



Achieving Business Excellence Through Standards

STANDARDS CATALOGUE

Complete to December 2023



FOREWORD

The Standards Association of Zimbabwe (SAZ) is the national standards body of Zimbabwe. Formed in 1957 and incorporated in 1960, the Association is a non-governmental and non-profit making organization operating under the Zimbabwe Companies' Act (Chapter 24:03) with Articles and Memorandum of Association. A General Council consisting of 48 representatives of government, local authorities, professional and academic institutions, industry and commerce and individuals governs the Association. The General Council determines the overall policy of the Association. Drawn out of the General Council is an Executive Committee, which keeps the activities of the Association under review and fulfills any functions that the General Council may delegate to them. Whilst the Association derives its income from certification activities, laboratory testing, calibration, training and sale of publications, it is subsidized by funds from the Standards Development Levy Fund (SDLF). Government collects the levy from specified employers through the Ministry of Industry and Commerce to promote standards in Zimbabwe.

VISION

To be the center of excellence through standards

MISSION STATEMENT

To develop national standards and promote their use for socio-economic development

CORE VALUES

Integrity Customer Centric Excellence

CORE ACTIVITIES

- To develop and publish Zimbabwe national standards.
- To promote an understanding of standards requirements by offering standards based training programs.
- To make available to producers and consumers laboratory facilities for the testing of manufactured goods, raw materials, and calibration of equipment.
- To promote the widespread use of standards by operating third party certification schemes.
- To provide information services on national, regional and international standards and technical regulations.
- To provide a World Trade Organization /Technical Barriers to Trade (WTO/TBT) enquiry point for standards and conformity assessment information.

These standards are also available for purchase from the SAZ Web store:

<https://sazportal.saz.org.zw/#/store/home> and from the SAZ offices in Harare, Bulawayo and Mutare contact the emails below:

The SAZ Information Centre: standards@saz.org.zw / +263 242 882 017

SAZ Mutare: sazmutare@saz.org.zw / +263 20 66252

SAZ Bulawayo: sazbyo@saz.org.zw / +263 29 70447

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ZWS STANDARDS

ZWS Directive: Part 2:2022

ZWS Directive

Part 2: Drafting and presentation of Zimbabwe national standards

Price Code: Gr.

71 pages

First publication 1987 as SAZ 100 Part 3

First revision 2012 as SAZ 100 Part 3

Second revision 2022, as SAZ 100: Part 3:2012

This Zimbabwe Standard Directive specifies the requirements for the structure, drafting and presentation of Zimbabwe Standards and other standards publications.

ZWS K18:1969 (Under revision)

Solid Carbon dioxide

Price Code: Gr. 2

6 pages

Reprinted 2008

Covers solid carbon dioxide for use in the carbonation of mineral waters and for refrigeration.

ZWS N7:1971

Agricultural discs

Price Code: Gr. 5

19 pages

Amended by MD 195: 1972

Reconfirmed 2002

Covers plough, harrow and seed-drill discs. Material, manufacture and dimensions are given.

ZWS 013:1969

Chipboard

Price Code: Gr. 3

10 pages

Based on BS 350

Specifies the requirements of boards consisting mainly of particles of wood and/or other lignocellulosic materials bonded with synthetic resin and/or other organic binders.

ZWS S18:1968

Worcestershire sauce

Price Code: Loan

17 pages

Amended MD 63: 1968

Endorsement of SABS 303: 1951

Covers sauce of one type and grade. Factory, ingredients, containers, packing, labelling and microbiological requirements are given.

ZWS S19:1968

Cucumber pickles

Price Code: Loan

17 pages

Amended by MD 66: 1968

Endorsement of SABS 302: 1951

Covers pickles of five types and one grade. Factory, ingredients, containers, packing, labelling and microbiological requirements are specified.

ZWS S25:1970

Canned soups

Price Code: Gr. 7

39 pages

Amended by MD 198: 1972: MD 446: 1978: MD 600: 1999

Replaces ZWS S8, ZWS S10, ZWS S11, ZWS S12, ZWS S13

Covers manufacture and processing of vegetable soup.

ZWS S33:1971

Potato crisps

Price Code: Gr. 3

11 pages

Amended by MD 603: 1999

Covers factory, physical, packing and microbiological requirements.

ZWS T1:1967

Rubber Closures for injectable products

Price Code: Loan

12 pages

Amended by MD 33: 1967

Endorsement of BS 3263: 1960

Covers material, tolerance, penetrability, fragmentation self-sealability, water extract, alkalinity or acidity and compatibility.

ZWS X3:1968

Office desks, tables and seating

Price Code: Loan

32 pages

Amended by MD 79: 1968

Endorsement of BS 3893: 1965

Partially superseded by ZWS 562 Part 1: 2002

Specifies dimensions and other requirements for office chairs, desks and tables.

ZWS X4:1968

Anthropometric recommendations for dimensions of non-adjustable office chairs, desks and tables

Price Code: Loan

12 pages

Amended by MD 80: 1968

Endorsement of BS 3079: 1959

Recommends dimensions for general purpose administrative and clerical non-adjustable office chairs, desks and tables.

ZWS Z2:1961

Marking articles made of sterling silver

Price Code: Gr. 1

6 pages

Based on: SABS 30: 1948

Details articles which qualify for the mark and the mark to be used.

ZWS Z4:1961

Miners' boots (Derby type with premoulded stuck-on-sole and heel)

Price Code: Gr. 3

10 pages

Covers men's Derby type mining boots with reinforced toe cap.

ZWS Z5C:1973**Charts for the identification of the contents of gas containers**

Price Code: Loan

8 pages

Amended by MD 254:1973; MD 483: 1982

Endorsement of BS 349C: 1973

A 760 by 460 mm chart giving marking for gas cylinders with 24 different contents.

ZWS Z6:1964**Medical gas cylinders and anaesthetic apparatus**

Price Code: Loan

23 page

Endorsement of BS 1319 1955

Specifies construction and identification of medical gas cylinders and gives fully, dimensioned details of non inter-changeable outlet for various gases and gas mixtures.

ZWSZ14:1971**Conveyor belting for use in flammable or explosive atmospheres**

Price Code: Loan

16 pages

Amended by MD 137:1971

Endorsement of BS 3289: 1960

Specifies requirements and test methods for conveyor belting intended for underground use.

ZWS Z17:1971**Industrial gloves**

Price Code: Loan

48 pages

Amended by: MD 148: 1971

Endorsement of BS 1651: 1966

Partially superceded by ZWS 339: 1991

Covers a range of gloves from protection against common industrial hazards. The standard classifies these common hazards and recommends gloves for protection against each hazard.

NOTE: From 1974 onwards the practice of using alpha-numeric identification which indicated broad subject classification was discontinued. All standards published since then are purely numerical.

ZWS 100 (under revision)**Code of practice for preparation of ZWS standards****Part 1:2016 Guide to general principles of standardization**

Price Code: Gr. 6

22 pages

Describes the context of standardization and in particular identifies the aims and principles that apply when standards are prepared, the range of ZWS standards publications and the role of standards within the framework of Zimbabwe law.

Part 2:2010 SAZ and the technical committee procedures

Price Code: Gr.6

25 pages

Explains the organization and functions of ZWS and outlines the procedures governing the presentation of Zimbabwe Standards and other standards publications.

Part 3:2012 Drafting and presentation

Price Code: Gr. 8

64 pages

Based on BS 0 Part 3: 1981

Specifies the requirements for the structure, drafting and presentation of Zimbabwe standards

ZWS 101:1976**Safety factors and smoke emission of domestic stoves burning solid fuels at a rate not exceeding 5 kg per hour**

Price Code: Gr. 3

6 pages

Reprinted 2014

Covers the smoke emission and certain safety factors of domestic stoves burning solid fuels. Quality of manufacture and general performance not included.

ZWS 102:1993**Steel pipes****Part 1: Steel pipes of nominal bore not exceeding 200mm**

Price Code: Gr. 7

15 pages

Replaces: ZWS 102: 1989

Based on SABS 62: 1989

Reprinted 2014

Covers requirements for three classes (light, medium and heavy) of welded and seamless steel pipes of nominal bore in the range 6 to 200 mm.

Part 2: Pieces and pipes fittings of nominal bore not exceeding 150 mm, made from steel pipe

Price Code: Gr. 6

17 pages

Replaces: ZWS 102: 1989

Based on SABS 62: 1989

Reprinted 2014

Covers requirements for two classes (light, medium and heavy) of welded and seamless steel pipes of nominal bore in the range 6 to 150 mm.

ZWS 103:1974**Glazed ceramic tiles and tile fittings for internal walls**

Price Code: Loan

32 pages

Amended by MD 259: 1974

Endorsement of BS 1281: 1966

Gives the requirements for one size of tile 150 x 150 x 6 mm and various fittings.

ZWS 104:1974**Precast concrete paving slabs**

Price Code: Gr. 4

9 pages

Based on SABS 541: 1971

Reprinted 2000

Reprinted 2007

Covers precast concrete paving slabs for use on a weaving surface on pavements, footpaths, etc.

ZWS 105:2001**Road tar binders**

Price Code: Gr. 7

31 pages

Replaces: ZWS A20:1966

Based on SABS 748: 1978

Reprinted 2005

Covers the essential requirements for a number of viscosity grades of road binders prepared entirely from crude tars pro-

duced as a by-product of the carbonisation of coal in coke ovens suitable for various types of road construction.

ZWS 106: 1974

Standard export documents

Price Code: Gr. 7
40 pages
Based on SITPRO: 1970

Lays down the requirements for a standard form of export documents for use in Zimbabwe and which can be reproduced by the "one run", system.

ZWS 107:1998

The assessment of defects in textile piece-goods and made-up articles

Part 1: Defects in woven piece-goods (cellulosic and cellulosic blends)

Price Code: Gr. 5
14 pages
Based on SABS 076: Part 1: 1981
Reprinted 2014

Applicable to woven fabrics (cellulosic and cellulosic blends) manufactured from yarns spun on the cotton system.

Part 2: Defects in woven terry toweling

Price Code: Gr. 4
11 pages
Based on SABS 076: Part 2: 1972

Covers the permissible number of defects, stringing of defects, length deductions of defects, net length, and colour matching and includes a guide to the various defects that shall be strung by the manufacturer.

Part 3: Defects in household articles

Price Code: Gr. 5
14 pages
Based on SABS 076: Part 7: 1985

Applicable to made-up household textile articles and includes a guide to the types of defects that are unacceptable in a made-up articles.

ZWS 109:1995

Winding wires

Part 1: Polyurethane base with solderable properties Class 130

Price Code: Gr. 6
23 pages
Replaces: ZWS 108: 1974
Based on BS 6811: Part 1 Sec. 1.1, BS 6811 Part 3 Sec. 3.2 and BS EN 60182: Part 2
Reprinted 2012

Specifies requirements, including those for dimensions, for round copper conductors covered with a synthetic enamel of class 180 based on a polyesterimide resin.

Part 2: Polyesterimide base enamel Class 180

Price Code: Gr. 6
24 pages
Replaces: ZWS 109: 1974
Based on BS 6811: Part 1 Section 1.1: part 3 Section 3.2 and BS EN 60182: Part 2

Specifies requirements, including those for dimensions for round copper conductors covered with a synthetic enamel of class 180 based on a polyesterimide resin, which may be a modified resin.

Part 3: Test methods

Price Code: Gr. 8
55 pages
Replaces ZWS 108: 1974 and ZWS 109:: 1974
Based on BS 6811: Part 2 Section 2.1 to section 2.6

Relates the methods of test for winding wires, irrespective of the conductor material and the type of insulation.

ZWS 111:1974

Canned meat products

Part 1: Corned beef and corned meat

Price Code: Gr. 4
10 pages
Amended by MD 283: 1974
Based on SABS 274: 1950
Reprinted 2007

Covers manufacture, processing and treatment of canned meat for human consumption.

ZWS 112:2023

Dog and cat food

Price Code: Gr. 6
14 pages
First published, 1974
First revision, 1999
Reprinted 2014
Second revision, 2023

This Zimbabwe Standard specifies the requirements for wet and dry types of dog and cat foods..

ZWS 113:2000

Fibre-cement pressures pipes and joints

Price Code: Gr. 6
26 pages
Replaces: ZWS 113: 1987
Based on BS 486: 1966
Reprinted 2014

Specifies the characteristics of fibre – cement pipes and joints for use under pressure for non-potable water and sewage.

ZWS 114:2010

Softwood flooring boards (Metric units)

Price Code: Gr.7
19 pages
Replaces: ZWS O 5: 1967
Amended by MD 394/5: 1977: MD 269: 1974
Based on SABS 629: 1973

Covers requirements, marking and test methods for two grades of board.

ZWS 115:1974

Terrazzo tiles

Price Code: Gr. 6
22 pages
Based on BS 4131: 1973

Specifies requirements for hydraulically – pressed terrazzo floor and wall tiles.

ZWS 116:1974

Self-tapping screws and metallic drive screws

Price Code: Loan
52 pages
Amended by MD 271: 1974
Endorsement of BS 4174: 1972

Relates to ferrous and non ferrous thread cutting and thread forming screws with countersunk, raised countersunk, raised countersunk or pan heads, slotted or recessed.

ZWS 117:1974

Small garden implements

Price Code: Gr. 4
8 pages

Covers planting trowels, weeding forks and daisy grubbers. Materials dimensions and strength requirements are given.

ZWS 118:1974

Hardwood block and strip flooring

Price Code: Gr. 7
29 pages
Based on SABS 281: 1972
Reprinted 2007

Covers species of wood, dimensions, defects squareness, finish and preservative treatment of two grades of flooring.

ZWS 120:2022

Eucalyptus poles, cross-arms and spacers for power distribution and communication systems

Price Code: Gr. 7
36 pages
Based on SABS 754
Eighth Revision

This standard specifies the requirements for eucalyptus poles, grown in Southern Africa, and that are intended to be used as upright supports for communications systems, and as upright supports, cross-arms and spacers (in five-pole structures) for power distribution lines.

ZWS 121:1989

Two-pole and earthing-pin plugs socket-outlets and socket-outlet adaptors for circuits up to 250 volts

Price Code: Gr. 8
53 pages

Relates to plugs, fused and non-fused, socket-outlets, shuttered and non-shuttered and fused socket-outlet adaptors, shuttered and non shuttered, for use in domestic premises, offices, etc with ratings up to 30 A.

ZWS 122:1991

General purpose fuse links for domestic and similar purpose (primarily for use in plugs)

Price Code: Gr. 7
30 pages
Based on BS 1362:1973
Reprinted 2000
Reprinted 2006

Specifies dimensions and performance requirements for general purpose cartridge fuse links of current ratings not exceeding 13 A for domestic and similar purposes.

ZWS 123:1974

Glass fibre reinforced plastics baths and basins

Price Code: Gr. 6
20 pages
Based on BS 4305: 1972
Reprinted 2006

Specifies the properties of the materials and the design, construction, workmanship, dimensions, testing and inspection of baths and basins.

ZWS 125:1974

Protective apparel for use against pesticides

Price Code: Gr. 4
12 pages
Reprinted 2003

Covers the production, testing and sampling of the following protective apparel: sou'westers, jackets, trousers, one-piece suits, boots, gloves, goggles, respirators, face-masks, face-shields and aprons.

ZWS 126:1997

Food Hygiene Part 1: 1997 Manufacturing

Price Code: Gr. 9
13 pages
Based on SABS 049: 1989
Reprinted 2006

Covers construction of the factory, hygiene, equipment and water supply, freedom from disease, medical examination of employees, prophylactic precautions and clothing.

Part 2:2001 Catering sector

Price Code: Gr. 9
138 pages
Reprinted 2004
Based on UK Industry guide to Good Hygiene Practice - Catering Guide

Covers hygiene requirements for various food catering operations.

Part 3:2001: Retailing

Price Code: Gr. 8
85 pages
Reprinted 2004

Based on UK Industry guide to Good Hygiene Practice -Retail Guide

Intended for application to food retailers, including grocery, butchers, fishmongers, green grocers, supermarkets etc. Also applies to business where food is only a part of what they do such as food shops at fuel stations and news agents.

Part 4:1999: The horticultural Industry

Price Code: Gr. 7
29 pages
Amended by MD 628: 2000
Based on Codex Volume 1B: 1995
Reprinted 2006

Recommends general hygienic practices for use in the handling of horticultural food and human consumption in order to ensure a safe, sound and wholesome product.

ZWS 127:2006

Ballasts for fluorescent lamps

Price Code: Gr. 8
50 pages
Reprinted 2006 incorporate MD 572: 1996
Partially superseded by ZWS 354: 1978
Identical to SABS 890:1977

Covers ballasts (for hot cathode lamps) with insulation at least class A; power factor corrected or uncorrected; for use on 50 Hz supply at 110-250 V and operation at temperatures between 10

and 40 °C. The specification does not cover resistors and filament lamps used as ballasts.

ZWS 130:2010

Plywood and composite board

Price Code: Gr. 7
37 pages
Replaces ZWS O2: 1973 and ZWS O12 1969
Reprinted 2004

Covers requirements for materials, construction, preservative treatment, dimensions and performance of plywood and composite board which is at least 3 mm thick.

ZWS 133:1975

Internal combustion engine lubricating oil

Price Code: Loan
13 pages
Replaces: ZWS D7: 1970
Amended by MD 289: 1975
Endorsement of SABS 704-A: 1974

Covers one type of engine lubricating oil (in six viscosity grades) suitable for crankcase lubrication of reciprocating internal combustion engines of both the spark ignition and the normally aspirated compression ignition types.

ZWS 134:1975

Sodium-base lubricating grease

Price Code: Gr. 4
9 pages
Replaces ZWS K23
Based on SABS 351: 1974
Reprinted 2000

Covers grease in four consistency grades.

ZWS 135:1975

Chassis lubricating grease

Price Code: Gr. 4
9 pages
Replaces ZWS K24
Endorsement of SABS 352: 1974
Reprinted 2000
Reprinted 2007
Covers water-resistant grease in three consistency grades.

ZWS 136:1975

Lithium-base lubricating grease

Price Code: Gr. 4
8 pages
Replaces ZWS K25: 1970
Based on SABS 406: 1974

Covers four grades suitable for temperatures between -20°C and 120°C.

ZWS 137:2000

The construction and site control of earthworks

Price code: Gr. 8
74 pages

Deals with the selection of materials, construction practice, tolerances and quality control of earthworks. Should be read in conjunction with ZWS 185.

ZWS 138:1975

Bitumen-based filling compounds for electrical purposes

Price Code: Gr. 7
18 pages

Replaces ZWS C5: 1967

Reprinted 2006 incorporate MD 293

Identical to BS 1858:1973

Covers bitumen-based filling compounds in six classes, according to softening point.

ZWS 139:1975

Meat-cutting bandsaw blades

Price code: Gr. 4
7 pages
Based on ZWS B6: 1972

Gives requirements for blades supplied either in coil or cut ready for use. Saws with heat-hardened teeth are not included

ZWS 140:1975

Calcium-base lubricating grease

Price Code: 4
9 pages
Replaces ZWS K22
Reprinted 2000
Covers water-resistance grease in five consistency grades.

ZWS 141:1978

Cast Iron fittings for asbestos-cement pressure pipes

Price Code: Gr. 7
29 pages
Equivalent to SABS 546 1977

Covers two categories of fittings for pressure up to 1 800 kPa, one for constant outside diameter pipes and the other for constant internal diameter pipes. Constructional requirements and tests are detailed.

ZWS 142:2023

Pig feeds

Price Code: Gr. 5
16 pages
First published 1959 as CAS 142,
First revision 1972, as CAS 142,
Second revision 1975, as CAS 142,
Third revision 1996, as ZWS 142,
First reprint 2005, as ZWS 142,
Fourth revision 2023, as ZWS 142

This Zimbabwe Standard covers the following types of pig feeds: Pig creep meal; Pig weaner meal; Pig grower meal; Dry sow and boar meal; Lactating/brood sow meal; and Pig finisher meal. It also provides for all types of concentrates in the categories listed above.

ZWS 143:1975

Life jackets

Price Code: Gr. 4
12 pages
Amended by MD 471: 1982
Reprinted 2012

Applies to inherently buoyant jackets, preferably of the waist coat type for use in conditions prevailing on lakes and rivers of Zimbabwe.

ZWS 147:1998

Switches for household and similar fixed electrical installations – General requirements

Price Code: Gr. 8
95 pages
Based on BS 3676: Part 1:1996

Specifies requirements and test for manually operated general purpose switches with a rated voltage not exceeding 440 V a.c or d.c and a similar fixed electrical installations.

ZWS 148:1994**Cast steel gate valves**

Price Code: Gr. 5

15 pages

Replaces: ZWS 148 1975

Reprinted 2009

Covers the material and constructional requirements for flanged cast steel gate valves (50 to 350 mm nominal bore) with rising or non-rising spindles and intended for use in waterworks, mining and industrial applications, in which the pressure differences across the gate in the closed position, will not exceed 2.5 mPa and the temperature of the fluid will not exceed 50 °C.

ZWS 149:1993**Cast Iron gate valves for waterworks**

Price Code: Gr. 8

46 pages

Amended by MD 400 1977

Replaces ZWS 149: 1977

Based on SABS 664: 1989

Covers the material and constructional requirements for cast iron gate valves of three classes and of either the inside or the outside screw type.

ZWS 150:1975**Matrices for tyre reconditioning**

Price Code: Gr. 4

7 pages

Reprinted 2012

Covers the alloy to be used, casting and machining processes and pressure tests.

ZWS 152:1999**Pepper sauce**

Price Code: Gr. 4

7 pages

Reprinted 2006 incorporate MD 611: 1999

Reprinted 2012

Covers pepper sauce of one type and grade.

ZWS 153:2000**Spades and shovels**

Price Code: Gr. 6

26 pages

Replaces ZWS Z12

Based on SABS 284: 1974

Reprinted 2007

Covers dimensional, material, constructional and strength requirements for four types of spades and ten types of shovels.

ZWS 154:1999**Forks and rakes**

Price Code: Gr. 7

25 pages

Replaces ZWS Z24

Based on SABS 390: 1974

Reprinted 2007

Covers material, dimensional, constructional and strength requirements of six types of forks and seven types of rakes.

ZWS 156:1975**Unplasticized polyvinyl chloride (UPVC) components for rain-water systems**

Price Code: Gr. 5

16 pages

Reprinted 1997 incorporate amendments

Identical to SABS 11: 1970

Reprinted 2007

The specification covers unplasticized polyvinyl chloride (UPVC) rainwater system components of different types and intended for external applications.

ZWS 157:1995**The use of structural steel in building**

Price Code: Gr. 9

119 pages

Based on BS 449: Part 2: 1969

Reprinted 2004

Relates primarily to the use of hot rolled steel sections and plates and normalized tubular shapes.

ZWS 158:1975**The use and disposal of acaricides (cattle dips)**

Price Code: Gr. 4

8 pages

Amended by MD 423: 1978

Reprinted 2005

Covers the handling, use and disposal of acaricides, so that these operations can be effected with minimum risk to humans and livestock.

ZWS 159:1975**Rubber and plastics belting of textile construction for use on bucket elevators**

Price Code: Gr. 7

15 pages

Replaces: ZWS Z14: Part 2 & 4

Reprinted 1996 incorporation MD 312: 1975

Identical to BS 490: Part 2: 1975

Reprinted 2007

Covers construction, preferred dimensions, tensile strength, ply adhesion, sampling and testing of belting impregnated with either a rubber or a plastic mix.

ZWS 160:1977 (under revision)**Basic data for the design of buildings: loads and forces****Part 1: Dead and imposed loads**

Price Code: Loan

20 pages

Endorsement of BS CP 3: Chapter V Part 1: 1967

Reprinted 2012

Gives dead and imposed loads as applied to new buildings, alterations and additions to existing buildings or change of use of existing construction.

Part 2: Wind loads

Price Code: Loan

52 pages

Amended by MD 380: 1977

Endorsement of CP 3 Chapter V Part 2: 1972

Gives methods for calculating wind loads which should be taken into account when designing buildings. Does not apply to buildings of unusual shape or those in unusual locations.

ZWS 162: Structural use of timber**Part 1: 2000 Limit states design**

Price Code: Gr. 10

39 pages

Reprinted 2004

Reprinted 2005

Gives guidance on the design, fabrication and erection of timber structures (and structural (and structural timber components in structures framed in other materials) where the design is based on limit states.

Part 2:2001 Allowable stress design

Price Code: Gr. 10
154 pages

Gives guidance on the structural design based on the allowable stresses of timber and on the evaluation of timber members and structures.

ZWS 164:1975

The structural use of reinforced concrete in building

Price Code: Gr. 8
83 pages
Amended by MD 1241: 1973: MD 1552: 1974: MD 1923: 1976:
MD 2304: 1977 MD 324: 1975
Endorsement of BS CP 114: 1969
Reprinted 2013

Covers the structural use of reinforced concrete in buildings.

ZWS 165:1975

The structural use of prestressed concrete in buildings

Price Code: Gr. 9
44 pages
Amended by MD 325: 1975
Endorsement of BS CP 155: 1969
Reprinted 2014

Deals with the structural use of prestressed concrete in buildings. It covers both work carried out on site and the manufacture of precast prestressed concrete units.

ZWS 166:1975

The structural use of precast concrete

Price Code: Gr. 9
147 pages
Amended by MD 326: 1975
Endorsement of BS CP 116: 1969
Reprinted 2013

Gives requirements for the materials, design, workmanship, inspection and testing of finished products of the various types of concrete.

ZWS 167:1975

Earthenware aeration tiles

Price Code: Gr. 4
6 pages
Reprinted 2007

Covers the type of tiles used in biological trickle filters treating sewage and trade effluents.

ZWS 168:1975

Screwdrivers

Price Code: Loan
25 pages
Amended by MD327: 1975
Endorsement of BS 2559: Part 1: 1971
Reprinted 2012

Covers six types of screwdrivers for use with slotted head screws.

ZWS 169:2010

Laminated timber (glulam)

Price Code: Gr. 7
35 pages

Based on SABS 1460: 1988

Covers the general requirements for softwood and hardwood laminated timbers.

ZWS 170

The structural use of concrete

Part 1: 2003 Code of practice for design and construction
Price Code: Gr. 11
223 pages
Replaces ZWS 170: 1978
Reprint 2012

Gives recommendations for the structural use of concrete in buildings and structures, excluding bridges and structural concrete made with high alumina cement.

Part 2:1978 Design charts for singly reinforced beams doubly reinforced beams and rectangular columns.(Under revision)

Price Code: Gr. 9
90 pages
Amended by MD 417: 1978
Endorsement of BS CP 110 Part 2: 1972
Reprinted 2013

Covers design charts for singly reinforced beams, doubly reinforced beams and rectangular columns. The charts have been based on the assumptions laid down in Part 1, use being made of the parabolic-rectangular stress block throughout.

Part 3:1978 Design charts for circular columns and prestressed beams (under revision).

Price Code: Gr. 11
174 pages
Amended by MD 418: 1978
Endorsement of BS CP 110 Part 3: 1972

Guidance is given on the specification and workmanship of concrete, the inspection and testing of structures and the fire resistance of various forms of construction. Parts 2 and 3 consist of design charts for use with Part 1.

ZWS 171:1975

Flexible urethane foam for load bearing applications

Price Code: Gr. 5
12 pages
Replaces ZWS D5
Amended by MD 329: 1975
Endorsement of BS 3379: 1975
Reprint 2012

Covers five types of foam for four conditions of services, depending upon severity. The foam is manufactured in block, sheet and strip foam in moulded and fabricated shapes and as reconstituted materials.

ZWS 172:1975

Ceramic insulators and pole fittings for telephone lines

Price Code: Gr. 8
44 pages
Amended by MD 330: 1975
Endorsement of BS 16: 1974
Reprinted 2001
Reprinted 2013

Dimensions and methods of test of insulators and fittings are detailed.

ZWS 173:1990

Code of practice for timber buildings

Price Code: Gr. 9
113 pages

Replaces ZWS 173: 1975

Describes practices to be followed in the design and construction of single-storey and double –storey timber buildings and portions of such buildings for residential or similar use. It does not cover buildings more than two storeys in height or where walls have a dimension exceeding 6 m without effective lateral restraint.

ZWS 174:1983

Tarpaulins

Price Code: Gr. 6
21 pages
Replaces: ZWS L 5: 1964
Amended by MD 547: 1993
Based on BS 3408: 1977
First reprint 2018

Specifies requirements for materials, manufacture and proofing of tarpaulins that have been treated and/ or coated to induce water resistance and rot resistance.

ZWS 175:1975

Plastics W.C seats

Price Code: Loan
38 pages
Amended by MD 335: 1975
Endorsement of BS 1254: 1971

Covers two types of seat for use with W.C pans complying with BS 1213.

ZWS 176:2000

Fire doors and fire shutters

Price Code: Gr. 6
8 pages
Reprinted 2004

Specifies the requirements for four classes of fire door and fire shutter assembled and two classes of fire doors and fire shutters that are intended to close permanent openings in walls or partitions, to provide a fire resistance of 30 mins or more in order to stop the spread of fire and to limit the spread of smoke.

ZWS 178:1976

Low voltage insulators

Price Code: Loan
34 pages
Amended by MD 340: 1976
Endorsement of SABS 161:1955
Reprinted 2013

Covers pin, reel and shackle insulators and bushings and support insulators for busbars for voltages up to 1000 V.

ZWS 179:1976

Cleats, bobbins and leading-in tubes

Price Code: Loan
8 pages
Amended by MD 341: 1976
Endorsement of SABS 176:1955
Reprint 2016

Covers dimensional and quality requirements for porcelain cleats, bobbins and leading in- tubes for the support of insulated conductors in the open wiring of circuits at system voltages up to and including 660volts between conductors.

ZWS 181:1992

Mirrors

Price Code: Gr. 5
12 pages

Replaces ZWS 181: 1976

Reprinted 2010

Covers three qualities of back silvered mirrors made from plate float or sheet glass.

ZWS 182:1976

Steel boilers and super heaters tubes

Part 1: Low tensile carbon steel tubes without specified elevated temperature properties

Price Code: Loan
49 pages
Amended by MD 343: 1976
Endorsement of BS 3059: 1968
Reprinted 2012
Reprinted 2014

Covers the requirements for tubes not exceeding 127 mm outside diameter intended for low pressure boilers for use at temperatures up to 40 °C.

Part 2: Carbon alloy and austenitic steel tubes with specified elevated temperature properties

Price Code: Gr. 7
27 pages
Endorsement of BS 3059:1969
Reprinted 2014

Contains requirements for seamless and electric resistance welded tubes of carbon and alloy steels and for cold finished seamless tubes of austenitic steels, not exceeding 12.5mm thick and 127mm outside diameter for use in the construction of boiler units.

ZWS 184:2000

Wooden doors

Price Code: Gr. 7
29 pages
Replaces ZWS A 27: 1968
Reprinted 2010

Covers the requirements for wooden doors of three exposure classes and three performance classes.

ZWS 185

Methods of testing soils for civil engineering purposes

Part 1: 1998: Preparation, classification and density of soil
Price Code: Gr. 8
95 pages
Replaces ZWS A43: Part 1: 1971
Reprinted 2005

Gives methods for the preparation of soil samples and for their classification and measurements. Procedures for use in the laboratory and in the field are given and methods of recording and calculating the results are included.

Part 2: 2001: Strength tests

Price Code: Gr. 8
70 pages

Gives methods for strength testing of soils and aggregates for pavements. Procedures for use in the laboratory and in the field are given and methods of recording and calculating the results are included.

ZWS 186:1976

Identification of pipelines

Price Code: Loan
11 pages
Replaces ZWS Z7
Amended by MD 345: 1976

Endorsement of BS 1710: 1975

Defines the meaning and application of colours for the identification of pipes containing fluids in liquid or gaseous conditions. Also includes ducts and conduits for electrical services.

ZWS 187:1984

Concrete roofing tiles

Price Code: Gr. 4
10 pages
Replaces: ZWS 187: 1976
Amended by
Based on SABS 542: 1969

Covers roofing tiles of plain and interlocking types. Dimensions and methods of test are given.

ZWS 188:1976

Cable glands for elastomer and plastic insulated cables

Price Code: Loan
33 pages
Amended by MD 346: 1976
Endorsement of BS 6121:1973

Gives details of glands suitable for use with cables conforming to ZWS 240.

ZWS 189:2002

Hydraulic brake fluid

Price Code: Gr. 8
49 pages
Replaces ZWS D1: 1962

Covers requirements for DOT 3 and DOT 4 fluids in hydraulic brake system of motor vehicles.

ZWS 190:1997

Methods for sampling and testing of aggregates and fillers

Price Code: Gr. 9
110 pages
Replaces: ZWS 190: 1978
Amended by 631:2001
Reprinted 2004 to incorporate MD 631: 2001

Covers methods for sampling and testing of materials for use in the production of normal structural concrete and bituminous road surface.

ZWS 191:1976

Current transformers

Price Code: Gr. 8
67 pages
Based on BS 3938:1973
Reprinted 2000
Reprinted 2005

Gives the requirements for current transformers suitable for frequencies of 15 Hz to 100 Hz, intended for use with electrical measuring instruments and electrical protective devices.

ZWS 192:1976

Covers electrodes for the manual metal-arc welding of carbon and carbon manganese steels

Price Code: Loan
14 pages
Replaces ZWS B7 and B8
Amended by MD 349: 1976
Endorsement of BS 639: 1976

Covers electrodes depositing weld metal having a tensile strength of not more than 650 mPa.

ZWS 193:1976

Cast iron baths for domestic purposes

Price Code: Loan
17 pages
Replaces: ZWS A39
Amended by MD 350: 1976
Endorsement of BS 1189: 1972
Reprinted 2012

Covers material, design and construction. Guidance in the care and handling of the baths is given.

ZWS 194:1976

Hard rubber chopping blocks

Price Code: Gr.3
5 pages
Reprinted 2010
Covers chopping and cutting blocks such as those used by butchers, bakers, catering establishments, households, etc made from rubber materials.

ZWS 195:1976

Asbestos-cement pipes for sewerage and drainage

Price Code: Gr. 6
15 pages

Specifies requirements for asbestos-cement pipes suitable for gravity flow lines at atmospheric pressure for sewerage and drainage applications.

ZWS 196:1979

Materials for elastomeric joint rings for pipework and pipelines

Price Code: Loan
5 pages
Replaces: ZWS A37: 1969 and ZWS A38: 1969
Amended by MD 355: 1976 MD 455: 1979
Endorsement of BS 2494: 1976
Reprint 2016

Six hardnesses of vulcanized rubber joint rings are covered with details of requirements for tensile strength, elongation compression set before and after aging, swelling and water absorption

ZWS 197:1976

Wooden handles for tools and implements

Part 1: Wooden handles for brooms, hay-forks and rakes (including general requirements for other wooden handles for tools)

Price Code: Gr. 6
17 pages
Amended by MD 356: 1976
Endorsement of SABS 77: 1975
Reprinted 2012

Covers detailed requirements for one grade of wooden handles for brooms, hay-forks and rakes.

Part 2: Wooden handles for beater picks, mattocks and picks

Price Code: Gr. 3
7 pages
Replaces ZWS O11: 1969
Amended by MD 357: 1976
Endorsement of SABS 268: 1975
Reprinted 2012

Covers one grade of wooden handles for beater picks, mattocks and picks.

Part 3: Wooden handles for forks, shovels and spades

Price Code: Gr. 4
 11 pages
 Replaces ZWS O11: 1968
 Amended by MD 358: 1976
 Endorsement of SABS 269: 1975
 Reprinted 2012

Covers one grade of wooden handles for forks, shovels and spades.

Part 4: Wooden handles for hammers

Price Code: Gr. 3
 18 pages
 Replaces ZWS O11: 1968
 Amended by MD 359: 1976
 Endorsement of SABS 292: 1975
 Reprinted 2012
 Covers one grade of wooden handles of different shapes for 14 types of hand-held hammer heads.

Part 5: Wooden handles for axes

Price Code: Gr. 3
 8 pages
 Amended by MD 360: 1976
 Endorsement of SABS 573: 1975
 Reprinted 2012

Covers one grade of wooden handles for axes

Part 6: Wooden handles for hatchets

Price Code: Gr. 4
 6 pages
 Amended by MD 361: 1976
 Endorsement of SABS 672: 1975
 Reprinted 2012
 Covers one grade of wooden handles for hatchets.

Part 7: Wooden handles for universal type picks

Price Code: Gr. 3
 8 pages
 Replaces: ZWS O11: 1968
 Amended by MD 362: 1976
 Endorsement of SABS 692: 1975
 Reprinted 2012

Covers two types of wooden handles for universal type picks

ZWS 198:2019

Fibre-cement sheets: Corrugated and flat

Price Code: Gr. 7
 20 pages
 Replaces: ZWS 198: 1992
 Endorsement of SANS 685:1972

Covers straight corrugated, curved corrugated, flat and flat pressed fibre-cement sheets.

ZWS 199:1984

Non-refillable metallic containers up to 1.4 litres capacity and 85 mm diameter for liquefied or compressed non-flammable gases

Price Code: Gr.4
 6 pages
 Amended by MD 368: 1976: MD 503: 1984
 Endorsement of BS 5188: 1975
 Reprinted 2010

Covers the materials and constructional requirements for two groups, depending on size, of non refillable metallic containers for use solely with liquefied or compressed gases or mixtures thereof.

ZWS 201:1977

Liners and fluting for corrugated board

Price Code: Loan
 21 pages
 Amended by MD 376: 1977
 Endorsement of SABS 431: 1961
 Reprinted 2012

Covers lining and fluting used in the manufacture of high quality board boxes and other corrugated paper products.

ZWS 202:1977

Safety colours and safety signs

Price Code: Loan
 12 pages
 Amended by MD 378: 1977
 Endorsement of BS 5378: 1976
 Replaces ZWS Z8

Defines safety colours and safety signs for the prevention of accidents and health hazards and for warning of certain emergencies.

ZWS 203:2000

Wooden scaffold boards

Price Code: Gr. 7
 26 pages
 Reprinted 2010

Specifies requirements for the four types of wooden scaffold board.

ZWS 204:1977

External rendered finishes

Price Code: Loan
 Replaces ZWS CA3
 21 pages
 Amended by MD 381: 1977
 Endorsement of BS 5262: 1976
 Reprinted 2012

Deals with renderings on all common backgrounds and the maintenance and repair of existing work.

ZWS 205:1977

Electric cable soldering sockets

Price Code: loan
 9 pages
 Amended by MD 382: 1977
 Endorsement of BS 91: 1973
 Reprinted 2014

Specifies the requirements for sockets of copper or copper alloy for connecting to each other or to apparatus. Suitable for conductors from 6 square millimeters up to 1 200 square millimeters.

ZWS 206:1977

Snap-on connectors

Price Code: Loan
 12 pages
 Amended by MD 383: 1977
 Endorsement of BS 5057: 1973
 Reprinted 2014

Specifies in-line tabs with rectangular section and the corresponding receptacles. Dimensions, strength and electrical performance are detailed.

ZWS 207:1977

Calcium hypochlorite and chlorinated lime

Price Code: Gr. 6
18 pages
Replaces ZWS K29
Reprinted 2002

Covers two types (calcium hypochlorite and chlorinated lime) of bleaching compound.

ZWS 208:2010

The manufacture of finger-jointed structural timber

Price Code: Gr. 7
24 pages
Based on SABS 096: 1976
First revision 2015
Covers recommendations for the manufacture of finger-jointed structural timber.

ZWS 209:1992

Sickles

Price Code: Gr. 4
7 pages
Replaces: ZWS 209: 1977

Covers serrated edges sickles

ZWS 210:1977

Safety and proof testing of small arms

Part 1: Small arms using 9 mm parabellum cartridges

Price code: Gr. 4
7 pages
Reprinted 2010
Refers to guns using 9 mm parabellum. Covers safety aspects and proof testing. Does not cover the design or efficiency of the arms.

Part 2: Small arms using 12 – bore cartridges

Price code: Gr. 4
8 pages

Covers safety aspects and methods of proof testing.

ZWS 212:1978

Primary cells and batteries

Price Code: Gr. 7
27 pages
Based on SABS 180: 1975
Reprinted 2005

Covers primary cells and batteries of the leclanche type and the air-depolarized type for use in torches, radios and similar appliances. (for multi-cell dry batteries, see ZWS 291).

ZWS 214:1997

Wooden ceiling and paneling boards (Metric units)

Price Code: Gr. 6
21 pages
Endorsement of SABS 1039: 1975
Reprinted 2005

Covers three grades of profiled boards, planed or planed and sanded, manufactured from hardwood or softwood.

ZWS 215:1993

The design and manufacture of welded steel cylinders for low pressure services

Price Code: Gr. 7
23 pages
Replaces: ZWS 215: 1978

Covers fusion welded cylinders of capacity 0,5to 130 litres for the storage and conveyance of compressed gas, having a maximum service pressure of 7 mPa.

ZWS 216:1995

Glazed ceramic sanitary ware

Price Code: Gr. 6
23 pages
Replaces: ZWS 216: 1978
Based on SABS 497: 1991
Reprinted 2005

Covers wash-hand basins, pedestals, sinks, water closet pans, bidets, urinals and flushing cisterns made of ceramic materials.

ZWS 217:1978

Rubber, balata or plastics flat transmission belting of textiles construction for general use

Price code: Loan
9 pages
Replaces ZWS Z14 Part 6
Amended by MD 412: 1978
Endorsement of BS 351: 1976
Reprinted 2014

Specifies the minimum requirements for belting designed for power transmission under specified operating conditions.

ZWS 218:2012

The mechanical stress grading of softwood timber - Flexural method

Price code Gr. 5
18 pages
Replaces: ZWS 218:1978
Amended by MD 582: 1999
Reprinted 2010
Replaces ZWS 218:1999

Covers the requirements for the mechanical stress grading by the determination of stiffness in bending of solid timber (free from glued or other joints) derived from trees of the genus pinus grown in the Southern Africa.

ZWS 219:1993

Unplasticised polyvinyl chloride (UPVC) sewer and drain pipes and pipe fittings.

Price Code: Gr. 8
52 pages
Replaces: ZWS 219: 1978
Based on SABS 791: 1986
Amended by MD 652: 2003

Covers two types, normal and heavy, of unplasticized polyvinyl (UPVC) pipes of nominal sizes 110 to 630 mm and and one type of UPVC pipe fitting of nominal sizes 110 mm and 160 mm for sewer and drains.

ZWS 220:1993

Unplasticized polyvinyl chloride (UPVC) soil, waste and vent pipes and fittings

Price Code: Gr. 8
48 pages
Replaces: ZWS 220: 1978

Based on SABS 967: 1987
Amended by MD 653: 2003

Covers unplasticized polyvinyl chloride (UPVC) pipes and fittings of nominal sizes 40-160 mm intended for above-ground non-pressure applications for the conveyance of soil and waste water.

ZWS 222:2003

Draw-off taps and above-ground stopvalves for water services (screw-down pattern)

Price Code: Gr. 8
Amended by md647:2003
72 pages
Replaces: ZWS 222: 1978
Identical to BS 1010: Part 2: 1973
Reprinted 2004

Specifies requirements for screw-down pattern draw – off taps and stopvalves of ¼, 3/8, 1, 1¼, 1 ½ and 2 inch nominal sizes. Pillar taps of rising type are specified in ½, ¾ and 1 inch nominal sizes and non-rising type in ½ and ¾ inch nominal sizes only.

ZWS 223:1985

Restraining devices (safety belts) for occupants of adult build in motor vehicles

Price Code: Gr. 8
62 pages
Replaces: ZWS 223: 1982
Based on SABS 1080: 1983
Reprinted 2010

This standard is mandatory through Zimbabwe Government Roads and Road Traffic legislation. The specification applies to safety belts and restraint systems which are designed for separate use by person of adult build occupying forward-facing seats.

ZWS 224:1978

The handling, storage and disposal of pesticides and their containers

Price Code: Gr. 4
9 pages
Reprinted 1998
Reprinted 2004

This code of practice covers the handling, storage and disposal of pesticides and their containers on farms and smallholdings. For other instances, refer to ZWS 250.

ZWS 225:2018

Portable fire extinguishers

Price Code: Gr. 7
42 pages
Reprinted 2018

Covers portable fire extinguishers containing an extinguishant which is expelled by internal pressure. The extinguishant shall be one of the following :water, foam, dry powder, carbon dioxide. Details are given of mechanical design ,extinguishants, marking, prototype tents and production tests.

ZWS 226:1978

Automotive V-belt drives

Price Code: Gr. 7
19 pages
Amended by MD 425: 1978
Endorsement of BS AU 150: 1973
Reprinted 2012

Covers endless V-belts and V-groove pulleys used for power transmission for automotive type engines in mobile and static applications.

ZWS 227:1978

Endless V-belt drives sections Y, Z, A, C and D

Price Code: Loan
49 pages
Amended by MD 426: 1978
Endorsement of BS 1440: 1971
Reprinted 2012
Reprinted 2013

Covers endless V-belts and V-grooved pulleys used for power transmission.

ZWS 228:1978

Endless wedge belt drives of SPZ, SPA, SPB and SPC sections

Price Code: Loan
32 pages
Amended by 427: 1978
Endorsement of BS 3790: 1973
Reprinted 2012

Covers endless wedge belts and their corresponding V-grooved pulleys, when used for power transmission.

ZWS 229:2006

General purpose textile-reinforced conveyor belting

Price Code: Gr. 7
24 pages
Revision of ZWS 229: 1979

Covers general requirements for textile-reinforced conveyor belting designed for use on flat or troughed idlers.

ZWS 231:2003

Boiler suits and work wear

Price Code: Gr. 8
25 pages
Based on SABS 434: 1998

Specifies general requirements of the material, cut, make and trim of boiler suits and separate jackets and pairs of trousers of work wear suits.

ZWS 232:1978

Crushed stone for surface treatment of roads

Price Code: Gr. 4
9 pages
Replaces ZWS A21: 1966
Reprinted 2004

Covers aggregate for use in surface dressings in the construction and maintenance of bituminous surfacing. Requirements are laid down for sizes, strength, gradation and methods of sampling and test.

ZWS 233:1997

Aggregates from natural sources for concrete

Price Code: Gr. 6
21 pages
Replaces ZWS 233: 1978
Reprinted 2004

Covers naturally occurring materials for use in the production of normal structural concrete.

ZWS 234:2010

Terry toweling, towels and other terry weave articles

Price Code: Gr. 5
13 pages

Based on SABS 1401: Part 1 & 5: 1983
Replaces ZWS 234: 1978
Amended by MD 665:2010
Reprinted 2010

Covers the specific requirements of three types of cotton terry toweling fabric and articles in the form of bibs, face cloths napkins and towels.

ZWS 235:1978

Wax crayons

Price Code: Loan
14 pages
Replaces ZWS Z22
Amended by MD 432: 1978
Endorsement of SABS 244: 1978
Reprinted 2012

Covers wax crayons for drawing.

ZWS 236:1978

Safety glass for land transport

Price Code: Gr. 7
42 pages
Replaces ZWS R1
Based on BS 857: 1967
Reprinted 2000

Covers requirements and tests for flat and curved safety glass for land transport.

ZWS 237:1978

Testing water boreholes

Price Code: Gr. 6
26 pages
Amended by MD 437: 1978:
Endorsement of SABS 045: 1974
Reprinted 2012

Covers (a) the straightness and verticality of boreholes and (b) the determination of the yield from a borehole by means of a direct pumping test.

ZWS 238:1978

Hose clamps (worn drive type) for general purpose use

Price Code: Loan
3 pages
Amended by MD 438: 1978: MD 442: 1978
Endorsement of SABS 045: 1974

Covers the range of sizes and methods of test for worm drive hose clamps for general purpose use.

ZWS 239:1998

Protective helmets for equestrian activities

Price Code: Gr. 6
21 pages
Identical to EN 1384: 1997
Reprinted 2009

Specifies requirements for protective helmets, that may or may not have a peak, for people involved in equestrian activities.

ZWS 240:1999

Electric cables with extruded solid dielectric insulation for fixed installations (300/500 V to 1 900/ 3 300 V)

Price Code: Gr. 8
43 pages
Replaces ZWS 240: 1973
Based on SABS 150: 1970

Reprinted 2013

Covers the requirements for construction, materials dimensions and electrical properties of single – core and multicore extruded solid dielectric operating voltage (U_0/V) in the range 300/ 500 V to 1900/ 3300 V and intended for use in fixed installations.

ZWS 241:1979

Screwed metal conduit and fittings for electrical wiring

Price Code: Loan
40 pages
Replaces ZWS C16
Amended by MD 449: 1979
Endorsement of SABS 162: 1978
Reprinted 2013

Covers the requirements for screwed metal conduit of nominal sizes 16-63 mm inclusive, intended for the protection of electrical wiring. It also covers the requirements for metal fittings used in conjunction with conduit.

ZWS 242:1979

Part 1 Resin cored solders – Non corrosive (Metric units)

Price Code: Gr. 6
19 pages
Replaces: ZWS H 4: 1968
Endorsement of SANS 137: 1971
Amended by MD 452: 1979
Reprinted 2013

Covers soft solders in the form of wire or ribbon containing one or more cores of non-corrosive flux.

Part 2

Resin cored solders Highly activated (Metric units)

Price Code: Gr. 4
9 pages
Replaces: ZWS H 4: 1968
Endorsement of SABS 137: 1971
Amended by MD 452: 1979
Reprinted 2013

Covers soft solders in the form of wire or ribbon containing one or more cores of highly activated flux.

ZWS 243:1979

Cast iron pipes and pipe fittings for use above ground in drainage installation

Price Code: Gr. 8
46 pages
Identical to: SABS 746: 1976
Reprinted to include amendments
Reprinted 2008

Covers the requirements for low pressure cast-iron pipes and pipe fittings, intended for use above ground as soil water, waste water and vent pipes.

ZWS 244:1999

Corn starch

Price Code: Gr. 3
9 pages
Amended by MD 612: 1999
Replaces ZWS 244: 1979
Reprinted 2009

Covers three types of starch, viz, corn, textile, low viscosity and textile, high viscosity.

ZWS 247:1985 (Under revision)**Cotton sailcloth, cotton jean and drill fabrics, cotton denim and cotton indigo denim.**

Price Code: Gr. 5
 14 pages
 Replace: ZWS 247: 1980
 Amended by MD 383:1977
 Reprinted 2008

Covers three types of cloth, suitable for the manufacture of clothing

ZWS 248:1983**Abrasive papers and cloths**

Price Code: Loan
 9 pages
 Amended by MD 491: 1983
 Endorsement of BS 871:1981
 Reprinted 2013

Covers requirements for abrasive papers and cloths for both technical and general purpose products. Appendices cover grading, metal removal test, breaking strength, dimensions and recommendations for storage and ordering.

ZWS 249:1980**Ballasts for low pressure sodium vapour and high intensity discharge lamps and reference ballasts for low pressure sodium vapour and high intensity discharge lamps**

Price Code: Gr. 6
 27 pages
 Amended by MD 463: 1980
 Endorsement of SABS 1266/1267: 1979

Covers ballasts with insulation of at least class B for use with discharge lamps on a.c. supply voltages having a frequency of 50 Hz and for operation at ambient temperatures of -10 to +40°C.

Part 2**Reference ballasts for low pressure sodium vapour and high intensity discharge lamps**

Price Code: Gr. 4
 6 pages
 Incorporates MD 463: 1980
 Endorsement of SABS 1267: 1979
 Covers the essential design features and operating characteristics of reference ballasts for high pressure mercury vapour, low pressure sodium vapour, and high pressure sodium vapour discharge.

ZWS 250:1980**Code of practice for the handling, storage and disposal of pesticides and used pesticides containers**

Price Code: Gr. 6
 14 pages
 Amended by MD 518/2: 1996
 Reprinted 2010

This code of practice covers the handling, storage and disposal of pesticides including veterinary remedies declared to be hazardous substances. It does not apply to pesticides used on farms or small-holdings. For such instances refer to ZWS 224.

ZWS 251:1980**Code of practice for fire extinguishing installations and equipment on premises - Sprinkler system**

Price Code: Loan
 16 pages
 Amended by MD 466: 1980
 Endorsement of BS 5306: Part 2: 1979
 Reprinted 2012

Covers the provision of automatic sprinkler systems and installations in buildings, their essential supplies and maintenance.

ZWS 252:1980**Agricultural box shooks and box boards**

Price Code: Gr. 7
 17 pages
 Amended by MD 467: 1980
 Based on SABS 452: 1972
 Reprinted 2009

Covers box shooks, box boards and assembled components derived from Zimbabwean grown or imported softwoods, poplar species and eucalyptus.

ZWS 253:1981**Softwood studs for timber frames in buildings**

Price Code: Gr. 5
 13 pages
 Based on SABS 1146: 1977

Covers one grade of softwood structural timber for use as concealed load-sharing members in domestic wall and partition constructions. Requirements are laid down for dimensions, finish, moisture content and gradient, density, packing and marking. Methods of test are covered by reference.

ZWS 254**Standardized specification for civil engineering construction**

Based on SABS 1200
 Complete set available in loose leaf file format (POA)

A: 1984 General

Price Code: Gr. 7
 22 pages

AA: 2001 General (small works)

Price Code: Gr. 6
 18 pages
 Reprinted 2013

AB: 2001 Engineer's office

Price Code: Gr. 6
 7 pages
 Reprinted 2012
 Reprinted 2013

AD: 2001 General (small dams)

Price Code: Gr. 5
 16 pages
 Reprinted 2012
 Reprinted 2013

AH: 2001 General (structural)

Price Code: Gr. 6
 16 pages

C: Site clearance

Price Code: Gr. 5
 11 pages
 Reprinted 2012
 Reprinted 2013

D: 1984 Earthworks

Price Code: Gr. 8
 33 pages
 Reprinted 2012
 Reprinted 2013

DA: 1984 Earthworks (small works) Price Code: Gr. 8 25 pages Reprinted 2013	HB: 2001 Cladding and sheeting Price Code: Gr. 7 27 pages Reprinted 2013
DB: 2001 Earthworks (pipe trenches) Price Code: Gr. 8 31 pages Reprinted 2012 Reprinted 2013	HC:2001 Corrosion protection of structural steel work Price Code: Gr. 6 21 pages Reprinted 2013
DE: 2001 small earth dams Price Code: Gr. 7 34 pages	HE:2001 Structural aluminium work Price Code :Gr. 6 17 pages Reprinted 2012 Reprinted 2013
DK: 2001 Gabions and pitching Price Code: Gr. 6 20 pages Reprinted 2012 Reprinted 2013	L:2001 Medium pressure pipelines Price Code: Gr. 7 Reprinted. 2013 37 pages
DM: 2008 Earthworks (roads, subgrade) Price Code: Gr 7 28 pages Reprinted 2013	LB: 2001 Bedding (pipes) Price Code: Gr. 6 22 pages Reprinted 2013
DN: 2001 Earthworks (railway sidings) Price Code: Gr. 8 18 pages Reprinted 2012 Reprinted 2013	LC: 2001 Cable ducts Price Code: Gr. 5 16 pages Reprinted 2013
G: 1984 Concrete (structural) Price Code: Gr .8 45 pages Reprinted 2013	LD:2001 Sewers Price Code: Gr. 7 30 pages Reprinted 2013
GA:2001 Concrete (small works) Price Code: Gr. 7 32 pages Reprinted 2012 Reprinted 2013	LE:2001 Stormwater drainage Price Code: Gr. 6 17 pages Reprinted 2013
GB:2001 Concrete (ordinary buildings) Price Code: Gr. 7 38 pages	LF:2001 Stand connections (water) Price Code: Gr. 6 22 pages Reprinted 2013
GE:2001 Precast concrete (structural) Price Code Gr. 5 16 pages Reprinted 2013	LG:2007 Pipe jacking Price Code: Gr. 5 15 pages Reprinted 2013
GF: 2001 Prestressed concrete Price Code: Gr. 7 31 pages Reprinted 2013	LK: 2007 Valves Price Code: Gr. 4 8 pages M: Roads (general) Price Code: Gr. 6 39 pages
H: 2001 Structural steelwork Price Code: Gr. 7 29 pages Reprinted 2013	ME:2007 Subbase Price Code: Gr. 6 19 pages
HA:2001 Structural steelwork (sundry items) Price Code: Gr. 5 15 pages Reprinted 2013	MF:2007 Base Price Code: Gr. 6 19 pages
	MFL:2007 Base (Light pavement structures) Price Code: Gr. 6 18 pages

MG:2007 Bituminous surface treatment

Price	Code:	Gr.	7
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28 pages

MH:2007 Asphalt base and surfacing

Price	Code:	Gr.	7
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32 pages

MJ:2007 Segmented paving

Price	Code:	Gr.	5
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14 pages

MK:2007 Kerbing and channeling

Price	Code:	Gr.	6
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21 pages

MM:2007 Ancilliary road works

Price	Code:	Gr.7	
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39 pages

ZWS 255:1994**Tyre reconditioning**

Price	Code:	Gr.	7
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26 pages

Replaces: ZWS 255: 1982
Amended by MD 507: 1994; MD 552: 1994
Reprinted 2006

Covers the minimum requirements for the precautions to be observed in thereconditioning of pneumatic tyres for passenger and commercial vehicles. Included the requirements of acceptance for reconditioning, limits of damage, repairs, processing, marking and inspection.

ZWS 257:2014**Sawn softwood timbers****Part 1: General requirement**

Price	Code:	Gr.	7
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31 pages

Based on SABS 1783: Part 1: 1997
Replaces ZWS 334: 1991 and ZWS 335: 1991
First reprint 2015 as ZWS 257.1
Incorporates MD 679:2014

Specifies requirements for visually, mechanically and proof-graded sawn softwood timber, for use as structural timber, brandering and battens, for frame wall construction and industrial purposes.

Part 2:2014 Stress-graded structural timber and timber for frame wall construction

Price	Code:	Gr.	6
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7 pages

Based on SABS 1783: Part 2: 1997
Replaces ZWS 334: 1991 and ZWS 335: 1991
Amended by AMD 669:2011, MD 677:2014
First reprint 2015 as ZWS 257.2

Specifies requirements for three stress grades of visually graded structural timber and three stress grades of mechanically graded structural timber.

Part 3: Industrial grade timber

Price	Code:	Gr.	5
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14 pages

Based on SABS 1783: Part 3: 1977
Replaces ZWS 336: 1991
First reprint 2015 as ZWS 257.3
Incorporates MD 676:2014

Specifies requirements for four grades of timber intended for industrial but not for structural use.

Part 4: Brandering and battens

Price	Code:	Gr.	6
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19 pages

Based on SABS 1783: Part 4: 1997
First reprint 2015 as ZWS 257.4
Incorporates MD 675:2014

Specifies requirements for one grade of timber suitable for use as brandering and battens intended for being fixed against beams and joist in roofs for the attachment of ceilings and for the boxing in of leaves and for use as supports on roof trusses for the fixing of roof slates, tile, wooden shingles and thatch moisture and warpage resistance of lenses.

ZWS 257:Part 5-1:2022**Structural timber****Part 5-1: Stress-grade (Assessment)**

Price	Code:	Gr.	7
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10 pages

This part of ZWS 257-5 specifies procedures for sampling, testing and assessing characteristic values of structural properties for specific grades and sizes of sawn softwood and hardwood timber produced from unproven resources or by innovative grading methods to meet the stress-grade requirements of grades.

Part 5-2: Quality assurance of stress grading

Price	Code:	Gr.	7
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9 pages

This part of ZWS 257-5 specifies procedures for sampling, testing and assessing characteristic values of structural properties for specific grades and sizes of sawn softwood and hardwood timber produced from unproven resources or by innovative grading methods to meet the stress-grade requirements of grades.

ZWS 258:Part 1:1982**Motor vehicle lighting and signaling equipment****Part 1: Side, rear, parking, marker and stop lamps and direction indicators.**

Price	Code:	Gr. 5	
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10 pages
Amended by MD 478
Endorsement of BS AU 40: Part 1: 1963
Reprinted 2013

Covers lighting and signalling equipment for motor vehicles of all types including motor cycles etc. Requirements include the colour of the light, its intensity at various angles, resistance of lamps to vibration, corrosion, penetration of dust and moisture.

Part 2: Reflex reflectors for vehicles, including cycles

Price	Code:	Loan	
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12 pages
Amended by MD 492:1983
Endorsement of BS AU 40: Part 2:1965
Reprinted 2013

Specifies requirements for reflex reflecting devices for use on motor vehicles, their trailers and pedal cycles. Includes tests for the colour and intensity of the reflected light, resistance of water penetration, petrol's, oils, corrosion, heat and the adhesion of the mirror backing of reflectors.

ZWS 259:1982**Short link chain for lifting purposes: General conditions of acceptance**

Price Code: Loan
 8 pages
 Amended by MD 472:1982
 Endorsement of ISO 1834:1980
 Reprinted 2013

Specifies the general conditions of acceptance for electrically welded round steel short link chain for use on cranes, in chain slings and for use with chain hoists and other lifting appliances.

ZWS 260:1982**Short link chain for lifting purposes: Grade M (4), non-calibrated, for chain slings etc.**

Price Code: Loan
 8 pages
 Amended by MD 473:1982
 Endorsement of ISO 1835:1980
 Reprinted 2013

Covers requirements for lifting chains, grade M (4), non-calibrated, for use on cranes, chain slings and for general lifting purposes. These are electrically welded rounded steel short link chains.

ZWS 261:1982**Short link chain for lifting purposes – Grade M (4), calibrated for chain hoists and other lifting appliances.**

Price Code: Loan
 9 pages
 Amended by MD 474:1982
 Endorsement of ISO 1836:1980
 Reprinted 2013

Specifies requirements for lifting chains, grade M (4) calibrated for use as load chains hoists and similar appliances.

ZWS 262:1982**Short link chain for lifting purposes – Grade T (8); non-calibrated, for chain slings etc.**

Price Code: Loan
 9 pages
 Amended by MD 475:1982
 Endorsement of ISO 3076:1980
 Reprinted 2013

Specifies requirements for lifting chains T (8), non-calibrated for use on cranes, in chain slings and for general lifting purposes. These are electrically welded round steel short link chains.

ZWS 263:1982**Short link chain for lifting purposes – Grade T (8), calibrated, for chain hoists and other lifting appliances**

Price Code: Loan
 9 pages
 Amended by MD 476:1980
 Endorsement of ISO 3077:1982
 Reprinted 2013

Specifies requirements for lifting chains, grade T (8), accurately calibrated, for use as load chain hoists and similar appliances. These are electrically welded round steel short link chains.

ZWS 264:1984**Code of practice for use with standardized specifications for civil engineering construction and contract documents.**

Based on SABS 0120
 Complete set available in loose leaf file format (POA)

The various parts of this code explain the format and content of ZWS 254 and give guidance on the drafting of project specifications and other contract documents.

Part 1:1984 Format and contents

Price Code: Gr. 8
 28 pages
 Reprinted 2004

0 – Introduction**Part 2: Project Specification**

Price Code: Gr. 6
 12 pages
 Reprinted 2004

Part 3: Guidance for Design

Price Code: Gr. 5
 7 pages
 Reprinted 2004
 Reprinted 2013

Part 4: Typical Bills of Quantities

Price	Code:	Gr.	5
12 pages			
Reprinted 2004			
Reprinted 2013			

Part 5: Contract Administration

Price	Code:	Gr.	6
16 pages			
Reprinted 2013			

A – General**Part 2: Project Specification**

Price	Code:	Gr.	6
11 pages			

Part 3: Guidance for Design

Price Code: Gr. 6
 11 pages

Part 4: Typical Bills of Quantities

Price Code: Gr. 5
 5 pages

Part 5: Contract Administration

Price	Code:	Gr.	5
6 pages			
Reprinted 2013			

C – Site Clearance**Part 2: Projection Specification**

Price	Code:	Gr.	5
11 pages			
Reprinted 2004			

Part 3: Guidance for Design

Price	Code:	Gr.	3
6 pages			
Reprinted 2004			

Part 4: Typical Bills of Quantities

Price	Code:	Gr.	4
4 pages			
Reprinted 2004			

Part 5: Contract Administration										Covers the manufacture, production, processing and treatment of open pack meat products of human consumption.
Price	Code:	Gr.	5							
5 pages										
Reprinted 2004										
D – Earthworks										
Part 2: Projection Specification										
Price	Code:	Gr.	6							ZWS 266:1982
11 pages										White chalks
										Price
										Code:
										Gr.
										4
										9 pages
										Reprinted 2000
										Reprinted 2008
										Reprinted 2013
Part 3: Guidance for Design										Covers for hard and soft white chalks.
Price	Code:	Gr.	5							
8 pages										
Part 4: Typical Bills of Quantities										
Price Code: Gr. 4										ZWS 267:1984
4 pages										Coloured chalks and pastels
										Price
										Code:
										Gr.
										5
										15 pages
										Reprinted 2000
										Reprinted 2009
										Reprinted 2014
Part 5: Contract Administration										Covers requirements for coloured chalks (soft and hard), soft dustfree and pastels for use in schools.
Price	Code:	Gr.	6							
9 pages										
DA – Earthworks (Small works)										
Part 2: Project Specification										
Price	Code:	Gr.	6							ZWS 268:1992
6 pages										Mechanical jacks
										Price
										Code:
										Gr.
										4
										11 pages
										Replaces ZWS 268:1982
										Based on SABS 1126:1977
										Reprinted 2009
Part 3: Guidance for Design										Covers the constructional, marking and performance requirements for mechanical jacks of the scissors, body and bumper types for use with motor vehicles.
Price	Code:	Gr.	3							
3 pages										
Reprinted 2004										
Part 4: Typical Bills of Quantities										Covers good practice in the planning, installation, testing and upkeep of hose reels on premises.
Price	Code:	Gr.	4							
4 pages										
Reprinted 2004										
Reprinted 2013										
Part 5: Contract Administration										
Price	Code:	Gr.	3							ZWS 270:1992
3 pages										Filler metals for brazing
										Price
										Code:
										Gr.
										6
										17 pages
										Based on BS 1845:1984
G – Concrete (Structural):1985										
Part 2: Project Specification										Specifies a range of filler metals used for brazing and lays down requirements for quality control system at the manufacturer's works.
Price	Code:	Gr.	8							
19 pages										
Reprinted 2004										
Part 3: Guidance for Design										
Price	Code:	Gr.	6							ZWS 271:1993
13 pages										Intruder alarm systems in buildings
										Price
										Code:
										Gr.
										6
										25 pages
										Replaces ZWS 271:1983
Part 4: Typical Bills of Quantities										Gives the general requirements for the installation and operation of intruder alarm systems with audible signalling and/or remote signaling.
Price	Code:	Gr.	5							
5 pages										
Part 5: Contract Administration										
Price	Code:	Gr.	7							ZWS 272:1987
14 pages										Semi-flexible vinyl floor tiles
										Price
										Code:
										Gr.
										6
										19 pages
										Replaces 272:1982
										Based on SABS 581:1977
										Reprinted 2008
										Reprinted 2010
ZWS 265:2018										Covers four thicknesses of semi-flexible floor tiles of compound vinyl plastic. Requirements are laid down for marbling, dimen-
Open pack meat products										
Price	Code:	Gr.	7							
37 pages										
Amended by MD 614:1999, MD 645:2002										
Replaces ZWS S1:1966										

sions, resistance to indentation and impact, flexibility after aging, loss in mass after heating, chemical resistance and resistance to curling.

ZWS 273:1982

Luminaires – General requirements and tests

Price Code: Gr. 9
113 pages
Amended by MD 488:1982
Endorsement of BS 4533: Part 101:1981
Reprinted 2011

Specifies general requirements for the classification and marking of luminaires and for their mechanical construction and electrical construction together with related tests.

ZWS 274:1983

Single-phase induction motors

Price Code: Gr.7
54 pages
Amended by MD 497:1983
Endorsement of SABS 1189:1978
Reprinted 2011

Covers four types of single-phase alternating current induction motors with standard dimensions and frame sizes up to and including 100 for voltages up to and including 250V at a frequency of 50Hz.

ZWS 276:1993

Damp-proofing materials

Part 1: Bituminous damp-proofing materials
Price Code: Gr. 5
16 pages
Amended by MD 656:2004

Specifies the requirements for bituminous materials suitable for use in the construction of damp-proof courses.

Part 2: Sandwich membranes in floors

Price Code: Gr. 4
10 pages
Replaces ZWS A25: Part 2: 1972

Specifies requirements for and methods of application of materials suitable for use in the construction of damp-proof floors. The materials may be used in order to prevent capillary rise of moisture when applied between concrete slabs or on top of blinding screed which has been laid on a hard core.

Part 3: Polyethylene sheet for damp-proofing in walls and floors

Price Code: Gr. 4
11 pages
Replaces ZWS A25: Part 3:1972

Covers the requirements for two types of polyethylene sheet for use in damp-proof courses in walls and for the damp-proofing of floors and basemen

ZWS 277:1993

Non-metallic conduit

Part 1: Metric units
Price Code: Gr. 6
18 pages
Replaces ZWS C13:1969
Covers conduit and fittings manufactured from non-metallic materials, principally unplasticized polyvinyl chloride but applies also to conduit and fittings manufactured from any other non-metallic materials which meets with requirements of this specification. Sizes covered are 20 – 25 mm.

Part 2: Imperial units

Price Code: Gr. 4
8 pages

As above but imperial measurements still sometimes used in Zimbabwe. Sizes covered are ¾ and 1 inch.

ZWS 279:1995

Twist drills

Price Code: Gr. 7
39 pages
Based on BS 328: Part 1: 1993
Reprinted 2009

Specifies requirements for dimensions, design, materials, hardness values and performance for twist drills made from high-speed steel with either parallel or Morse taper shanks.

ZWS 280:1985

Lined polyvinyl chloride boots

Part 1: PVC moulded boots for general industrial purposes

Part 2: PVC moulded safety footwear

Price Code: Gr. 4
16 pages
Based on BS 6159 and BS 1870 Part 3
Reprinted 2009

Part 1 specifies the requirements for boots moulded from polyvinyl chloride compounds for general industrial use. Part 2 specifies requirements for two types of moulded polyvinyl chloride (PVC) safety footwear.

ZWS 281:1985

Lined rubber gumboots

Part 1: Rubber gumboots for general purposes

Price Code: Gr. 6
15 pages
Based on BS 5462: Parts 1 & 2:1984
Reprinted 2009

Part 1 specifies requirements for high sided rubber boots intended for heavy duty or to protect the wearer from injury due to penetration by sharp objects.

Part 2: Rubber gumboots for safety purposes

Price Code: Gr. 6
15 pages
Based on BS 5462: Parts 1 & 2:1984
Reprinted 2009

Part 2 specifies the requirements for two types of lined rubber safety boots: with safety toecaps and protective midsoles.

ZWS 282:1993

Open-end, ring and combination spanners

Price code: Gr. 6
18 pages
Based on SABS 1112: 1976
Covers the requirements for the material, dimensions, performance and finish of wrenches (spanners).

ZWS 283:1984

Stationary instantaneous electric water heaters

Price code: Loan
44 pages
Endorsement of BS 3456 Part 3 section 3.9 1979
Amended by MD 505: 1984
Reprinted 2012

Safety requirements for electric stationary instantaneous water heaters for heating water to a temperature below its boiling point. Covers sheathed and bare element types but does not include the electrode type.

ZWS 284:1994

Steel fencing materials

Price Code: Gr. 7
32 pages
Replaces: ZWS N5: 1971
Amended by MD 549: 1984
Reprinted 2000
Reprinted 2013

Covers barbed wire; fencing standards; droppers; galvanized wire; gateposts; gates and straining posts. Materials complying with this standard meet the requirements of the Zimbabwe Fencing Act.

ZWS 285:1986

Mild steel wire nails

Price code: Gr. 6
18 pages
Based on SABS 820: 1974
Reprinted 2012

Covers the requirements for wire and cut mild steel nails and tacks. The standard is partially comparable to BS 1202: 1974 but includes types of nails currently manufactured in Zimbabwe. It comprises general requirements, dimensions and tolerances, packing, sampling and methods of test.

ZWS 286:1985

Natural fibre ropes

Price Code: Gr. 6
14 pages
Amended by MD 531: 1989
Based on SABS 991: 1980
Reprinted 2009

Covers manila, sisal and cotton ropes of two grades and of 3 strand hawser (plain-laid) construction. Also gives requirements, packing, sampling and test methods.

ZWS 287:1998

Fibre-cement boards

Price code: Gr. 6
14 pages
Based on SABS 803: 1971
Reprinted 2008

Specifies the requirements for the flat unpressed and flat pressed boards manufactured from fibre-cement with acceptable additives. The boards may have either a smooth or a textured surface and are generally recommended for internal use. For external use reference shall be made to ZWS 198.

ZWS 288:1994

Ground granulated blast furnace slag for use with Portland cement

Price Code: Gr. 6
19 pages
Based on BS 6699:1992
Reprinted 2009

Specifies requirements for the composition and manufacture of ground granulated blast furnace slag (ggbs) for use in combination with Portland cement.

ZWS 289:1995

Cast iron wedge and double disk gate valves for general purposes

Price Code: Gr. 5
19 pages
Based on BS 5150: 1974 and BS 4504
Reprinted 2007

Specifies requirements for flanged and screwed body end cast iron gate valves of the wedge and double disk types, copper alloy faced, resilient seated or of all iron construction for general purpose.

ZWS 290:1986

Electric luminaries: handlamps

Price Code: Gr. 5
16 pages
Identical to BS 4533: Section 102.8:1982 and IEC 598: Part 2: Section 8: 1981
Reprinted 2010

Specifies requirements for handlamps and similar portable hand-held luminaires for use with tungsten filament and tubular fluorescent lamps on supply voltages not exceeding 250 V. To be read in conjunction with ZWS 273.

ZWS 291:1986

Multi-cell dry batteries

Price Code: Gr. 5
13 pages
Reprinted 2009

Covers dry cell batteries for use with military and similar radio equipment. Includes designation of batteries, construction, electrical and physical requirements, packaging and testing.

ZWS 292:1986

Detergent-disinfectants (iodophors)

Price Code: Gr. 6
28 pages
Amended by MD 550: 1993
Reprinted 2001
Reprinted 2009

Covers both acidic and non-acidic detergent-disinfectants that contain an iodophor and compatible surface-active agent for use only on previously cleaned inanimate surfaces. Methods of test include stability, disinfecting efficacy, rinsing properties and cleaning efficiency.

ZWS 293:1986

Fusion welded steel air receivers

Price Code: Gr. 8
69 pages
Amended by MD 537: 1991
Based on BS 5169: 1975
Reprinted 2007

Species requirements for Class I, Class II, and Class III fusion welded steel air receivers.

ZWS 294:1999

Woven polypropylene fertilizer bags

Price Code: Gr. 4
10 pages
Based on SABS CKS 632: 1990
Reprinted 2009

Covers requirements for 50 kg fertilizer bags, made from tubular, woven fabric of which polypropylene yarns are the major com-

ponent and suitable for use for the handling, transportation and storage of fertilizer.

ZWS 295:1989

Salt cured and shade dried bovine hides

Price Code: Gr. 8
22 pages
Reprinted 2009

Specifies the requirements for bovine hides of both commercial and country origin cured by suspended shade drying; dry salting; wet salting without prior brining; or wet salting with prior brining.

ZWS 296:1987

Liquid carbon dioxide (industrial)

Price Code: Gr. 7
27 pages
Replaces: ZWS K19: 1969
Based on BS 4105: 1969
Reprinted 2009

Specifies three types of carbon dioxides for industrial use only. Does not cover carbon dioxide intended for medical use.

ZWS 297:2000

Mills balls

Price Code: Gr. 5
13 pages
Amended by MD 639: 2001
Reprinted 2020
Specifies requirements for mill balls: a) cast steel; b) unalloyed white cast iron; c) chromium white cast iron; nickel chromium white cast iron; e) manganese cast steel.

ZWS 298:1988

Detergent-disinfectants based on quaternary ammonium compounds

Price Code: Gr. 4
9 pages
Based on SABS 639: 1974
Reprinted 2000
Reprinted 2009

Covers two types (liquid or solid) of detergent-disinfectants that contain quaternary ammonium compound disinfectants and other chemical agents that are miscible with water and are intended for use on inanimate surfaces that are free from excessive dirt.

ZWS 299:1991

Moulded – case circuits – breakers

Price Code: Gr. 8
49 pages
Based on SABS 156: 1977

Covers single-pole and multi – pole air break circuit breakers, assembled as an integral unit in a supporting and in enclosing moulded case of insulating materials, for current ratings up to and including 1 000 A and alternative voltages up to and including 660 V.

ZWS 302:2012

Quaternary ammonium compound disinfectants

Price Code: Gr. 5
15 pages
Replaces ZWS K31
Reprinted 2009

Covers formulations based on quaternary ammonium compounds in liquid or in powder form for disinfecting inanimate surfaces.

ZWS 303:1993

Safety helmets for industrial use and for firemen

Price Code: Gr. 7
28 pages
Replaces: ZWS Z13: 1970
Amended by MD 574: 1997 MD 579 199
Based on SABS 397: 1983

Covers three types of safety helmets (with brim or peak) for protection against falling objects and electrical hazards such as may be encountered in industry during fire-fighting and rescue operations.

ZWS 305:1991

Pneumatic tyre valves

Price Code: Gr. 5
15 pages
Based on BS AU 50: Part 3: Section 1a, 2, 3 and 5

Covers all known pneumatic tyre valves manufactured locally and are capable of being adapted to cover any valve to be produced at any time in the future.

ZWS 308:1990

Mastic asphalt for roofing

Price Code: Gr. 5
14 pages
Replaces: ZWS A1: 1960

Covers mastic asphalt for roofing composed of fine ground limestone and coarse aggregate incorporating either (a) asphalt bitumen or (b) a blend of asphaltic bitumen and refined lake asphalt or (c) blends of bitumen (s), asphaltite and refined lake asphalt.

ZWS 309:1990

Mastic asphalt for flooring

Price Code: Gr. 5
14 pages
Replaces: ZWS A2: 1960

Covers mainly industrial flooring applications, but mastic asphalt that complies with this standard may also be used as a base coat to receive floor coverings such as wood block, parquet, vinyl, rubber, ceramic or stone as protection against rising damp.

ZWS 310:1990

Mastic asphalt for tanking

Price Code: Gr. 5
14 pages
Replaces: ZWS A3: 1960

Covers mastic for tanking composed of fine ground limestone and coarse aggregate incorporating either (a) bitumen or (b) blends of bitumen and refined lake asphalt or (c) blends of bitumens and asphaltite or blends of bitumens, asphaltite and refined lake asphalt.

ZWS 311:1990

Code of practice for application of mastic asphalt for roofing

Price Code: Gr. 4
9 pages
Replaces ZWS A1: 1960

Deals with the use of mastic as a roof covering, including situations designed to carry traffic. It also covers recommendations for the preparation of the base to which the mastic asphalt is applied and sets out the site practice. It includes recommendations concerning various accessory materials generally used in

conjunction with mastic for roofing, including the use of mastic asphalt as waterproofing of roofs of reservoirs.

ZWS 313:1990

Code of practice for the application of mastic asphalt tanking
Price Code: Gr. 3
6 pages
Replaces: ZWS A3: 1960

Deals with the use of mastic asphalt for waterproofing concrete structures below ground level and tank linings, includes recommendations for the preparation of the base to which the mastic asphalt is applied and sets out the site practices.

ZWS 314:2014

Pre-constructural termite proofing
Price Code: Gr. 3
6 pages
Replaces: ZWS 314: 1973
Amended by MD 682
Reprinted 2013

Covers the application of chemicals to building sites as an aid to the proofing of buildings against subterranean termite attacks. It is not intended for the proofing of wooden structures in contact with the ground.

ZWS 315:2010

Concrete Pipes (non-pressure)
Price Code: Gr. 6
20 pages
Replaces: ZWS 315: 1973
Amended by MD 667:2010
Reprinted 2010

Covers non-pressure precast reinforced and unreinforced concrete circular pipes intended for the conveyance of storm water, sewage and water for irrigation.

ZWS 316:1997

Graphical symbols for electrical diagrams
Price Code: Gr. 9
113 pages
Based on IEC 617: Part 1 to 11
Reprinted 2006

Contains graphical symbols for use in typical electrotechnical diagrams. These symbols have been selected from Parts 2 to 8 and 11 of IEC 617 and are those that are more commonly used.

ZWS 317:1995

Lever arch files for stationery
Price Code: Gr. 5
12 pages
Identical to SABS CKS 368: 1973
Reprinted 2011

Covers lever arch files of the landscape and upright types for filing.

ZWS 319:1989

Sandlime bricks
Price Code: Gr. 4
9 pages
Replaces: ZWS A8: 1960
Based on BS 187: 1955 and SABS 285: 1951

Covers dimensions and strengths of three classes of bricks, viz, bricks for special purposes, face bricks and common bricks.

ZWS 320:2007

Cleaning services Industry – cleaning performance for commercial residential, industrial and health premises
Price Code: Gr. 7
22 pages
Based on SS 449: 02

Applies to the quality of cleaning services in commercial, residential, industrial and health premises.

ZWS 321:1982

Bitumen roofing felts
Price Code: Gr. 6
21 pages
Replaces: ZWS A30 1968
Based on SABS 92
Reprinted 2010

Covers three types of bituminous felt and two types of glass fibre tissue based felt classed according to mass per square metre.

ZWS 322:1993

Photovoltaic modules
Price Code: Gr. 7
44 pages
Based on CAN/CSA F380-M87
Reprinted 2011

Applies to terrestrial photovoltaic modules used for converting solar radiation into electric energy and is limited to mobile applications producing up to a maximum of 300 V.

ZWS 323:1991

Wheelchairs for the disabled
Price Code: Gr. 6
22 pages

Specifies the requirements for folding or collapsible wheel chairs for adults. Static performance, dynamic and life requirements are specified.

ZWS 324:1990

Slide fasteners
Price Code: Gr. 7
27 pages
Based on BS 3084

Give requirements for both metal and plastic zip fasteners supplied for use in industry and also when sold singly to the general public. Information on performance when related to end use is also shown for the labelling purposes.

ZWS 325:1993

Capillary and compression fittings for copper tubes
Price Code: Gr. 7
31 pages
Based on BS 864: Part 2: 1983
Reprinted 2010

Specifies requirements for capillary fittings and compression fittings for use with copper tubes complying with tables W, X, Y and Z of ZWS

ZWS 326: 1990

Copper tubes
Price Code: Gr. 5
13 pages
Reprinted 2004 to incorporate MD 544 and 546: 2004
Based on BS 2871: Part 1: 1971

Specifies requirements for copper tubes in the following four different conditions: annealed (O) copper tubes; half hard (1/2

H) copper tubes (See table X); half hard (1/2 H) copper tubes; and hard drawn (H) copper tubes.

ZWS 327:2002

Part 1: 2003 Components of pressure pipe systems- unplasticized poly(vinyl chloride) pressure pipe systems

Price Code: Gr. 9
 58 pages
 Replaces ZWS K21: 1971
 Reprinted 2004 to incorporate MD 655: 2003
 Amended: MD 663: 2009
 Reprinted 1999

Specifies requirements for unplasticized poly (vinyl chloride) (PVC-U) pipes and injection molded fittings intended for above-ground and below ground pressure applications for the conveyance of potable water in reticulation systems, and for other applications in which continuous temperatures in excess of 25 °C are not encountered.

Part 2: 2002 Modified (vinyl chloride) PVC-M) pressure pipes systems

Price Code: Gr. 8
 42 pages

Specifies requirements for modified unplasticized poly (vinyl chloride) (PVC) pipes (with integral joints that incorporate rubber sealing rings) and fittings (post-formed from pipe made of PVC-M) that are intended for above-ground and below-ground pressure applications for the conveyance of portable water in reticulation system and for other application in which continuous temperature n excess of 25 °C are not encountered.

ZWS 329:1990

Code of practice for application of mastic asphalt flooring

Price Code: Gr. 4
 8 pages
 Replaces: ZWS A2: 1960
 Reprinted 2010

Deals with the use of mastic asphalt as a floor covering on new or old worn concrete.

ZWS 330:1991

Storage of cereals and pulses

Part 1: Guide to control of attack by vertebrate and invertebrate animals

Price Code: Gr. 5
 13 pages
 Based on ISO 6322: part 3: 1981

Gives guidance on limiting accessibility of grain and pulses to birds, rodents and other pests which might feed on it.

Part 2: Guide to particular problems encountered in the storage of cereals and pulses

Price Code: Gr. 6
 21 pages
 Based on ISO 6322: part 1: 1981

Describes general considerations related to the problems of keeping cereals. Other aspects of the storage of cereals and pulses are dealt with in ZWS 330: Part 1 and ZWS 331.

ZWS 331:1991

Storage of cereals and pulses

Price Code: Gr. 5
 14 pages
 Based on ISO 6322: Part 2: 1981

Gives guidance on the choice of a method of storage of cereals and pulses and on the essential requirements for good storage according to the method chosen. Other aspects of the storage of cereals and pulses are dealt with in ZWS 330: Part 1 and 2.

ZWS 332: 2015

Labelling of food and feed that are and are not products of genetic modification

Price Code: Gr. 5
 8 pages

Specifies the labeling and advertising of food and feed produced from genetic modification or consisting of or containing GMOs irrespective of whether the food/feed contains DNA or protein.

ZWS 333: 1974

Wood Screws

Price Code: Gr. 7
 31 pages
 Reprint of ZWS 10: 1974
 Reprinted 2004

Specifies the requirements for slotted head wood screws manufactured to the dimensions specified.

ZWS 337:1991

Hydraulic jacks

Price Code: Gr. 4
 10 pages
 Based on SABS 1144: 1977
 Reprinted 2004

Covers the requirements for the suggested dimensions, construction and performance of hydraulic jacks of the general industrial (bottle) and trolley (garage) types.

ZWS 338:1990

Concrete floor and wall tiles

Price Code: Gr. 3
 12 pages
 Based on BS 1197: Part 2: 1980 and SABS CKS 208: 1969

Specifies the requirements for dimensions, strength and workmanship of floor and wall tiles made with cement and aggregate.

ZWS 339:1991

Industrial leather hand protectors and leather protective clothing

Price Code: Gr. 7
 25 pages
 Replaces: ZWS Z17: 1971 (Partially)
 Based on SABS 316: 1988

Covers materials and construction of industrial leather hand protectors (e.g. gloves) and leather protective clothing.

ZWS 341:2022

The Petroleum industry - The storage, transportation and use of small quantities of flammable petroleum liquids

Price Code: Gr. 9
 48 pages
 Replaces: ZWSCZ2: 1972
 Reprinted 2004
 Amended by MD 682:2014

This standards specifies requirements for storage and transportation of flammable petroleum products of quantities not exceeding 1000 litres for diesel and illuminating paraffin and quantities not exceeding 200 litres for petrol/ ethanol blends.

ZWS 342:1977**Earthenware drain and sewer pipes and fittings**

Price Code: Gr. 7

40 pages

Replaces: ZWS A16: 1973

Reprinted 2011

Covers vitrified clay pipes suitable for jointing by the following methods: mortar caulking; rolling rubber ring; bitumen run; reformed factory-applied; plain-end pipe; slip seal rubber. Jointing methods are not covered in the specification.

ZWS 343:1991**Supersulphated cement**

Price Code: Gr. 4

9 pages

Based on BS 4248: 1974

Specifies requirements for the composition, manufacture, sampling and testing of supersulphated cement.

ZWS 344:1999**Insecticide in the form of one percent or three percent endosulfan granules**

Price Code: Gr. 4

12 pages

Replaces ZWS 230: 1978

Reprinted 2010

Covers a granular type of insecticide consisting of quartzitic sand to which is bonded a finely-ground concentrate of endosulfan by means of an emulsifier to which is added a stabilizer.

ZWS 345:1991**Pesticide in the form of five percent disulfoton granules**

Price Code: Gr. 5

14 pages

Replaces: ZWS 230: Pat 2: 1986

Covers a granular type of pesticide consisting of crushed brick pumice, Fuller's earth, attapulgite granules or any other suitable carrier to which is adsorbed and absorbed a concentrate of disulfoton.

ZWS 346:1991**Insecticide in the form of two and a half percent trichlorfon granules**

Price Code: Gr. 4

9 pages

Replaces ZWS 230 Part 3: 1986

Covers granular type of insecticide consisting of crushed brick granules, dolomite, sand or any other suitable carrier to which is adsorbed and absorbed a concentrate of trichlorfon. Applies to insecticides for the treatment of maize against stalk borer.

ZWS 347:1991**Handheld blowpipes, mixers and nozzles, using fuel gas and oxygen, for gas welding, cutting and related processes**

Price Code: Gr. 7

30 pages

Based on BS 6503: 1984

Specifies materials, construction, safety, performance and test requirements for handled blowpipes and nozzles.

ZWS 348:2007**The manufacture of soft drinks and soft drink concentrates**

Price Code: Gr. 10

65 pages

Second revision of ZWS 348: 1972

Based on SANS 449: 1985

Replaces: ZWS S9: 1967

Amended MD 613: 1999: MD 642: 2002

Covers the manufacture of soft drinks.

ZWS 350:1992**The protection of dwelling houses against lightning**

Price Code: Gr. 8

62 pages

Replaces: ZWS CC2: 1973

Based on SABS 03A: 1976

Provides authoritative guidance on the principles and practice which experience has shown to be of major importance in the protection of dwelling houses and similar buildings against lightning.

ZWS 351:1993**The protection of structures against lightning**

Price Code: Gr. 9

123 pages

Replaces: ZWS CC2: 1973

Based on SABS 03: 1985

Covers the installation of a lightning protection system and sets out the principles. Requirements for air terminal systems, down conductor, earthing and materials are given.

ZWS 352:2002**Fruit squashes and fruit cordials (fruit syrups) and their bases**

Price Code: Gr. 6

16 pages

Amended by MD 615: 1999, MD 644: 2002

Replaces: CAS S21:1969

Reprinted 2011

Covers the manufacture of fruit squashes and fruit cordials (fruit syrups) and their bases.

ZWS 354:1978**Fluorescent lamp ballasts**

Price Code: Gr. 5

13 pages

Partially superseded by ZWS 127: 1978

Reprinted 2011

Covers the features and operating characteristics of reference ballasts for fluorescent lamps for use on a.c. supplies at a frequency of 50 Hz.

ZWS 355:1995**Universal undercoating: White**

Price Code: Gr. 4

10 pages

Amended by MD 553: 1994

Replaces: ZWS K9: 1961

Reprinted 2011

Covers white undercoating for air-drying protective and decorative paints for use on primed steel and timber and onsealed and primed masonry wall board, compressed fibre board and other constructional and finishing materials in building.

ZWS 356:1995**High gloss synthetic enamel paint**

Price Code: Gr. 4

12 pages

Replaces: ZWS 356: 1993

Reprinted 2011

Covers ready mixed high gloss synthetic resin based enamel paint for interior and exterior use as a finishing coat on metal, wood, sealed plaster walls and concrete surfaces, composition board and similar materials.

ZWS 357:1993

Emulsion paints for exterior use

Price Code: Gr. 4
14 pages
Amended by MD 567: 1995
Replaces: ZWS K13: 1968
Based o SABS 634: 1972

Covers emulsion paints based on synthetic polymers primarily intended for exterior use on plaster, fibre cement or other similar porous surfaces or on surfaces previously painted with compatible emulsion paint.

ZWS 359:1995

Domestic and industrial security grill swing-type gates

Price Code: Gr. 4
7 pages
Reprinted 2011
Covers requirements for both single and double security grill swing-type gates and their accessories for domestic and industrial application.

ZWS 360:1993

Self-supporting plastics containers of nominal capacities 5 to 220 litres

Price Code: Gr. 7
39 pages
Amended by MD 577: 1997
Based on SABS 1176: 1981

Covers self-supporting containers made of plastics materials, of nominal capacities 5 to 220 litres, suitable for the storage and transportation of commodities. Also covers self supporting containers of maximum nominal capacity 10 litres for reserve fuel for motor vehicles.

ZWS 361:1968

Carbon paper

Price Code: Gr. 5
13 pages
Replaces: ZWS XI1: 1968
Based on SABS 652: 1961

Covers three types of typewriter carbon paper and two types of pencil carbon paper.

ZWS 362:1994

Aluminum tubes for irrigation purposes

Price Code: Gr. 4
12 pages
Based on ASAE S263.2: 1992 and BS 1474: 1987
Reprinted 2011

Specifies minimum requirements, design, manufacture and testing of aluminum tubes for use in irrigation tubing systems where operational pressure does not exceed 1 000 kPa.

ZWS 363:1996

Irrigation equipment – irrigation sprayers and rotating sprinklers

Price Code: Gr. 7
37 pages
Based on ISO 7749: Part 1: 1986: ISO 7749: Part 2: 1990 and ISO 8026: 1985

Covers irrigation equipment, irrigation sprayers and rotating sprinklers.

ZWS 365:1993

Whole spices: Determination of extraneous matter content

Price Code: Gr. 3
6 pages
Equivalent to ISO 927: 1982

Describes a method for determining the presence of foreign substances in whole spices.

ZWS 366:1993

Spices and condiments: Determination of total ash

Price Code: Gr. 4
7 pages
Equivalent to ISO 928: 1980
Describes a method for the determination of total ash from spices and condiments.

ZWS 367:1993

Spices and condiments: Determination of water - insoluble ash

Price Code: Gr. 3
6 pages
Equivalent to ISO 929: 1980

Describes a method for determination of water-insoluble ash from spices and condiments.

ZWS 368:1993

Spices and condiments: Determination of moisture content (Entrainment method)

Price Code: Gr. 4
6 pages
Equivalent to ISO 939: 1980

Describes a test method for the determination of the moisture content of spices and condiments.

ZWS 369:1993

Spices and condiments: Determination of alcohol-soluble extract

Price Code: Gr .3
6 pages
Equivalent to ISO 940: 1979

Specifies a method for determination of alcohol-soluble extract from spices and condiments.

ZWS 370:1993

Spices and condiments: Determination of cold water-soluble extract

Price Code: Gr. 3
6 pages
Equivalent to ISO 941: 1980

Specifies a method for the determination of cold water-soluble extract in spices and condiments.

ZWS 371:1993

Method of sampling spices and condiments

Price Code: Gr. 4
7 pages
Equivalent to ISO 948: 1980

Specifies a method of sampling spices and condiments.

ZWS 372:1993**Spices and condiments: Preparation of a ground sample for analysis**

Price	Code:	Gr.	2
4 pages			
Equivalent to ISO 2825: 1981			

Specifies a method of preparing a groundsample of spices or condiments for analysis, from a laboratory sample obtained by the method specified in ZWS 371.

ZWS 373:1993**Agricultural food products: Determination of crude fibre content – General method**

Price	Code:	Gr.	6
22 pages			
Equivalent to ISO 5498: 1981			

Specifies a conventional method for the determination of crude fibre content of agricultural food products. Method is based on the Weende method which involves acid treatment followed by alkali treatment.

ZWS 374:1993**Black pepper and white pepper, whole or ground: Determination of piperine content - Spectrophotometric method**

Price	Code:	Gr.	3
7 pages			
Equivalent to ISO 5564: 1962			

Specifies a spectrophotometric method for the determination of the piperine content of black or white pepper (*Piper nigrum*L), in whole or ground form. The test method determines the quantity of pungent compound (piperine) and its analogues in the product.

ZWS 375:1993**Agricultural food products: Determination of crude fibre content – Modified Scharrer method**

Price	Code:	Gr.	4
11 pages			
Equivalent to ISO 6541: 1981			

Specifies a conventional method for the determination of the crude fibre content of agricultural food products. Method is applicable to cereals and cereal products as well as to certain products containing less than 1 % of crude fibre, for example yeast.

ZWS 376:1993**Nomenclature for spices and condiments: First list**

Price	Code:	Gr.	4
11 pages			
Based on ISO 678			
Reprinted 2013			

A list of spices and condiments together with their botanical names, their common English names and names of parts used in the spices or condiments are given.

ZWS 377:1995**Curry powder**

Price	Code:	Gr.	4
8 pages			
Based on ISO 2253: 1986			
Amended by MD 609: 1999			

Specifies minimum requirements for curry powder which is used as a flavouring material in the preparation of foods.

ZWS 378:1993**Spices and condiments: Determination of acid-insoluble ash**

Price Code:	Gr.	3
6 pages		
Equivalent to ISO 930: 1980		

Specifies a method for the determination of acid-insoluble ash from spices and condiments.

ZWS 379:1995**Ginger: whole, in pieces or ground**

Price	Code:	Gr.	5
13 pages			
Amended by MD 616: 1999			
Based on ISO 1003: 1980			
Reprinted 2013			

Specifies requirements for ginger (*Zingiber officinale* Roscoe) whole, in pieces or ground.

ZWS 380:1995**Dehydrated garlic**

Price	Code:	Gr.	5
12 pages			
Amended by MD 610: 1999			
Equivalent to ISO 5560: 1983			

Specifies requirements for dehydrated garlic in various commercial forms.

ZWS 381:1996**Part 1: Black pepper****Specifies requirements for black pepper (*Piper nigrum* Linnaeus), whole or ground**

Price	Code:	Gr.	6
17 pages			
Amended by MD 617: 1999			
Identical to ISO 959: Part 1: 1988			
Reprinted 2009			

Specifies requirements for black pepper (*Piper nigrum* Linnaeus) whole or ground.

Part 2: White pepper**Specifies requirements for white pepper (*Piper nigrum* Linnaeus) whole or ground at the following commercial stages semi processed (SP) pepper, processed (P) pepper**

Price	Code:	Gr.	5
14 pages			
Amended by MD 618: 1999			
Equivalent to ISO 959: Part 2: 1988			

Specifies requirements for white pepper (*Piper nigrum* Linnaeus) whole or ground, at the following commercial stages sem processed (SP) pepper, processed (P) pepper.

ZWS 382:1993**Spices and condiments: Determination of filth**

Price	Code:	Gr.	5
13 pages			
Equivalent to ISO 1208: 1982			

Specifies a method for the quantitative determination of mineral matter (sand, soil) and matter of animal origin (insect fragments, rodents hairs and excreta) in spices and condiments.

ZWS 383:1993**Spices and condiments: Determination of non-volatile ether extract**

Price	Code:	Gr.	3
6 pages			
Equivalent to ISO 1108: 1992			

Specifies a method for determining the whole of the non-volatile substances extracted by diethyl- ether.

ZWS 384:1993**Spices and condiments: determination of volatile oil content**

Price	Code:	Gr.	4
11 pages			
Equivalent to ISO 6571: 1984			

Specifies a method for the determination of the volatile oil content of spices, condiments and herbs.

ZWS 385:1993**Spices and condiments - Determination of volatile organic sulphur Compounds**

Price	Code:	Gr.	4
7 pages			

Specifies a method for determination of volatile organic sulfur compounds in dehydrated garlic.

ZWS 386: 1993**Aerials for the reception of sound and television broadcasting in the frequency range 30 MHz to 1 GHz: Electrical and mechanical characteristics**

Price	Code:	Gr.	4
9 pages			
Based on BS 5640: Part 1: 1978			

Covers linearly polarized receiving aerials for domestic use. Also defines and specifies the essential electrical and mechanical properties of aerials for the reception of sound and television broadcasting.

ZWS 387: 1993**Aerials of the reception of sound and television broadcasting in the frequency range 30 MHz to 1 GHz: Methods of measurements of electrical performance parameters**

Price	Code:	Gr.	6
17 pages			
Based on BS 5640: Part 2: 1978			

Covers linearly polarized aerials for domestic use. Also specifies the conditions and methods of measurement of electrical performance parameters of aerials for the reception of sound and television broadcasting.

ZWS 390:1995**Soya beans**

Price	Code:	Gr.	4
11 pages			
Reprinted 2013			

Specifies the requirements for soya beans suitable for human consumption.

ZWS 391:1996**Wheat grain**

Price	Code:	Gr.	6
17 pages			
Based on ISO 7970: 1989			

Lays down minimum specification for wheat (*Triticum aestivum*) intended for human consumption and which is the subject of international trade.

ZWS 392:1995**Sunflower seeds**

Price	Code:	Gr.	4
9 pages			

Based on Grain Marketing Act (Chapter 113) and Grain Marketing (Sunflower) Rules 1993

Specifies minimum requirements for sunflower seeds (*Helianthus annuus*).

ZWS 394:1993**Golden syrup, flavoured syrup and treacle**

Price	Code:	Gr.	4
10 pages			
Amended by MD 565: 1994, MD 620: 1999			
Replaces: ZWS S29: 1970			

Specifies physical and chemical requirements as well as containers and packaging.

ZWS 395: 1993**Hearing protectors: Ear-plugs**

Price	Code:	Gr.	4
9 pages			
Reprinted 2012			

Covers the constructional and chemical requirements of ear plugs intended for use as hearing protectors.

ZWS 396:1994**Orange juice preserved exclusively by physical means**

Price	Code:	Gr.	4
9 pages			

Amended by MD 585: 1999

Based on Codex standard 45: 1981

Reprinted 2012

Covers unfermented orange juice intended for direct consumption obtained by a mechanical process from the endocarp of sound ripe oranges preserved exclusively by physical means.

ZWS 397:1994**Pineapple juice preserved exclusively by physical means**

Price	Code:	Gr.	4
9 pages			

Amended by MD 592: 1999

Based on Codex standard 85: 1981

Reprinted 2012

Covers unfermented pineapple juice, intended for direct consumption, obtained by a mechanical process from the flesh or parts thereof if sound, ripe pineapples preserved exclusively by physical means.

ZWS 398:1999**Apple juice preserved exclusively by physical means**

Price	Code:	Gr.	4
8 pages			

Amended by MD 591: 1999

Based on Codex standard 46: 1981

Reprinted 2011

Covers unfermented grape juice, obtained by mechanical process from sound, ripe grapes preserved exclusively by physical means.

ZWS 399:1999**Grape juice preserved exclusively by physical means**

Price Code: Gr. 4
 8 pages
 Amended by MD 590: 1999
 Based on Codex standard 82: 1981
 Reprinted 2011

Covers unfermented grape juice, obtained by mechanical process from sound, ripe grapes preserved exclusively by physical means.

ZWS 400:2006**Electrical wiring of premises (ZWS wiring rules)**

Price Code: Gr. 12
 155 pages
 Replaces: ZWS CC1: 1964

This code of practice is designed to ensure safety in the utilization of electricity in or on premises and covers, design, selection, erection, inspection and testing of electrical installations.

ZWS 401:1993**Paints: Determination of volatile content**

Price Code: Gr. 2
 4 pages
 Replaces: ZWS K15 Part 2: 1966

Test method for determining the volatile content of paint at 105 +/- 2 °C.

ZWS 405:1993**Paints: Lieberman-Storch test for rosin derivatives in paint**

Price Code: Gr. 2
 4 pages
 Replaces: ZWS K15: Part 5: 1966

Specifies the Lieberman-Storch test method for determining the content of rosin and rosin derivatives in paint.

ZWS 406:1993**Paints: Determination of daylight 45°, 0° luminous directional reflectance of surface coatings and pigments**

Price Code: Gr. 3
 5 pages
 Replaces: ZWS K15: Part 6: 1966

Specifies a test method for determining the daylight 45°, 0° luminous directional reflectance of surface coating and pigment.

ZWS 407:1993**Paints: Coarse skins and particles in emulsion paints**

Price Code: Gr. 2
 4 pages
 Replaces: ZWS K15: Part 7: 1966
 Test method for determining coarse skins and particles in paints.

ZWS 408:1993**Paints: Determination of flexibility of paints films**

Price Code: Gr. 3
 5 pages
 Replaces: ZWS K15: Part 8: 1996
 Based on SABS method 145: 1975

Test method to assess the flexibility of paint films.

ZWS 410:1993**Paints: Resistance to wet abrasion of emulsion paints**

Price Code: Gr. 3
 5 pages
 Replaces: ZWS K15 Part 10: 1966

Based on SABS Method 175: 1975

Test method for assessing the resistance of emulsion paints to wet abrasion.

ZWS 411:1993**Paints: Light fastness and resistance to exposure**

Price Code: Gr. 2
 4 pages
 Replaces: ZWS K15: Part 11: 1966

Test method for determining ability of paints to withstand exposure to light and outdoor atmospheric conditions.

ZWS 414:1996**Paints – Determination of aluminum metal content of aluminum paint**

Price Code: Gr. 4
 5 pages
 Replaces: ZWS K15: Parts 13 and 14: 1967
 Based on SABS 682: 1972
 Reprinted 2011

Specifies the method of determining aluminum content of aluminum paint.

ZWS 417:1996**Paints- Determination of leafing value of aluminum paint**

Price Code: Gr. 4
 5 pages
 Replaces: ZWS K15: Part 17: 1967
 Based on ISO1247: 1974, SABS 1214: 1984
 Reprinted 2011

Specifies the method of determining the leafing value of aluminum paint.

ZWS 418:1996**Paints and varnishes – Determination for viscosity by means of an efflux cup**

Price Code: Gr. 4
 7 pages
 Identical to SABS Method 125: 1995
 Reprinted 2011
 Specifies the determination of the viscosity of Newtonian or near-Newtonian liquids with an efflux cup.

ZWS 420:1993**Paints-Pre-treatment of metal test panel –Abrading**

Price Code: Gr. 3
 5 pages
 Replaces: ZWS K15: Part 20: 1967

Specifies the method of pre-treating metal test panels for use during testing of paints.

ZWS 421:1993**Paints: Consistency of paints measured by means of a Krebs-stormer viscometer (without stroboscope)**

Price Code: Gr. 3
 6 pages
 Replaces: ZWS K15: Part 15: Part 21: 1967
 Specifies a method of measuring the consistency of paints using Krebs-stormer viscometer without stroboscope.

ZWS 422:1993**Paints: Consistency of paints measured by means of Krebs-stormer viscometer (with stroboscope)**

Price Code: Gr. 3
 6 pages

Replaces: ZWS K15: Part 22: 1967

Specifies a method of measuring the consistency of paints by means of a Krebs-stomer viscometer with stroboscope.

ZWS 423:2005

The installation of glazing in buildings

Price Code: Gr 8

91 pages

Based on SABS 0137: 2002

Covers methods of glazing and the fixing of glazing materials normally used in buildings.

ZWS 424:1993

Paints: Determination of mass per litre and specific gravity

Price Code: Gr. 3

5 pages

Replaces: ZWS K15: Part 24: 1971

Based on SABS Method 80: 1975

Specifies a method of determining mass per litre and specific gravity of paints.

ZWS 425:1993

Paints: Wet hiding power

Price Code: Gr. 3

6 pages

Replaces: ZWS K15: Part 25: 1971

Equivalent to SABS Method 464: 1975

Test method for determining the wet hiding power of paints. Includes a note for the use of the method for water based paints.

ZWS 426:1993

Paints: Brushing properties of paints

Price Code: Gr. 2

4 pages

Replaces: ZWS K15: Part 26: 1971

Equivalent to SABS Method 42: 1975

Specifies a test method for assessing the brushing properties of paints.

ZWS 428:1996

Paints-Spraying properties of paints

Price Code: Gr. 2

4 pages

Replaces: ZWS K15: Part 28: 1977

Based on SABS Method 44: 1975

Reprinted 2011

Specifies a method for determining the spraying properties of paints.

ZWS 429:1993

Paints: Fineness of grind of paints and pastes

Price Code: Gr. 3

5 pages

Replaces: ZWS K15: Part 29: 1971

Equivalent to SABS Method 53: 1975

Specifies a method for assessing the fineness of grid of paints and pastes

ZWS 430:1993

Paints: Drying time of paint films

Price Code: Gr.3

5 pages

Replaces: ZWS K15: Part 30: 1971

Amended by MD 548: 1993

Based on SABS Method 148: 1975

Test method for assessing the drying time of paints under laboratory conditions.

ZWS 431:1993

Paints: Sixty-degree specular reflection of paint films

Price Code: Gr. 2

4 pages

Replaces: ZWS K15: Part 31: 1971

Test method for determining the sixty-degree specular reflection of paint films using glossmeter.

ZWS 432:1993

Relative density of liquids

Price Code: Gr. 3

5 pages

Replaces: ZWS K15: Part 32: 1975

Identical to SABS Method 51: 1975

Test method for assessing relative density of liquids using a pycnometer.

ZWS 433:1993

Paints: Relative density of pigments and extenders

Price Code: Gr. 3

6 pages

Replaces: ZWS K15: Part 33: 1971

Equivalent to SABS Method 52: 1975

Method for assessing relative density of pigment and extenders used in paints.

ZWS 434:1993

Paints: Pigment content of paints with a non-aqueous solvent base

Price Code: Gr. 4

7 pages

Replaces: ZWS K15 Part 34: 1971

Equivalent to SABS Method 192: 1974

Test method for determining the content of pigments in paints and pastes with a non-aqueous base.

ZWS 435:1993

Paints: Pigment volume concentration of paints with a non-aqueous solvent base

Price Code: Gr. 3

6 pages

Replaces: ZWS K15: Part 35: 1971

Equivalent to SABS Method 560: 1975

Test method for determining the volume concentration of pigments in paints with a non-aqueous solvent base.

ZWS 436:2007

Textile floor coverings – Clearing maintenance of residential and commercial carpeting

Price Code:Gr.8

55 pages

Provides specifications and guidelines for maintenance techniques for textile floor coverings. It provides cleaning practices and consumers with minimum requirements for cleaning maintenance programmes and cleaning techniques to enable textile floor coverings to be kept in a good and hygienic conditions.

ZWS 437:1993

Paints: Resistance to skinning of paint, varnish and lacquer

Price Code: Gr. 2

3 pages

Equivalent to SABS Method 149: 1975

Test method for determining the resistance of paint, varnish and lacquer to skinning.

ZWS 438:1993

Paints: Resistance of paint films to laboratory artificial weathering
Price Code: Gr. 4
8 pages
Equivalent to SABS Method 182: 1975

Test method for determining resistance of paint films to weathering under laboratory conditions.

ZWS 439:1993

Paints: Titanium dioxide content of white emulsion paint pigment
Price Code: Gr. 3
6 pages
Based on ASTM D 1394: 1987

Test method for determining the titanium dioxide content of white emulsion paint.

ZWS 440:1993

Paints: Application of paint by doctor blade
Price Code: Gr. 3
5 pages
Equivalent to SABS Method 37: 1975

Method of paint application using a doctor blade during test procedures.

ZWS 441:1993

Paints: Wet film thickness of paint
Price Code: Gr. 2
4 pages
Based on SABS Method 139: 175

Specifies a method of determining the wet film thickness of paints using an eccentric disc type wet film thickness gauge.

ZWS 442:1993

Hearing protectors: Ear-muffs
Price Code: Gr. 7
31 pages
Based on SABS 1451: Part 1: 1988

Covers constructional, design and performance requirements for ear-muffs intended for use as hearing protectors.

ZWS 443:1994

Primer for wood for interior and exterior use
Price Code: Gr. 4
8 pages
Replaces: ZWS K7: 1961

Covers requirements for primer for wood which is intended for interior and exterior use under synthetic resin enamel paints.

ZWS 444:1993

Red oxide primer for iron and steel
Price Code: Gr. 4
8 pages
Replaces: ZWS K4: 1961
Reprinted 2012

Covers requirements for red oxide primer for use on iron and steel substrate. Intended for interior or exterior use under ready-mix synthetic resin paints.

ZWS 445:1993

Zinc phosphate primer
Price Code: Gr. 4
9 pages
Amended by MD 551: 1994
Based on SABS 1319: 1980

Lays down requirements for zinc phosphate primer for use on suitably prepared iron and steel surfaces.

ZWS 446:1993

Paints: Determination of total iron, expressed as iron (III) oxide, in paints
Price Code: Gr. 3
6 pages
Identical to ISO 1248: 1974

Test method for determining the total iron, as iron (III) oxide, in paints.

ZWS 447:1993

Paints: Resistance of paints and varnish films to cold water
Price Code: Gr. 3
5 pages
Based on SABS Method 167: 1975

Method for determining the resistance of paints and varnishes to cold water.

ZWS 448

Road and runway marking paint
Part 1: 2000 Non-reflectorized solvent-borne road marking paint
Price Code: Gr. 6
19 pages
Replaces: ZWS K20: 1970
Amended by MD 575: 1996. 626: 2000
Reprinted 2011

Covers non-reflectorized quick drying solvent-borne road marking paint for use on bituminous and concrete road surfaces.

Part 2: 1996: Non-reflectorized water-borne road and runway marking paint

Price Code: Gr. 6
20 pages
Based on SABS 731: 1995

Covers non-reflectorized quick-drying water borne road and runway paint for use in bituminous and concrete road and runway surfaces.

ZWS 449:2007

The cleaning and maintenance of floors
Price Code: Gr. 8
48 pages
Based on SANS 10170: 04

Outlines the basic principles of floor maintenance and covers procedures for the cleaning and maintenance the resilient wooden and hard surface floors in domestic, commercial and industrial establishments.

ZWS 451:2007

Cold Chain Management – Milk and dairy products
Price Code: Gr. 7
36 pages
Based on Singapore Standard CP 95:2002

Intended for the application and observance of temperature controls in each sector of the cold chain for milk and dairy products. It sets out recommendations and guidelines for the proper management of these during the production storage, transportation, manufacturing, distribution, handling etc

ZWS 457:2015

Natural mineral water and spring water

Price Code: Gr. 7
 18 pages
 Amended by MD 664:2009
 Reprinted 2004
 Reprinted 2013
 Second revision 2015

Applies to natural mineral water and spring water for human consumption.

ZWS 458:1994

Wax emulsion for coating citrus fruit

Price Code: Gr. 5
 14 pages
 Based on SABS 1448: 1988

Covers requirements for wax emulsions that are used on citrus fruits to replace the natural coating that has been partially or entirely removed by washing and brushing.

ZWS 459:1993

Measurement of water pH value

Price Code: Gr. 3
 7 pages
 Reprinted 2004

Test method for measuring the hydrogen ion activity in water and waste water using a glass electrode with reference calomel or a silver/silver chloride electrode or a combination pH electrode at a standard temperature.

ZWS 461:1994

Starches: Determination of moisture content, oven-drying method

Price Code: Gr. 5
 13 pages
 Equivalent to ISO 1666: 1973
 Reprinted 2012

Specifies two methods for the determination of moisture content in starch: (a) the oven-drying method at 130 °C at atmospheric pressure; (b) the oven-drying method at 100 °C or 73 °C under reduced pressure.

ZWS 462:1994

Starches: Determination of ash

Price Code: Gr. 4
 7 pages
 Equivalent to ISO 3593: 1981
 Reprinted 2012

Specifies a method for the determination of the ash yield by starches. The method is applicable to native (unmodified) starches and to modified starches yielding not more than 2 % of ash.

ZWS 463:1994

Starches: Native (unmodified) or modified: Determination of total fat Content

Price Code: Gr. 4
 7 pages

Identified ISO 3947: 1977

Reprinted 2012

Specifies a method for the determination of the total fat content of starches, native (unmodified) or modified, of which the expected total fat content is less than 1,5 % mass fraction.

ZWS 464:1995

Incandescent lamps

Price Code: Gr. 5
 17 pages
 Based on SABS 56:1990

Covers electric incandescent lamps having a nominal life of 1 000 h and intended for domestic and similar general lighting purposes.

ZWS 465:1999

Woven polypropylene grain bags

Price Code: Gr. 4
 12 pages
 Based on SABS CKS 632: 1990
 Reprinted 2012

Covers the requirements for 50 kg bags, made from slip-resistant, tubular, woven fabric (of which polypropylene yarns are the major components) and suitable for use for the handling, transportation and storage of whole cereal grains.

ZWS 466:1994

Starches and derived products: Determination of nitrogen and protein content by the Kjeldahl method - Titrimetric method

Price Code: Gr. 4
 10 pages
 Equivalent to ISO 3188: 1978
 Based on SABS CKS 632: 1990
 Reprinted 2012

Specifies a titrimetric method for the determination of the nitrogen and protein content of starch and its derived products with nitrogen content which is greater than 0,01 % (mass fraction).

ZWS 467:1995

Bitumens for roads, Industrial and other purposes

Price Code: Gr. 6
 19 pages
 Replaces: ZWS 144: 1975 and ZWS 145: 1975
 Based on BS 3690: Parts 1 & 2: 1990

Specifies the requirements for penetration, cut-back, hard and oxidized bitumens suitable for use in road construction, industrial purposes and maintenance.

ZWS 468:1995

Burglar resisting safes

Price Code: Gr. 5
 15 pages
 Identical to SABS 751: 1983
 Reprinted 2011
 Amended by AMD 673:2014

Covers the requirements for four categories of burglar-resisting safes.

ZWS 469:1995

Paints – Resistance of paint films to laboratory artificial weathering using fluorescent lamps

Price Code: Gr. 2
 4 pages

Specifies a method of determining the resistance of paint films to laboratory artificial weathering using fluorescent lamps.

ZWS 470:1999

Guava nectar preserved exclusively by physical means

Price Code: Gr. 4
8 pages
Amended by MD 566: 1995: MD 589: 1999
Based on Codex standard 148: 1985
Reprinted 2011

Covers unfermented pulpy or non-pulpy product obtained by blending guava juice and /or the total edible sieved ground or homogenized product of sound ripe guavas concentrated or unconcentrated with water, sugars or honey and preserved exclusively by physical means.

ZWS 471:1999

Grapefruit juice preserved exclusively by physical means

Price Code: Gr. 4
8 pages
Amended by MD 588: 1999
Based on Codex standard 48: 1981
Reprinted 2011

Cover unfermented grapefruit juice, intended for direct consumption, obtained by a mechanical process, from the endocarp of sound, ripe grapefruit preserved exclusively by physical means.

ZWS 472:1994

Lemon juice preserved exclusively by physical means

Price Code: Gr. 4
8 pages
Amended by MD 587: 1999
Based on Codex standard 47: 1981
Reprinted 2011

Covers unfermented lemon juice intended for direct consumption, obtained by a mechanical process, from the endocarp of sound, ripe lemons preserved exclusively by physical means.

ZWS 473:1994

Precast concrete interlocking pavers

Price Code: Gr. 5
14 pages
Amended by MD 594: 1999
Based on BS 6717 Part 1: 1993 and SABS 1058: 1986
Reprinted 2011

Specifies requirements for precast concrete interlocking pavers intended for use in the construction of paved surfaces subjected to vehicular loading and pedestrian traffic.

ZWS 474:1996

Mechanical properties of fasteners – Bolts, screws and studs

Price Code: Gr. 7
36 pages
Based on ISO 898 Part 1: 1988
Reprinted 2011

Specifies the mechanical properties of bolts, screws and studs when tested at room temperature. Properties will vary at higher and lower temperatures.

ZWS 475:1994

Granadilla juice preserved exclusively by physical means

Price Code: Gr. 4
9 pages
Amended by MD 586: 1999
Reprinted 2011

Covers unfermented granadilla juice intended for direct consumption, obtained by a mechanical process, from the flesh of sound, ripe granadillas preserved exclusively by physical means.

ZWS 477:1996

Water quality – Examination and determination of colour

Price Code: Gr. 4
11 pages
Based on ISO 7887: 1985

Specifies three methods for the determination of colour.

ZWS 478:1995

Water quality – Determination of turbidity

Price Code: Gr. 4
11 pages
Based on ISO 7027: 1990
Reprinted 2011

Specifies four methods for the determination of turbidity of water. Method A – using the transparency testing tube (suitable for pure and lightly polluted water); Method B – using the transparency testing disk (especially suitable for surface water); Method C and D specify quantitative methods using optical turbidity meters.

ZWS 479:1995

Water quality – Determination of chloride – silver nitrate titration with chromate indicator (MOHR's Method)

Price Code: Gr. 4
9 pages
Based on ISO 9297: 1989
Reprinted 2011

Specifies a titration method for the determination of dissolved chloride in water. The method is applicable to the direct determination of dissolved chloride in concentrations between 5 and 150 mg/l. Due to many interferences the method is not applicable to heavily polluted waters of low chloride content.

ZWS 480:1995

Water quality – Determination of sulfate – Gravimetric method using barium chloride

Price Code: Gr. 5
12 pages
Based on ISO 9280: 1990
Reprinted 2010

Specifies a gravimetric method for the determination of sulfate in water. The method is applicable to the analysis of all types of water including sea water and most industrial effluents.

ZWS 481:1995

Water quality – Determination of nitrate – Spectrometric method using sulfosalicylic acid

Price Code: Gr. 4
12 pages
Based on ISO 7890: Part 3: 1988
Reprinted 2011

Specifies a method for the determination of nitrate ions in water. Applies to raw and portable water samples.

ZWS 482:1995

Water quality – Determination of nitrite – Molecular absorptometric spectrometric method

Price Code: Gr. 4
11 pages
Based on ISO 6777: 1984
Reprinted 2011

Specifies a molecular absorption spectrometric method for the determination of nitrate in potable, raw and waste water.

ZWS 483:1995

Water quality – Determination of ammonium – Distillation and titration method

Price Code: Gr. 4
10 pages
Identical to ISO 5664: 1984
Reprinted 2011

Specifies a distillation and titration method for the determination of ammonium in raw, potable and waste water.

ZWS 484:1995

Water quality – Determination of calcium content EDTA titrimetric method

Price Code: Gr. 4
9 pages
Based on ISO 6058: 1984
Reprinted 2011

Specifies a titrimetric method using ethylene diamine tetraacetic acid (EDTA) for the determination of the calcium content of ground waters, surface waters and drinking waters.

ZWS 485:1995

Water quality – Determination of the sum of calcium and magnesium – EDTA titrimetric method

Price Code: Gr. 4
11 pages
Based on ISO 6059: 1984
Reprinted 2011

Specifies a titrimetric method using ethylene diamine tetraacetic acid for the determination of the sum of the calcium and magnesium concentrations in ground water, surface water and drinking water. The lowest concentration that can be determined is 0,05 mmol/l.

ZWS 486:1995

Water quality – Determination of iron – Spectrometric method using 1.10 phenantroline

Price Code: Gr. 4
12 pages
Based on ISO 6332: 1988
Reprinted 2011

Specifies a 1,10 phenantroline spectrometric method for determination of iron in water and waste water.

ZWS 487:1995

Water quality – Determination of manganese – Formaldoxime spectrometric method

Price Code: Gr. 4
11 pages
Based on ISO 6333:1986
Reprinted 2011

Specifies a formaldoxime spectrometric method for the determination of total manganese concentrations between 0,01 and 5 mg/l including dissolved, suspended and organically bound manganese in surface and ground water.

ZWS 488:1995

Water quality – Determination of cobalt, nickel, zinc, copper, cadmium and lead – Flame atomic absorption spectrometric methods

Price Code: Gr. 6
24 pages
Based on ISO 8288: 1986
Reprinted 2011

Specifies three methods for determining cobalt, nickel, copper, zinc, cadmium and lead in water by flame atomic absorption spectrometry.

ZWS 489:1996

Water quality – Determination of phosphorus – Ammonium molybdate spectrometric method

Price Code: Gr. 7
25 pages
Based on ISO 6878: Part 1: 1986
Reprinted 2011

Specifies methods for determination of phosphorous compounds present in ground, surface and waste waters in various concentrations in dissolved and undissolved state.

ZWS 490:1995

Water quality – Determination of fluoride – Electrochemical probe method for portable and lightly polluted water

Price Code: Gr. 4
11 pages
Based on ISO 10359 Part 1: 1992
Reprinted 2011

Specifies a method for the determination of dissolved fluoride in fresh, potable and low contaminated water and some surface waters, using an electrochemical technique.

ZWS 491:1996

Water quality – Guidelines for the determination of total organic carbon (TOC)

Price Code: Gr. 4
12 pages
Based on ISO 8245: 1987
Reprinted 2011

Gives guidelines for the measurement of TOC concentrations in all kinds of water.

ZWS 492:1995

Water quality – Determination of total water arsenic – Silver diethyldithiocarbamate spectrophotometric method

Price Code: Gr. 4
13 pages
Identical to ISO 6595: 1985
Reprinted 2011

Specifies a silver diethyldithiocarbamate spectrophotometric method for the determination of arsenic in water and waste water.

ZWS 493:1996

Water quality – Determination of cyanide as cyanogens chloride

Price Code: Gr. 4
12 pages
Based on ISO 6703: Part 3: 1984
Reprinted 2011

Specifies a method for the determination of cyanide, as cyanogens chloride in water.

ZWS 494:1996

Water quality – Determination of total chromium – Atomic absorption spectrometric methods

Price Code: Gr. 5
14 pages
Based on ISO 9174: 1990
Reprinted 2011

Specifies two methods for the determination of total chromium in water by atomic absorption spectrometry.

ZWS 495:1995

Water quality – Determination of chemical oxygen demand

Price Code: Gr. 4
9 pages
Based on ISO 6060: 1989
Reprinted 2011

Specifies a method for determining the chemical oxygen demand (COD) of water. It is applicable to water with a COD value of between 30 and 700 mg/l. The chloride content must not exceed 1 000 mg/l.

ZWS 496:1995

Water quality – Determination of biochemical oxygen demand after 5 days (BOD5) Dilution and seeding method

Price Code: Gr. 5
15 pages
Based on 5815: 1989
Reprinted 2010
Reprinted 2011

Specifies a method for the empirical and conventional determination of the biochemical oxygen demand of waters by dilution and seeding.

ZWS 497:1995

Water quality – Determination of total mercury by flameless atomic absorption spectrometric method after digestion with bromine

Price Code: Gr. 5
15 pages
Based on ISO 5666: Part 3: 1994
Reprinted 2012

Specifies a flameless atomic absorption spectrometric method for the determination of total mercury in fresh waters, soft water and brines (saline waters) drinking water and other waters containing only small amounts of organic matter.

ZWS 498:1998

The installation of communal and single antenna systems for the reception of television and sound broadcast transmission

Part 1: VHF and UHF TV and VHF sound antenna systems
Price Code: Gr. 7
43 pages
Based on SABS 061: Part 1: 1994
Reprinted 2012
Reprinted 2013

Establishes principles for the installation, modification and maintenance of communal and single antenna systems.

Part 2: Satellite antenna systems

Price Code: Gr.
49 pages

Establishes principles for the installations of communal and single antenna systems for the reception of signals in the frequency range 11.2 to 12.7 GHz from orbiting satellites.

ZWS 499:1995

Passive antennae for the reception of VHF and UHF television and VHF sound transmissions

Price Code: Gr. 5
21 pages
Identical to SABS 1252: 1994

Specifies the characteristic of passive antennae designed to be used out of doors for the reception of VHF and UHF television and VHF sound transmissions.

ZWS 500:1999

Wheat flour

Price Code: Gr. 4
8 pages
Based on MS 85: 1988
Reprinted 2012

Covers wheat flour, classified according to the following groups: standard white flour, cake flour, self raising flour and biscuit flour, standard brown flour, wholemeal flour and crakka wheat flour.

ZWS 502:1995

Mailing envelopes

Price Code: Gr. 4
9 pages
Replaces: ZWS P1: 1970 (Partially)
Identical to SABS 822:1966

Specifies envelopes used for mailing purposes, including window-faced envelopes.

ZWS 503:1995

Bond Paper

Price Code: Gr. 4
9 pages
Identical to SABS CKS 610: 1986

Covers four classes (based on grammage) of general purpose bond paper suitable for printing, typewriting, pen and ink writing and photocopying and that are supplied in sheets or reels.

ZWS 504:1995

Toilet tissue

Price Code: Gr. 5
14 pages
Based on SABS 648: 1980

Covers single and double ply grades of creped toilet tissue supplied in rolls.

ZWS 505:1995

Melamine tableware

Price Code: Gr. 5
13 pages
Based on SABS CKS 8: 1977
Reprinted 2012

Covers two types of tableware made of melamine formaldehyde of the categories contained in Table 1 of this standard.

ZWS 506:1995

Fiberglass washdown low flush volume water closet pans with horizontal outlets

Part 1: Connecting dimensions

Price Code: Gr. 3
7 pages
Reprinted 2012

Specifies the connecting dimensions of pedestal wash down low flush volume water closet pans with independent low level cisterns of capacity not less 4, 5l.

Part 2: Materials quality, performance and dimensions other than connecting dimensions

PriceCode: Gr. 4
10 pages
Based on ISO 5503: Part 2: 1977

Lays down requirements for dimensions, materials, quality and performance requirements for pedestal wash down, low flush volume water-closet pans with horizontal outlet .

ZWS 507:1995
Paper and board – Determination of water absorptiveness – Cobb method
 Price Code: Gr. 4
 10 pages
 Identical to ISO 535: 1991
 Reprinted 2012

Specifies a method of determining the water absorptiveness of sized paper and board, including corrugated fibreboard.

ZWS 508:1995
Paper, board and pulps – Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples
 Price Code: Gr. 6
 17 pages
 Identical to ISO 187:1990
 Reprinted 2012

Specifies the standard atmosphere for conditioning and for testing pulp, paper and board including the procedures for measuring the temperature and relative humidity.

ZWS 509:1995
Paper and board – Determination of grammage
 Price Code: Gr. 4
 9 pages
 Identical to ISO 536: 1994
 Reprinted 2012

Specifies a method of determining the grammage of paper and board.

ZWS 510:1995
Paper and board – Determination of tearing resistance (Elmendorf method)
 Price Code: Gr. 6
 19 pages
 Identical to ISO 1974: 1990
 Reprinted 2012

Specifies a method for determining the tearing resistance of paper. The method can also be used for light boards if the tearing resistance is within the range of the instrument.

ZWS 511:1995
Paper and board – Measurement of diffuse blue reflectance factor (ISO brightness)
 Price Code: Gr. 4
 9 pages
 Identical to ISO 2471: 1977
 Reprinted 2012

Specifies a method for measuring the diffuse blue reflectance factor (ISO brightness) of paper and board.

ZWS 512:1995:
Paper and Board - Determination of opacity (paper backing) - diffuse reflectance method
 Price Code: Gr. 4
 11 pages
 Identical to ISO 2471: 1977
 Reprinted 2012

Specifies a method for the measurements of the opacity of paper by diffuse reflectance. It is restricted to white and near white papers

and boards. Also includes paper or board which has been treated with fluorescent dyestuff or exhibits significant fluorescence.

ZWS 513:1996
Paper –Determination of bursting strength
 Price Code: Gr. 6
 17 pages
 Identical to ISO 2758: 1983
 Reprinted 2012

Specifies a method for measuring the bursting strength of paper submitted to increasing hydraulic pressure.

ZWS 514:2019
Wood-Preserving creosote
 Price Code: Gr. 8
 44 pages
 Based on SANS 616:2008 and BS 144:1977
 Supersedes ZWS 514:2011
 Amended by MD 689

Covers wood preserving creosote from coal tar. This coal tar may either be a coal-tar distillate (creosote) or a solution of coal tar pitch in coal-tar distillate and is intended for use in the preservation of timber.

ZWS 515:1996
Scholastic stationery
 Price Code: Gr. 7
 44 pages
 Based on SABS CKS 596: 1984
 Amended by MD 580: 2001

Covers 15 types of books and pads and 3 types of ruled paper intended for scholastic and related uses.

ZWS 517:2023
Poultry feeds
 Price Code: Gr. 6
 18 pages
 First published, 1959
 First revision, 1972
 Second revision, 1996
 Third revision, 2005
 Fourth revision, 2023
 Replaces ZWS 517: 2005

The objective of this standard is to ensure that poultry animals, used either as poultry meat or for the production of eggs used for human food, are fed rations, which are appropriate for the category of bird; and to help ensure the safety of food for human consumption through adherence to recommended poultry feeding practice at the farm level and good best practices during the procurement, handling, storage, processing and distribution of poultry feed and feed ingredients. This standard is meant to control the production and trade of farm feeds in Zimbabwe.

ZWS 518:2023
Cattle feeds
 Price Code: Gr. 5
 10 pages
 First published, 1959
 First revision, 1972
 Second revision, 1996
 Replaces: ZWS N2: 1959
 First reprinted 2006
 Third revision, 2023

The objective of this standard is to provide guidance on animal feeding in relation to animal nutrition and health. It encompasses

animal nutrient requirements and veterinary requirements that matter in animal production. These standards are meant to control the production and trade of farm feeds in Zimbabwe.

ZWS 519:2000

Measurement of lettable and tenancy areas of a building

Price Code: Gr. 5
13 pages

Sets down the method by which the floor area of any commercial and industrial building, or portion thereof, shall be measured for the purposes of establishing lettable and tenancy areas.

ZWS 520:1996

Inlet air cleaning equipment for internal combustion engines and compressors – Performance testing

Price Code: Gr. 8
48 pages
Based on ISO 5011: 1988
Reprinted 2012

Establishes and specifies uniform test procedures, conditions equipment and performance reports to permit the direct laboratory performance comparison of air cleaners.

ZWS 521:1996

Welded steel fabric for the reinforcement of concrete and masonry

Price Code: Gr. 5
13 pages
Based on SABS 1024: 1991
Reprinted 2012

Specifies the characteristic of steel fabric made of hard-drawn steel wire, consisting of longitudinal cross wire welded together and intended for use as a form of reinforcement for concrete and masonry.

ZWS 522:2017

Solar batteries

Price Code: Gr. 4
6 pages
Reprinted 2012
First revision 2017

Specifies the minimum requirements for batteries to be used in photovoltaic systems.

ZWS 523:1999

Fluorescent lights for use in photovoltaic systems

Price Code: Gr. 4
10 pages
Reprinted 2012

Specifies the minimum requirements for fluorescent tube lights powered with direct current (dc) invertors ballasts for use in photovoltaic systems.

ZWS 524:1998

Charge controllers for photovoltaic systems using lead acid batteries

Price Code: Gr. 4
9 pages
Reprinted 2012

Specifies the requirements for charge controllers which shall be fitted on all battery-based photovoltaic electric systems.

ZWS 525:2007

Windows, doors, sidelights and tanlights made from rolled mild steel sections

Price Code: Gr. 7
33 pages
Based on SABS 727: 1981

Covers windows, doors, sidelights and fanlights fabricated from rolled mild steel sections complete with fittings and ancillary components.

ZWS 526:1996

Copper for electrical purposes

Part 1: High conductivity copper rectangular conductors with drawn or rolled edges

Price code: Gr. 7
27 pages
Based on BS 1432:1987
Reprinted 2012

Covers requirements for high conductivity copper conductors of rectangular cross section with drawn or rolled edges.

Part 2: Rod and bar

Price Code: Gr. 6
23 pages
Based on BS 1433:1970
Reprinted 2012

Specifies requirements for copper rod and bar for electrical purposes.

ZWS 527:1997

Heavy duty thermoplastic flexible film sacks

Price Code: Gr. 4
9 pages
Based on BS EN 787: 1984
Specifies the general characteristics, requirements and methods of test for sacks made of heavy duty thermoplastic flexible film.

ZWS 528:1996

Pressed steel door frames

Price Code: Gr. 4
12 pages
Replaces: ZWS A36: 1969
Amended by MD 632:2001; MD641: 2002
Reprinted 2012

Specifies the sizes fittings and finish for pressed steel door frames.

ZWS 529:1998

Identification colours for gas cylinders

Price Code: Gr 9
9 pages
Replaces: ZWS Z5: 1973
Reprinted 2004

Specifies requirements for identification of the contents of industrial gas containers.

ZWS 530:2023

Animal feeding stuffs – Sampling and preparation of test samples

Price Code: Gr. 3
3 pages
Reprinted 2012
First Revision 2023

This Zimbabwe standard specifies methods of sampling animal feeding stuffs and a method for the preparation of test samples.

ZWS 531:1996**Polyethylene (PE) pipes for irrigation laterals**

Price Code: Gr. 5

13 pages

Based on ISO 8779: 1992. ISO 8796: 1989

Reprinted 2012

Specifies the test methods and required properties for pipes made from polyethylene designed to be used for irrigation laterals.

ZWS 532:1997**Salt**

Price Code: Gr. 4

13 pages

Replaces ZWS S34: 1972

Based on Codex Standards 150: 1985

Amended by MD 629: 2000

Specifies requirements for common salt for human and animal consumption.

ZWS 533:1996**Laying precast concrete interlocking pavers**

Price Code: Gr. 5

16 pages

Based on BS 6717: Part 3: 1989: South African Concrete Masonry

First reprint 2018

Association Paving block manual and Precast paving blocks-Laying manual

Specifies requirements for laying precast concrete interlocking pavers intended for use in the construction of paved surfaces subjected to vehicular loading and pedestrian traffic.

ZWS 534:1996**Paper, board and pulps – Determination of pH or aqueous extracts**

Price Code: Gr. 4

8 pages

Identical to ISO 6588: 1981

Specifies a method for the determination of the pH of an aqueous extract of paper, board of pulps. The pH value is not a quantitative measure of the total content of acid or base in the material extracted.

ZWS 535:2021**Manned security services**

Price Code: Gr. 7

20 pages

Based on BS 7499: Part 1: 1991

First published 1999

Reprinted 2014

It gives the recommendation for the management, staffing and operation of an organization providing security guarding services on a static site and/or mobile patrol basis.

ZWS 536:1998**Design, sizing and installation of battery based photovoltaic systems**

Price Code: Gr. 4

7 pages

Gives recommendations for the design, sizing and installation of battery based photovoltaic domestic systems of up to 100 W peak.

ZWS 537:1997**Malleable cast iron fittings threaded to ISO 7: Part 1**

Price Code: Gr. 8

49 pages

Based on ISO 49: 1994

First reprint 2016

Specifies requirements for the design and performance of malleable cast iron threaded pipe fittings.

ZWS 538:1996**Portable aluminum ladders, steps, trestles and lightweight stagings**

Price Code: Gr. 8

47 pages

Replaces: ZWS A40: 1969

Based on BS 2037: 1994

Reprinted 2015 as ZWS 538

Specifies requirements for materials and details of construction and performance for portable aluminum ladders, steps trestles and stagings.

ZWS 540:1996**Ready-mixed aluminum finishing paint**

Price Code: Gr. 4

8 pages

Replaces: ZWSK 14 1967

Based on SABS 682: 1972

Covers a general purpose ready-mixed aluminum paint for use as a finishing coat on printed surface for interior and exterior use.

ZWS 541 :2020**Carbon steel bars for the reinforcement of concrete****Part 1 – Weldable Reinforcing Bar, coil and de-coiled products**

Price Code: Gr. 7

37 pages

Based on BS 4449: 2016

Amended by MD 646: 2003

First reprint 2020

Specifies requirements for weldable steel for the reinforcement of concrete structures. It covers plain round steel bars in grade 250, square twisted bars in grade 410 and deformed high yield steel bars in grade 460.

ZWS 541 :2020**Carbon steel bars for the reinforcement of concrete****Part 2 – Specification**

Price Code: Gr. 7

37 pages

Based on BS 4482: 2016

Amended by MD 646: 2003

Specifies requirements for weldable steel for the reinforcement of concrete structures. It covers plain round steel bars in grade 250, square twisted bars in grade 410 and deformed high yield steel bars in grade 460.

ZWS 542:1996**Animal feeding stuffs – Determination of available lysine**

Price Code: Gr. 5

14 pages

Replaces: ZWS K 1: 1969

Based on ISO 5510: 1984

First reprint 2018

Specifies a method for the determination of available lysine in animal feeding stuffs containing animal or vegetable proteins.

ZWS 543:1996**Animal feeding stuffs – Determination of total nitrogen content and calculation of crude protein content**

Price Code: Gr. 4

12 pages

Replaces: ZWS K1: 1969

Based on ISO 5983: 1991

Specifies methods for determination of the total nitrogen content of feeding stuffs by the Kjeldahl process and for calculation of crude protein content.

ZWS 544:1996**Animal feeding stuffs-Determination of crude ash**

Price Code: Gr. 4

7 pages

Replace: ZWS K 1 1969

Based on ISO 5984: 1978

Specifies a method for the determination of crude ash of feeding stuffs.

ZWS 545:1996**Animal feeding stuffs – Determination of calcium content – Titrimetric method**

Price Code: Gr. 4

8 pages

Replace: ZWS K1: 1969

Based on ISO 6490: Part 1: 1985

Specifies a titrimetric method for the determination of the calcium content of animal feeding stuffs.

ZWS 546:1997**Animal feeding stuffs – Determination of total phosphorus content – Spectrophotometric method**

Price Code: Gr. 4

9 pages

Based on ISO 6491: 1980

Specifies a spectrophotometric method for the determination of the total phosphorus content of animal feeding stuffs.

ZWS 547:1996**Animal feeding stuffs – Determination of moisture content**

Price Code: Gr. 4

8 pages

Replaces:ZWS K 1: 1969

Based on ISO 6496: 1983

Reprinted 2015

Specifies a method for determination of the moisture (water and other volatile substances) content of animal feeding stuffs.

ZWS 548:1996**Animal feeding stuffs-Determination of aflatoxin B₁ content**

Price Code: Gr. 3

6 pages

Replaces: ZWS K 1: 1969

Based on ISO 6651: 1987

Specifies two methods for the determination of aflatoxin B₁ content of animal feeding stuffs.

ZWS 549:1996**Animal feeding stuffs-Determination of urea content**

Price Code: Gr. 5

8 pages

Replaces: ZWS K1: 1969

Based on ISO 6654: 1991

Reprinted 2015

Specifies a spectrophotometric method for the determination of the urea content of animal feeding stuffs.

ZWS 550:1996**Animal feeding stuffs – Determination of free and total gossypol**

Price Code: Gr. 4

9 pages

Replaces: ZWS K1: 1969

Based on ISO 6866: 1985

Reprinted 2015

Specifies a method for the determination of the total content of free and total gossypol and chemically related substances in animal feeding stuffs.

ZWS 553:2023**Hard woodpoles, droppers, laths, guardrail posts and spacer blocks**

Price Code: Gr. 7

36 pages

Amended by MD 622: 1999: 625: 2000

Based on SABS 457: Part 1 to 3: 1994

Incorporates MD 678:2014

First reprint 2015

Fifth revision, 2023

This standard specifies requirements for hardwood structural poles, agricultural poles, fencing poles, round droppers and guardrail posts. The poles are intended for the erection of fences and vine trellises, for general use in orchards and for structural purposes. The droppers are intended for fencing. The guardrail posts are intended for the erection of steel guardrails at the sides of roads.

ZWS 554:1998**W.C flushing cisterns**

Price Code: Gr. 6

17 pages

Based on SABS 821: 1990

First reprint 2015

Covers the requirements for hand-operated high-level, low-level, near-level and close-coupled cisterns of various flushing capacities and that are designed for a single operation or a dual-flushing operation.

ZWS 555:1997**Cold pour resin compound and heat-shrink cable joints in the voltage range up to 1 000 V ac and 1 500V dc****Part 1: Specification for materials**

Price Code: Gr. 8

49 pages

First reprint 2015 as ZWS 555.1

Specifies requirements for materials supplied in kits for making cable joints in operating voltage range up to 1 000 V a.c. and 1 500 V d.c. in which the cable insulation reinstatement is effected by cold pour resin compound.

Part 2: Code of practice for on-site installation

Price Code: Gr. 6

23 pages

Based on BS 6910: part 2: 1989

Provides guidance on the procedures to be followed when making joints by the cold pour resin or heat-shrink methods in cables in the operating voltage range up to 1 000 V ac and 1 500 V dc.

ZWS 556:1997**13 A plugs, socket-outlets, adaptors and connection units****Part 1: Rewirable and non rewirable 13 A fused plugs**

Price Code: Gr. 8

75 pages

Replaces ZWS C22 1973

Based on BS 1363: Part 1: 1995

Specifies requirements for 13 A fused plugs having insulating sleeves on line and neutral pins, for household, commercial and light industry purposes, with particular reference to safety in normal use. The plugs are suitable for sound-vision equipment, luminaires, etc, in a.c. circuits only, operating at voltages not exceeding 250 V r.m.s at 50 Hz.

Part 2: 13 A switched and un switched socket-outlets

Price Code: Gr. 8

76 pages

Replaces ZWS C22: 1973

Based on BS 1363: Part 2: 1995

Specifies requirements for 13 A switched and unswitched shuttered sockets-outlets for household, commercial and light industrial purposes with particular references to safety in normal use.

ZWS 557:1997**Immersion heaters for electric storage water heaters**

Price Code: Gr. 4

16 pages

Based on SABS 514: 1975

Covers withdrawable and non withdrawable types of electric immersion heaters for use in thermostatically controlled electric storage water heaters.

ZWS 558:1999**Waste water**

Price Code: Gr. 8

22 pages

Replaces ZWS Z21: 1972

Reprinted 2004

Specifies standards for waste water which has been produced by or results from the use of water for manufacturing, mechanical or mining purposes, for the generation of power or for the purposes of water-borne sanitation.

ZWS 559:1999**Refined sugar for household use**

Price Code: Gr. 4

10 pages

Amended by MD 636:2001, MD640: 2004

Based on Codex standard 4: 1981

First reprint 2016

Specifies requirements for refined sugar that is produced for the purpose of household use only.

ZWS 560:1997**Water for domestic supplies**

Price Code: Gr. 6

21 pages

Based on SABS 241: 1984

Reprinted 2004

Lays down the minimum physical, chemical and bacteriological requirements for the purity as delivered to the consumer, of water for domestic supplies regardless of source.

ZWS 561:1998**Diaries**

Price Code: Gr. 4

10 pages

Based on SABS CKS 301: 1971

First reprint 2016

Specification covers four different types of diaries.

ZWS 562:2002**Office furniture – Work tables and desks****Part 1: 2002 Dimensions**

Price Code: Gr. 4

7 pages

Amended by MD 657: 2004

Based on EN 527: Part 1: 2000

Partially supersedes ZWSKX 3: 1968

Specifies dimensions of office tables and desks for general use. It includes neither dimensions for drawers nor those for other tables or reception desks.

Part 2:2003 Mechanical safety requirements

Price Code: Gr. 3

7 pages

Based on EN 527-2: 2002

Specifies the mechanical safety requirements of office tables and desks.

ZWS 564: 1998**Protective helmets for pedal cyclists**

Price Code: Gr. 6

21 pages

First reprint 2016 Based on SABS 1542: 1991

Specifies the characteristics of protective headgear for wear by pedal cyclists.

ZWS 567:1996**Animal feeding stuffs- Determination of sodium chloride content**

Price Code: Gr. 3

6 pages

Partially replaces: ZWS K 1: 1969

First reprint 2016

Specifies a method of determining sodium chloride in animal feeding stuffs.

ZWS 569:1997**Wood mosaic flooring**

Price Code: Gr. 6

19 pages

Endorsement of SABS 978: 1983

Supersedes ZWS 015: 1972

First reprint 2016

Covers the requirements for two grades of mosaic flooring in the form of prefabricated panels that are made from fillets of certain species of wood and are intended to be bonded directly or over an interlayer to a supporting base.

ZWS 571:1997**Agricultural food products – General directions for the determination of nitrogen by the Kjeldahl method**

Price Code: Gr. 7

11 pages

Based on ISO 1871: 1975

Reprinted 2010

Gives general directions for the apparatus and procedures used for the determination of nitrogen in agricultural food products by the Kjeldahl method.

ZWS 572:1998

Waste water – Determination of temperature

Price Code: Gr. 3

5 pages

Replaces ZWS Z21: 1972 (Clause 20)

First reprint 2016

Describes a method for the determination of temperature in waste water.

ZWS 573:1997

Waste water - Determination of dissolved oxygen

Price Code: Gr. 4

8 pages

Replaces ZWS Z21: 1972 (clause 21)

Reprinted 2004

Specifies a method for the determination of dissolved oxygen in waste water.

ZWS 574:1997

Waste water – Determination of chemical oxygen demand

Price code: Gr. 4

7 pages

Replaces: ZWS Z21: 1972 (Clause 22)

Reprinted 2004

Describes a method for the determination of chemical oxygen demand (COD) in waste water.

ZWS 575:1997

Waste water – Determination of oxygen absorbed

Price Code: Gr. 3

6 pages

Replaces ZWS Z21: 1972 (Clause 23)

Reprinted 2004

Specifies a method for the determination of oxygen absorbed in waste water.

ZWS 576:1997

Waste water – Determination of total suspended solids, total dissolved solids and total solids

Price Code: Gr. 3

5 pages

Replaces ZWS Z21: 1972 (Clause 24, 25 and 26)

Reprinted 2004

Specifies a method for the determination of total suspended solids, total dissolved solids and total solids in waste water at the point of discharge.

ZWS 577:1997

Water quality – Determination of total dissolved solids – Conductivity method

Price Code: Gr. 3

6 pages

First reprint 2016

Specifies the conductivity method for the determination of total dissolved solids (TDS) in water.

ZWS 578:1997

Water quality –Determination of sulfate content – Turbid metric method

Price Code: Gr. 4

7 pages

Reprinted 2004

Specifies a method for determination of sulfate in water.

ZWS 579:1997

Waste water – Determination of calcium and magnesium content – Titrimetric method

Price Code: Gr. 3

6 pages

Replaces: ZWS Z21: 1972 (Clause 27)

Reprinted 2004

Specifies the titrimetric method for the determination of calcium and magnesium content in waste water.

ZWS 580:1997

Water quality – Determination of sodium and potassium – Flame emission spectrometry

Price code: Gr. 4

10 pages

Based on ISO 9964: 1993

Reprinted 2005

Specifies a method for the determination of dissolved sodium and potassium by flame emission spectrometry (FES). It is intended for the analysis of raw and drinking waters.

ZWS 581:1998

Waste water – Determination of soap, oil or grease

Price Code: Gr. 3

5 pages

Replaces ZWS Z21: 1972 (Clause 25)

First reprint 2018

Describes a method for the determination of soap, oil or grease in waste water.

ZWS 582:1997

Waste water – Determination of free and saline ammonia

Price Code: Gr. 3

6 pages

Replaces: ZWS Z21: 1972 (Clause 3)

Reprinted 2005

Specifies a method for the determination of free and saline ammonia in waste water.

ZWS 583:1997

Waste water – Determination of arsenic content – Gutzeit method

Price Code: Gr. 4

6 pages

Replaces: ZWS Z21: 1972 (Clause 31)

Reprinted 2005

First reprint 2016

Describes the Gutzeit method for the determination of arsenic content in waste water.

ZWS 584:1997

Waste water – Determination of barium content

Part 1: Turbidimetric method

Price Code: Gr. 4

7 pages

Replaces: ZWS Z21: 1972 (clause 32)

Reprinted 2004, 2005

Describes the turbidimetric method for the determination of barium content in waste water.

Part 2: Direct nitrous oxide-acetylene flame method

Price Code: Gr. 4

9 pages
Reprinted 2004

Describes the direct nitrous oxide-acetylene flame method for the determination of barium content in waste water.

ZWS 585:1997
Waste water – Determination of boron content – UV spectrometric method
Price Code: Gr. 3
6 pages
Replaces: ZWS Z21: 1972 (clause 33)
Reprinted 2004

Describes the UV spectrometric method for the determination of boron content in waste water.

ZWS 586:1997
Waste water – Determination of cadmium content Dithizone method
Price Code: Gr.4
11 pages
Replaces: ZWS Z21: 1972 (clause 34)
Reprinted 2004
Describes the dithizone method for the determination of cadmium in waste water.

ZWS 587:1997
Waste water – Determination of chlorides content
Part 1: Titrimetric method
Price Code: Gr. 3
5 pages
Replaces: ZWS Z21: 1972 (Clause 35)
Reprinted 2004

Describes the titrimetric method for the determination of chlorides content in waste water.

Part 2:Mercuric nitrate method
Price Code: Gr 4
7 pages

Describes the mercuric nitrate method for the determination of chlorides content in waste water.

ZWS 588:1997
Water quality- Determination of residual chlorine
Part 1: Amperometric titration method
Price Code: Gr. 4
10 pages
Reprinted 2005

Describes the amperometric titration method for the determination of residual chlorine in water.

Part 2: DPD colorimetric method
Price Code: Gr. 5
15 pages
Reprinted 2005

Describes an N, N – Diethyl – p – phenylenediamine (DPD) colorimetric method for the determination of residual chlorine in water.

ZWS 589:1997
Waster water-Determination of total chromium content (as Cr)
Price Code: Gr. 4
8 pages
Replaces: ZWS Z21: 1972 (Clause 37)

Describes a method for he determination of total chromium (as Cr) in waste water.

ZWS 590:1997
Waste water: Determination of copper content – UV spectrometric method after complexation
Price Code: Gr. 4
7 pages
Replaces: ZWS Z21: 1972 (Clause 38)
Reprinted 2005

Describes a method for the determination of copper in waste water using UV spectrometry.

ZWS 591:1997
Waste water – Determination of cyanides content
Part 1: UV spectrometric method
Price Code: Gr. 3
6 pages
Replaces: ZWS Z21: 1972 (Clause 39)
Reprinted 2005

Describes the UV spectrometric method for the determination of cyanides content in waster water.

Part 2: Titrimetric method
Price Code: Gr. 5
15 pages
Reprinted 2005
Described the titrimetric method for the determination of cyanides content in waste water.

ZWS 592:1998
Water quality – Determination of anionic surfactants by measurement of the methylene blue index (MBAS)
Price Code: Gr. 5
16 pages
Based on ISO 7875: Part 1: 1996
Reprinted 2004

Specifies a spectrometric method for the determination of anionic surfactants by measurement of the methylene blue index (MBAS) in aqueous media.

ZWS 593:1997
Water quality – Determination of non-ionic surfactants using Dragendorff reagent
Price Code: Gr. 5
16 pages
Based on ISO 7875: Part 2: 1984
Reprinted 2005

Specifies a method for the determination of non-ionic surfactants in aqueous media using Dragendorff reagent.

ZWS 594:1997
Waste water – Determination of fluoride content
Part 1: Ion-selective electrode method
Price Code: Gr. 5
14 pages
Reprinted 2005

Describes the ion selective electrode method for the determination of fluoride content in waste water.

Part 2: Nessler tube method
Price Code: Gr. 3
6 pages
Reprinted 2005

Describes the Nessler tube method for the determination of fluoride content in waste water.

ZWS 595:1997

Waste water – Determination of lead content – UV spectrometric method using dithizone

Price Code: Gr. 4
11 pages

Replaces ZWS Z21: 1972 (Clause 43)

Reprinted 2005

Describes the UV spectrometric method for the determination of fluoride content in waste water.

ZWS 596:1997

Water quality – Determination of manganese content – Persulfate colorimetric method

Price Code: Gr. 4
10 pages

Reprinted 2005

Specifies a method for the determination of manganese content in water.

ZWS 597:1997

**Waste water – Determination of mercury content
Part 1: Cold vapour atomic absorption spectrometry**

Price Code: Gr. 4
9 pages

Reprinted 2004, 2005

Specifies a cold vapour atomic absorption spectrometric method for the determination of mercury content in waste water.

Part 2: UV Spectrometric method

Price Code: Gr. 4
9 pages

Replaces ZWS Z21: 1972 (Clause 45)

Describes the UV spectrometric method for the determination of mercury in waste water.

ZWS 598:1997

Waste water – Determination of nickel content – UV spectrometric method after complexation with dimethylglyoxime

Price Code: Gr. 4
9 pages

Replaces ZWS Z21: 1972 (Clause 46)

Reprinted 2005

Describes the UV spectrometric method after complexation with dimethylglyoxime for the determination of nickel content in waste water.

ZWS 599:1997

Waste water – Determination of total nitrogen content kjeldahl distillation using selenium catalyst

Price Code: Gr. 4
8 pages

Replaces: ZWS Z21: 1972 (Clause 47)

Describes the kjeldahl distillation method using selenium catalysts for the determination of the total nitrogen content in waste water.

ZWS 600:1997

Waste water – Determination of phenolic compounds contents (as phenol) – UV spectrometric analysis

Price Code: Gr. 3
6 pages

Replaces: ZWS Z21: 1972 Clause 48)

Reprinted 2005

Describes the UV spectrometric method for the determination of phenolic compounds (as phenol) content in waste water.

ZWS 601:1997

Waste water – Determination of sulfides content – titrimetric method

Price Code: Gr. 3
6 pages

Replaces ZWS Z21: 1972: (Clause 51)

Reprinted 2005

Describes a titrimetric method for the determination of sulfides content in waste water.

ZWS 602:1997

Water quality – Determination of zinc content –UV spectrometric method

Price Code: Gr. 4
8 pages

Reprinted 2005

Describes the UV spectrometric method for the determination of zinc content in water.

ZWS 603:1997

Waste water – Determination of total phosphate content (as P)

Price Code: Gr. 4
6 pages

Replaces: ZWS Z21: 1972 (Clause 49)

Reprinted 2005

Describes a method for the determination of total phosphates content in waste water.

ZWS 604:1997

Water quality – Determination of total chromium (VI)

Price Code: Gr. 4
11 pages

Reprinted 2005

Describes a method for the determination of total chromium (VI) in water.

ZWS 605:1997

Water quality – Determination of selenium – Atomic absorption spectrometric method (hydride technique)

Price Code: Gr. 5
13 pages

Based on ISO 9965: 1993

Reprinted 2005

Specifies a method for the determination of selenium and organically bonded selenium in drinking waters, ground waters and surface waters.

ZWS 606:1997

Water quality – Determination of alkalinity – Titrimetric method

Price Code: Gr. 5
16 pages

Reprinted 2005

Specifies the titrimetric method for the determination of the alkalinity of water.

ZWS 608:1998

Respiratory protective devices for self-rescue – self-contained closed-circuit breathing apparatus-Chemical oxygen (KO2) escape apparatus-Requirements, testing and marking

Price Code: Gr. 7
40 pages

Based on EN 401: 1993

Reprinted 2005

Covers self-contained closed-circuit breathing apparatus, chemical oxygen (KO₂) type, for escape.

ZWS 609: 2000

Bread

Part 1: White

Price Code: Gr. 7

19 pages

First Reprint of ZWS 609: Part 1

Specifies the requirements for yeast-leavened white bread.

Part 2: 2002 Brown and whole-wheat bread

Price Code: Gr. 8

24 pages

Based on KS 05-172: 1972

Specifies the requirements for yeast-leavened brown and whole-wheat bread.

ZWS 610:1997

Salt - Determination of sodium chloride content

Price Code: Gr. 3

6 pages

Based on ISO 2481: 1993

Reprinted 2015

Specifies a mercurimetric method for the determination of sodium chloride content in salt.

ZWS 611:1997

Salt - Determination of cadmium content

Price Code: Gr. 4

11 pages

Based on BS 7319: part 6: 1990

First reprint 2015 as ZWS 611

Describes a flame atomic absorption spectrometric (AAS) method for the determination of total cadmium in common salt.

ZWS 612:1997

Salt - Determination of copper content

Price Code: Gr. 4

8 pages

Based on BS 7319: Part 7: 1990

Reprint 2015 as ZWS 612

Describes a photometric method, using zinc dibenzylthiocarbamate for the determination of copper in common salt.

ZWS 613:1997

Salt - Determination of lead content

Price Code: Gr. 4

10 pages

Based on BS 7319: Part 8: 1990

First reprint 2016

Describes a flame atomic absorption spectrometric (AAS) method for the determination of total lead in salt.

ZWS 614:1997

Salt - Determination of mercury content

Price Code: Gr. 4

11 pages

Based on BS 7319: Part 9: 1990

Reprinted 2015

Describes a cold vapour atomic absorption spectrometric method for the determination of total mercury in common salt.

ZWS 615:1997

Salt - Determination of pH and total alkalinity

Price Code: Gr. 4

7 pages

Based on BS 7319: Part 10: 1990

First reprint 2016

Specifies a potentiometric method for the measurement of the pH of sodium chloride solution, of concentration 100g/l and for the determination of total alkalinity.

ZWS 616:1997

Salt - Determination of iron content

Price Code: Gr. 4

9 pages

Based on BS 7319: Part 11: 1990

First reprint 2016

Specifies a photometric method, using 1,10-phenanthroline, for the determination of iron in salt.

ZWS 617:1997

Salt - Determination of anti-caking additives content of salt for food use

Price Code: Gr. 4

8 pages

Based on BS 7319: Part 12: 1990

First reprint 2016

Specifies two methods for the determination of water-soluble hexacyanoferrate (II) (anti-caking additives) in salt for food use.

ZWS 618:1997

Salt - Determination of arsenic - Silver diethyldithiocarbamate photometric method

Price Code: Gr. 4

10 pages

Based on Codex Standard 150: 1985

First reprint 2016

Describe a silver diethyldithiocarbamate method for the determination of arsenic in common salt.

ZWS 619:1997

Salt - Determination of total iodine - Titrimetric method with sodiumthiosulfate

Price Code: Gr. 4

8 pages

Based on Codex Standards 150: 1985

First reprint 2016

Describes a titrimetric method for the determination of total iodine (iodides and iodates) in common salt.

ZWS 620: 1985

Flexible polyvinyl chloride garden hose (Metric units)

Price Code: Gr. 4

11 pages

Replaces K27: 1971

First reprint 2016

Covers requirements for two types of flexible PVC garden hose for use with water.

ZWS 622:1997

Salt - Determination of matter insoluble in water or in acid and preparation of principal solutions for other determinations

Price Code: Gr. 4

9 pages

First reprint 2016

Specifies a method for determining insoluble matter in common salt.

ZWS 623:1997

Salt - Determination of sulfate content - Barium sulphate gravimetric

Method

Price Code: Gr. 4
7 pages
Based on ISO 2480: 1972
First reprint 2016

Specifies a gravimetric method for the determination of sulfate content of common salt.

ZWS 624:1997

Salt - Determination of calcium and magnesium contents - EDTA complexometric methods

Price Code: Gr. 4
9 pages
Based on ISO 2482: 1973
Reprint 2015

Specifies complexometric methods for determining the calcium and magnesium contents in common salt.

ZWS 625:1997

Salt - Determination of moisture content

Price Code: Gr. 3
5 pages
Based on ISO 7319: Part 2: 1990
Reprint 2015

Specifies a method for the determination of moisture content of common salt.

ZWS 626:1997

Water quality - Determination of iron, manganese, potassium and sodium content - Direct air-acetylene flame method

Price Code: Gr. 7
28 pages
Reprinted 2005
Describes the direct air-acetylene flame method for the determination of iron, manganese, potassium and sodium content in water.

ZWS 627:1997

Waste water - Determination of sodium content - Flame photometric method

Price Code: Gr. 3
5 pages
Replaces ZWS Z21: 1972 (Clause 28)
Reprinted 2005

Describes the flame photometric method for the determination of sodium in waste water.

ZWS 628:1997

Water quality - Determination of potassium content - Flame photometric method

Price Code: Gr. 4
8 pages
Reprinted 2005

Describes the flame photometric method for the determination of potassium method.

ZWS 629:1997

Water quality - Detection and enumeration of coliform organisms, thermotolerant organisms and presumptive *Escherichia coli*

Part 1: 1997 Membrane filtration method

Price Code: Gr. 6
16 pages
Based on ISO 9308: Part 1: 1990
First reprint 2016

Specifies a method for the detection and enumeration in water of coliform organisms, thermotolerant coliform organisms and presumptive *Escherichia coli* (presumptive *E. coli*) after filtration through a membrane.

Part 2:1997 Multiple tube (most probable number) method

Price Code: Gr. 6
19 pages
Based on ISO 9308: Part 2: 1990
First reprint 2016

Specifies a method for the detection and enumeration in water of coliform organisms thermotolerant coliform organisms and presumptive *Escherichia coli* (presumptive *E. coli*) by culture in a liquid medium in multiple tubes and calculation of their most probable numbers in the sample.

Part 3:2004 Defined substrate technology (Colilert) method

Price Code: Gr. 3
6 pages
First reprint 2015 as ZWS 629.3
Specifies a method for the detection and enumeration of coliform organisms, thermotolerant coliform organisms and presumptive *Escherichia coli* (*E. coli*) by the defined substrate technology.

ZWS 631:1998

Bakery products - Determination of total solid content

Price Code: Gr. 2
4 pages
Based on TZS 102: 1983 (Annex C)
First reprint 2016

Describes a method for the determination of total solid content in bakery products.

ZWS 632:1998

Bakery products - Determination of pH

Price Code: Gr. 3
5 pages
Based on TZS 102: 1983 (Annex D)
First reprint 2016

Describes a method for the determination of pH of aqueous extracts for bakery products.

ZWS 633:1998

Bakery products - Determination of acid insoluble ash

Price Code: Gr. 3
5 pages
Based on TZS 102: 1983 (Annex E)
First reprint 2016

Specifies a method for the determination of insoluble ash in bakery products.

ZWS 634:1998

Bakery products - Determination of crude fibre

Price Code: Gr. 3
6 pages
Based on TZS 102: 1983 (Annex F)
First reprint 2016

Specifies a method for the determination of crude fibre in bakery products.

ZWS 636:1998
Bakery Products - Determination of fat content
 Price Code: Gr. 3
 5 pages
 Based on AOAC official Methods of analysis
 First reprint 2018

Specifies an ether extraction method for the determination of fat content in bakery products.

ZWS 637:1998
Bakery Products - Determination of volume/mass ratio
 Price Code: Gr. 2
 5 pages
 Based on TZS 102: 1983 (Annex B)
 First reprint 2016

Specifies a method for the determination of volume/mass ratio of bread.

ZWS 639:1999
Plastering cement
 Price Code: Gr. 5
 15 pages
 Based on BS 7583: 1996
 First reprint 2016

Specifies requirements for the composition, manufacture as well as the chemical and physical properties of plastering cement.

ZWS 641:1997
Water quality – Determination of total hardness of water – Ethylene diamine tetra acetic acid (EDTA) method
 Price Code: Gr. 4
 8 pages
 Based on SABS: Method 215: 1971
 First reprint 2016

Specifies a method of determining the total hardness of water using ethylene diamine tetra acetic acid (EDTA) as the complexing agent.

ZWS 642:1998
Water quality – Determination of calcium content – Direct flame atomic absorption
 Price Code: Gr. 4
 8 pages
 Based on SABS Method 216: 1990

Specifies a method of determining the calcium content of water and waste water, using an air acetylene flame and direct flame atomic absorption.

ZWS 643:1997
Water quality – Determination of electrical conductivity
 Price Code: Gr. 3
 5 pages
 Based on SABS Method 1057: 1981
 Reprinted 2005

Specifies a method to determine the electrical conductivity of water using a conductivity meter.

ZWS 645:2002
Safety on construction sites
Part 1: Format documents
 Price Code: Gr. 7
 33 pages

Gives recommendations for the management of safety on construction sites.

Part 2: Safe working practice
 Price Code: Gr. 8
 58 pages

Gives advice for specific construction activities.

ZWS 647:1999
Refined sugar - Determination of polarization by polarimetry
 Price Code: Gr. 3
 6 pages
 Based on Laboratory manual of South African Sugar Factories
 First reprint 2018

Specifies a method for determination of polarization (pol) of refined sugar for household use.

ZWS 649:2000
The inspection and repairs of boilers
 Price Code: Gr. 10
 101 pages
 Based on AS 3788: 1999

Specifies the requirements for the inspection, repairs and alteration of in-service boiler and gives guidance in the execution of such inspection.

ZWS 650:1997
Efficacy of cleaning plant, equipment and utensils - Swab technique
 Price Code: Gr. 3
 6 pages
 Identical to SABS Method 763: 1974

Covers the sampling and testing of plant, equipment and utensils for efficacy of cleaning and disinfecting using the swab technique.

ZWS 651:1997
Efficacy of cleaning plant, equipment and utensils - Strip technique
 Price Code: Gr. 4
 7 pages
 Identical to SABS Method 764: 1974

Covers the sampling and testing of plant, equipment and utensils for efficacy of cleaning and disinfecting, using the strip technique.

ZWS 652:1997
Efficacy of cleaning plant, equipment and utensils - Agar sausage technique
 Price Code: Gr. 4
 7 pages
 Identical to SABS Method 765: 1974

Covers the sampling of plant, equipment and utensils for efficacy of cleaning and disinfecting, using the agar sausage technique.

ZWS 653:1998
Protective Devices – Definitions
 Price Code: Gr. 4
 11 pages
 Based on EN 132: 1990
 Refers to respiratory protective devices. It contains definitions for commonly used terms of this subject area.

ZWS 654:1998**Respiratory protective devices - Classification**

Price Code: Gr. 4

7 pages

Based on EN 133: 1990

Covers the classification of respiratory protective devices.

ZWS 655:1998**Respiratory protective devices: Nomenclature of components**

Price Code: Gr. 8

25 pages

Based on EN 134: 1998

Covers respiratory protective devices.

ZWS 656:1998**Respiratory protective devices – List of terms**

Price Code: Gr. 4

10 pages

Based on EN 135: 1991

Contains a list of terms which are commonly used in the field of respiratory protection.

ZWS 657:1998**Respiratory protective devices – Full face masks for special use**

Price Code: Gr. 4

10 pages

Based on EN 136: Part 10: 1992

Specifies requirements for full face masks for special use such as fire fighting and mining.

ZWS 658:1998**Respiratory protective devices – Fresh air hose breathing apparatus for use with full face mask, half mask or mouth piece assembly – Requirements, testing and marking**

Price Code: Gr. 7

31 pages

Based on EN 138: 1990

Specifies minimum requirements for fresh air hose breathing apparatus for use with a full face masks, a half mask or a mouth piece assembly as a respiratory protective device.

ZWS 659:1998**Respiratory protective devices – Compressed air line breathing apparatus for use with a full face mask, half mask or a mouth-piece assembly – Requirements, testing and marking**

Price Code: Gr. 7

38 pages

Based on EN 139: 1995

Specifies minimum requirements for compressed air line breathing apparatus for use with a full face mask, half mask or a mouth piece assembly as a respiratory protective device.

ZWS 660:1998**Respiratory protective devices – Gas filters and combined filters**

Price Code: Gr. 7

29 pages

Based on EN 141: 1991

Covers gas filters and combined filters for use as components in unassisted respiratory protective devices with the exception of escape apparatus and filtering facepieces.

ZWS 661:1998**Respiratory protective devices - Particle filters – Requirements, testing and marking**

Price Code: Gr. 7

35 pages

Based on EN 143: 1990

Refers to particle filters and components in unassisted respiratory protective devices, except escape apparatus and filtering facepieces.

ZWS 662:1998**Respiratory protective devices – Gas cylinder valves thread connection for insert connector**

Price Code: Gr.4

10 pages

Based on EN 144 Part 1: 1991

Applies to the connection between a gas cylinder valve and a gas cylinder for respiratory protective devices.

ZWS 663:1998**Respiratory protective devices – Powered particle filtering devices incorporating helmets or hoods**

Price Code: Gr. 7

28 pages

Based on EN 146: 1992

Specifies minimum requirements for powered particle filtering devices incorporating helmets or hoods used as respiratory protective device.

ZWS 664:1998**Respiratory protective devices – Power assisted particle filtering devices incorporating full face masks, half masks or quarter masks – Requirements, testing and marking**

Price Code: Gr. 7

29 pages

Based on EN 147: 1991

Specifies minimum requirements for power assisted respiratory protective devices which incorporated full face mask, half mask or quarter mask –together with a particle filter.

ZWS 665:1998**Respiratory protective devices – Threads for face pieces – Thread connection M 45 x 3**

Price Code: Gr. 3

6 pages

Based on EN 148: Part 3: 1992

Applies to self – contained compressed air breathing apparatus designed as positive pressure breathing apparatus.

ZWS 666:1998**Respiratory protective devices – Powered fresh air hose breathing apparatus incorporating a hood – Requirements, testing and marking**

Price Code: Gr. 7

31 pages

Based on EN 269: 1994

Specifies minimum requirements for powered fresh air hose breathing apparatus incorporating a hood as a respiratory protective device.

ZWS 667:1998**Respiratory protective devices – Compressed air line breathing apparatus incorporating hood – Requirements, testing and marking**

Price Code: Gr. 7

35 pages

Based on EN 270: 1995

Specifies minimum requirements for compressed air line breathing apparatus incorporating a hood as a respiratory protective device.

ZWS 668:1998**Respiratory protective devices – Compressed air line or powered fresh air hose breathing apparatus incorporating a hood for use in abrasive blasting operations – Requirements, testing and marking**

Price Code: Gr. 6

21 pages

Based on EN 271: 1995

Specifies minimum requirements for compressed air line and powered fresh air hose breathing apparatus incorporating a hood used to provide protection when undertaking blasting work using solid abrasives.

ZWS 669:1998**Respiratory protective devices – AX gas filters and combined filters for use against low boiling organic compounds – Requirements, testing and marking**

Price Code: Gr. 4

11 pages

Based on EN 371: 1992

Specifies gas filters and combined filters used against low boiling organic compounds.

ZWS 670:1998**Respiratory protective devices – SX gas filters and combined filters against specific named compounds – Requirements, testing and marking**

Price Code: Gr. 4

11 pages

Based on EN 372: 1992

Specifies requirements for gas filters and combined filters against specific named compounds for unassisted respiratory protective devices.

ZWS 671:1999**Non-destructive testing of winding equipment****Part 1: Main drive shaft(s) (Hollow or solid design)**

Price Code: Gr. 6

20 pages

Covers full cover inspection (FCI) of the main drive shaft(s) using acceptable non-destructive testing (NDT) techniques.

Part 2: Gearboxes

Price Code: Gr. 4

12 pages

Specifies a full cover inspection (FCI) of gearboxes used on or as part of hoisting or winding system using acceptable non destructive testing (NDT) techniques.

ZWS 672:1998**Respiratory protective devices for escape – Self contained open-circuit compressed air breathing apparatus with full face mask or mouthpiece assembly-Requirements, testing and marking**

Price Code: Gr. 7

31 pages

Based on EN 402: 1993

Refers to self-contained open circuit compressed air breathing apparatus with full face mask or mouthpieces assembly for escape.

ZWS 673:1998**Cereals and cereal products - Determination of ash**

Price Code: Gr. 4

8 pages

Based on ICC Standards 104/ 1: 1990

Describes a method for the determination of ash in cereals and cereal products for human consumption.

ZWS 674:1998**Petroleum product – Determination of inorganic acidity – Colour indicator titration method**

Price Code: Gr. 3

6 pages

Based on IP 182: 1993

Intended to provide a measure of the inorganic (strong) acid content of used and unused lubricating oils, fuel oils and petrolatum.

ZWS 675:1998**Wheat flour - Determination of total carbon dioxide**

Price Code: Gr. 4

11 pages

Based AACC: Method 12.21: 1961

Describes a method for the determination of total carbon dioxide in prepared mixes and self-raising flours.

ZWS 676:1998**Code of practice for the application of pesticides in the food industry**

Price Code: Gr. 8

50 pages

Based on SABS 0133:1977

Covers the methods of safe application of pesticides registered as suitable for use in food handling, food processing and catering establishments.

ZWS 677:1999**Wheat flour - Determination of particle size**

Price Code: Gr. 3

5 pages

Based on AOAC test method 965: 1999

Specifies a method for determination of particle size of wheat flour.

ZWS 678:2013**Development, maintenance and management of ground water resources****Part 1: Glossary of Terms**

Price Code: Gr.5

8 pages

Replaces ZWS 678.1:2009

Covers the terms and definitions applicable to water boreholes.

Part 2: The location and siting of water boreholes.

Price Code: Gr. 6

11 pages

Replaces ZWS 678.2:2009

Covers requirements for the location and siting of water boreholes. Whenever a borehole is considered for conversion to a

production borehole the relevant clauses of this Part of ZWS 678 shall apply.

Part 3: The design, construction and drilling of boreholes

Price Code: Gr 7
30 pages
Replaces ZWS 678.3:2009

Covers the requirements for the drilling design and construction water wells/ boreholes.

Part 4: Pumping test of water wells/boreholes

Price Code: Gr. 6
23 pages
Covers requirements for the pumping test of a water wells/borehole in order to obtain information about its possible long-term pumping rate.

Part 5: The design, selection and performance of pumping equipment for production wells/boreholes

Price Code: Gr. 7
38 pages

Covers the design, selection and performance of pumping equipment intended for production boreholes.

Part 6: The installation and commission of pumping equipment for production wells/boreholes

Price Code: Gr. 7
15 pages

Covers the installation and commissioning of pumping equipment intended for production boreholes.

Part 7: The rehabilitation of water wells/boreholes

Price Code: Gr. 5
6 pages

Specifies methods to be applied for the rehabilitation of water boreholes.

Part 8: The management of water wells/boreholes

Price Code: Gr. 6
8 pages

Covers the design, selection and performance of pumping equipment intended for production boreholes.

Part 9: The decommissioning of water wells/boreholes

Price Code: Gr. 6
7 pages

Covers the methods to be applied for the decommissioning of all types of water boreholes to protect ground water resources.

ZWS 679:1999

Power lawn-mowers, lawn tractors, lawn and garden tractors, professional lawn mowers and lawn and garden tractors with lawn mowing attachments – Definitions, safety requirements and test procedures.

Price Code: Gr. 8 72
pages
Based on ISO 5395: 1990
Replaces ZWS B4

Specifies safety requirements and test procedures applicable powered rotary and cylinder mowers.

ZWS 680:1998

Part 1:1999 Conductors

Materials of insulated electric cables and flexible cords
Price Code: Gr. 7
26 pages
Based on SABS 1411: Part 1: 1986, IEC 60228: 1978

Covers the requirements for fire classes of conductors in insulated electric cables and flexible cords.

Part 2:1999 Polyvinyl chloride (PVC)

Price Code: Gr. 7
13 pages
Based on SABS 1411: Part 11: 1987
Covers requirements for PVC components in insulated electric cables and flexible cords.

Part 3:1999 Elastomers

Price Code: Gr. 7
31 pages
Based on SABS 1411: Part 3: 1990

Covers the requirements for elastomer components in insulated electric cables and flexible cords.

Part 4:1999 Cross-linked polyethylene (XLPE)

Price Code: Gr. 3
6 pages
Based on SABS 1411: Part 4: 1984

Specifies the requirements for cross linked polyethylene (XLPE) insulation of electric cables.

Part 5:1999 Halogen-free materials

Price Code: Gr. 4
9 pages
Based on SABS 1411: Part 5: 1987

Specifies the requirements for non metal components (of electric cables and flexible cords) that do not contain halogens in their chemical composition.

Part 6:1998 Armour

Price Code: Gr. 4
8 pages
Based on SABS 1411: Part 6 1987

Covers requirements for three types of metal armour materials that are components of insulated electric cables and that provide protection against mechanical damage both during installation of cables and in services.

ZWS 681:2001

Water quality-Determination of atrazine and other nitrogen and phosphorus containing pesticides in water by gas chromatography with nitrogen-phosphorus detector

Price Code: Gr. 6
17 pages
Reprinted 2005

Describes a gas chromatographic (GC) method applicable to the determination of certain nitrogen and phosphorus containing pesticides in ground water and finished drinking water.

ZWS 682:1999

Water quality – Determination of organochlorine pesticides-Liquid-liquid extraction gas chromatographic method

Price Code: Gr. 6
21 pages

Based on Standard method for the examination of water and waste water method 66308B. Describes a liquid-liquid extraction gas chromatographic method for determination of organochlorine pesticides in water.

ZWS 683:2000

Water quality – Determination of N-Methylcarbamoyloximes and N-Methylcarbamates-Direct aqueous injection HPLC with post column derivatization

Price Code: Gr. 5
15 pages
Reprinted 2005

Describes a high performance liquid chromatographic (HPLC) method for the determination of certain N-Methylcarbamoyloximes and N-methylcarbamates in water.

ZWS 684:1998

Petroleum jelly (petrolatum)

Price Code: Gr. 4
10 pages
Based on SABS 1755:1997

Specifies requirements for refined petroleum jelly in 3 colour grades (white, snow-white and yellow) which is intended for use in pharmaceutical and cosmetic application.

ZWS 685:1998

Petroleum jelly – Determination of pH value

Price Code: Gr. 2
1 page
Based on SABS 1755: 1997

Describes the measurement of the pH of petroleum jelly.

ZWS 686:1998

Petroleum jelly – Determination of evaporation loss

Price Code: Gr. 3
5 pages
Based on SABS 175: 1997 (Clause 5.4)

Describes a method of determining evaporation loss of petroleum jelly.

ZWS 687:1998

Petroleum jelly – Determination of arsenic content – Gutzeit method

Price Code: Gr. 4
9 pages
Based on SABS 1755: 1997

Describe a method for the determination of arsenic content in petroleum jelly.

ZWS 688:1998

Petroleum jelly – Determination of oil dissociation

Price Code: Gr. 3
5 pages
Based on SABS 1755: 1997: (Clause 5.6)

Describes the method of determining oil dissociation of petroleum jelly.

ZWS 689:1998

Petroleum products – Determination of drop melting point

Price Code: Gr. 4
7 pages
Identical to IP 133: 1994

Describes a method for the determination of the drop melting point of petroleum products.

ZWS 690:1998

Petroleum products – Determination of cone penetration

Price Code: Gr. 4
7 Pages
Identical to IP 179: 1994

Describes the method for measuring with a penetrometer, the penetration of petroleum products as an empirical measure of consistency.

ZWS 691:1998

Petroleum products – Determination of acidity and neutralisation value – colour indicator titration method

Price Code: Gr. 9
10 pages
Based on IP 139: 1994

Specifies method for the determination of the acidity of unused lubricating oil, fuel oil and petroleum.

ZWS 692:1998

Petroleum products – Determination of sulfated ash

Price Code: Gr. 4
9 pages
Based on IP 163: 1994

Describes a method for determining the sulfated ash from unused lubricating oils containing additives from concentrates used in compounding.

ZWS 693:1998

Petroleum products – Determination of matter insolubles in toluene by membrane filtration method

Price Code: Gr. 4
9 pages
Based on ASTM D4055: 1981

Describes a method for the determination of toluene insolubles by particles exceeding 0.8 um in new and used lubricating oils.

ZWS 694:1998

Petroleum products – Determination of lead content – Dithizone extraction colorimetric method

Price Code: Gr. 4
12 pages
Based on IP 224: 1994

Describes a method for the determination of trace amounts of lead in petroleum products in the range ug/l to mg/l.

ZWS 695:1998

Petroleum products – Determination of saponification number – titration method

Price Code: Gr. 4
11 pages
Based on IP 136: 1994

Describes a method for test for the determination of constituents in petroleum products that will saponify under the conditions of the test.

ZWS 696:1998

Petroleum jelly – Determination of light absorption of a 0.05 % (by mass fraction) solution in trimethyl pentane or iso-octane at 290 nm maximum

Price Code: Gr. 3
5 pages

Based on British Pharmacopoeia Volume 1: 1993

Describes the method for the determination of light absorption of a 0.05 % (by mass fraction) solution for petroleum jelly in either trimethyl pentane or iso-octane at 290 nm maximum.

ZWS 697:1998

Petroleum products – Determination of polycyclic aromatic hydrocarbons (PCAs)

Price Code: Gr. 3

6 pages

Based on British Pharmacopoeia Volume 1:1993

Describes a method for the determination of polycyclic aromatic hydrocarbons in petroleum products.

ZWS 698:1998

Petroleum products – Determination of colour – Iovibond tintometer method

Price Code: Gr. 4

11 pages

Based on IP 17: 1994

Describes a method for determining the colour of practically all petroleum products (dyed or undyed) except black oils and bitumen.

ZWS 699:2000

Waste water – Determination of residual organo phosphorus pesticides gas – Gas chromatographic method

Price Code: Gr. 4

10 pages

Reprinted 2005

Describes a method for the determination of residual chromatographic pesticides in waste water using gas chromatography.

ZWS 700:1998

Protective helmets for motor cyclists

Price Code: Gr. 7

35 pages

Replaces Z16: 1971

Based on SABS 799: 1983

Covers the requirements for the general design, construction, performance, marking, labelling and testing of protective helmets for use by motor cyclists on the roads.

ZWS 701:1999

Radiological protection in dentistry

Price Code: Gr. 4

11 pages

Reprinted 2010

Based on International Commission on Radiological Protection (ICRP) Publication of 1991, the 1990 Recommendation of the ICRP, ICRP Vol. 21. Covers requirements for radiological protection in dental practice.

ZWS 702

The use of radioactive materials in medical practice

Part 1:2000 Unsealed sources

Price Code: Gr. 6

20 pages

Reprinted 2010

Provides guidance to users of unsealed radioactive materials in hospitals and medical laboratories.

Part 2:2000 Sealed sources

Price Code: Gr. 4

10 pages

Reprinted 2010

Contains guidance on the use of sealed or other solid sources for diagnostic purposes.

ZWS 703:2000

Radiation protection in veterinary radiology

Price Code: Gr. 6

24 pages

Reprinted 2010

Based on international basic safety standards for protection against ionizing radiation and for the safety of radiation sources, safety series no 151 and Radiation protection in veterinary radiology, Irish Nuclear Energy Board Code of Practice.

Specifies requirements for radiation protection in veterinary practice.

ZWS 704:2000

Radioactive waste management

Price Code: Gr. 7

40 pages

Reprinted 2010

Covers the management of liquid (aqueous and organic) solid and gaseous radioactive waste and spent sealed sources at the users premises.

ZWS 705:2000

The safe use of X-rays in medical diagnosis

Price Code: Gr. 8

Reprinted 2010

68 pages

Based on the National Radiation laboratory of New Zealand Specification

Covers the safe use of X-rays in medical diagnosis.

ZWS 706:2001

Canned ox tongue in gelatine and stewed steak in gravy

Price Code: Gr. 7

37 pages

Based on SABS 1675: 1997

Specifies requirements for the manufacture, production processing and treatment of canned ox tongue in gelatine and stewed steak in gravy in order to ensure a safe, sound and wholesome product.

ZWS 707:1999

Refined sugar - Determination of colour and turbidity

Price Code: Gr. 4

7 pages

Based on Laboratory manual for South Africa Sugar Factories

Specifies a method for determination of colour of refined sugar for household use.

ZWS 708:1999

Refined sugar - Determination of grain size

Price Code: Gr. 3

5 pages

Based on Laboratory manual for South Africa Sugar factories

Specifies method for the determination of grain size in refined sugar.

ZWS 709:1998**Bow and skewness in woven textile fabric**

Price Code: Gr. 3
 6 pages
 Identical to SABS Method 91: 1982

Specifies a method for the determination of bow and skewness in woven textiles fabrics.

ZWS 710:1999**Fluidity of cotton and certain cellulosic man-made fibres in cuprammonium solution (Modified Method)**

Price Code: Gr. 5
 11 pages
 Based on SABS Method 115: 1980

Specifies a method for the determination of the fluidity of cotton and certain man-made fibres in cuprammonium solution.

ZWS 711:2000**Water quality – Determination of chlorinated phenoxy acids and other acidic herbicides by gas chromatography**

Price Code: Gr. 6
 19 pages
 Based on method 6251B for Examination of water and wastewater(19thEd)

Describes the method for the determination of chlorinated phenoxy acids and other acidic herbicides by gas chromatography.

ZWS 712:1999**Newsprint**

Price Code: Gr. 4
 8 pages
 Based on MS 855: 1983

Specifies requirements for newsprint, suitable for printing duplicating and pen and ink writing.

ZWS 717:2008**The manufacture and erection of timber trusses**

Price Code: Gr. 9
 107 pages
 Based on SANS 10243:04

Gives guidance on the manufacture, erection and bracing of timber roof trusses, including nail plated trusses and bolted trusses with lapped members.

ZWS 718:2017**Blankets suitable for use in the public sector**

Price Code: Gr. 5
 6 pages

Standard specifies requirements for the synthetic fibre blankets suitable for use in the public sector. Requirements for adults', children's and infants' blankets are specified

ZWS 719:2012**Biodiesel fuel blend stock (B100) for middle distillate**

Price Code:Gr. 7
 9 pages
 Identical to ASTM 6751:2000
 Amended by AMD 674:2014

Covers four grades of biodiesel (B100) for use as a blend component with middle distillate fuels.

ZWS 720:2003**Meat and meat products – Determination of nitrates and nitrites – Xylenolmethod**

Price Code: Gr. 3
 5 pages

Based on AOAC official methods of analysis: 1990

Describes the determination of nitrates and nitrites in meat and meat products.

ZWS 721:2001**Meat and meat products – Determination of nitrogen and protein – Block digestion method**

Price Code: Gr. 3
 5 pages
 Based on AOAC

Describes the method for the determination of nitrogen and protein in meat and meat products.

ZWS 722:1998**Water quality – Determination of sodium by atomic absorption spectrometry**

Price Code: Gr. 4
 8 pages
 Based on ISO 9964: Part 1: 1993

Specifies a method for the determination of dissolved sodium (Na) by flame atomic absorption spectrometry (AAS). It is intended for the analysis of raw and drinking water.

ZWS 723:1998**Water quality – Determination of phenol index-4-aminoantipyrine spectrometric method after distillation**

Price Code: Gr. 6
 17 pages
 Identical to ISO 6439:1990

Specifies methods of determining the phenol index in drinking water and waste waters.

ZWS 725:1999**Ostrich feed**

Price Code: Gr. 4 8 pages

Specifies the requirements for ostrich feed.

ZWS 728:1999**Wheat flour - Determination of colour**

Price code: Gr. 2
 4 pages
 Based on Henry Simon and the Kent Jones test methods

Covers the determination of colour of wheat flour by the Henry Simon or the Kent Jones method.

ZWS 729:1999**Wheat flour - Determination of bran mass fraction**

Price Code: Gr. 3
 5 pages

Specifies a method for determination of bran mass in wheat flour.

ZWS 730:2015**The manufacture of sanitary pads**

Price Code: Gr. 7

24 pages

Covers the manufacturing and performance requirements for sanitary pads used during menstruation.

ZWS 731:1999**Woodcutting bandsaw blades**

Price Code: Gr. 5
 13 pages
 Based on BS 4411: 1969

Relates to the terminology, manufacture, properties, dimensions, and tolerances of both “narrow” and “wide” bandsaw blades, either supplied in coil or cut to length joined ready for use.

ZWS 732:2001**Electrical cables – Flexible cords and flexible cables**

Price Code: Gr. 7
 41 pages
 Based on SABS 1574:1992

Specifies the characteristics of single-core flexible insulated wires and multicore flexible cords and flexible cables of rated operating voltage up to and including 600 V to earth and 1 000 V between conductors and intended for use with electrical appliances. Insulating and sheathing materials of both PVC and rubber are covered.

ZWS 733:2000**Shaped refractory bricks**

Price Code: Gr. 5
 16 pages
 Based on SABS 35: 1982

Covers four categories of shaped refractory bricks intended for use as a construction material or lining.

ZWS 734:2000**Leaded petrol**

Price Code: Gr.5
 13 pages
 Based on SABS 299: 1995

Specifies an inland grade of leaded petrol with research octane number (RON) of 93 suitable for use in spark-ignition internal-combustion engines other than aviation piston engines.

ZWS 735:2000**Refractory bricks – Determination of dimensions**

Price Code: Gr. 3
 13 pages
 Based on SABS 299: 1995

Specifies methods for determining the dimensions of refractory bricks.

ZWS 736:2000**Refractory bricks – Determination of warpage and squareness**

Price Code: Gr. 4
 8 pages

Specifies method for determination of warpage and squareness of refractory bricks.

ZWS 738:2000**Refractory bricks – Determination of bulk density, bulk volume, apparent porosity and apparent relative density**

Price Code: Gr. 4
 11 pages

Specifies a method for determination of bulk density, bulk volume, apparent porosity and apparent relative density of refractory bricks.

ZWS 739:2000**Refractory bricks – Determination of the pyrometric cone equivalent (refractoriness)**

Price Code: Gr. 4
 8 pages

Specifies a method for determination of the pyrometric cone equivalent (refractoriness) of refractory bricks.

ZWS 740:2000**Shaped refractory bricks – Determination of permanent changes in dimensions on heating**

Price Code: Gr. 4
 10 pages

Specifies a method for determining the permanent change in dimensions on heating.

ZWS 741:2000**Shaped refractory bricks – Determination of cold crushing strength**

Price Code: Gr. 4
 8 pages

Specifies a method for determination of cold crushing strength of shaped refractory bricks.

ZWS 742:2000**Precast concrete post and panel walls**

Price Code: Gr. 6
 17 pages
 Based on SABS 1372: 1983
 Reprinted 2004

Covers precast concrete components of the following types for use in free standing posts (a) Posts (b) Plain panels (c) Decorative panels.

ZWS 743:2000**Paper and board – Determination of thickness and apparatus – bulk density**

Price Code: Gr. 5
 15 pages
 Technically identical to ISO 534: 1988
 Reprinted 2004

Specifies two methods of measuring the thickness of paper and board and of calculating the apparent bulk.

ZWS 744:2003**Installation of solar water heaters**

Price Code: Gr. 9
 92 pages
 Based on AS/NZS 3500: 4:2: 1997

Sets out the requirements for the installation of domestic-type water heaters using portable water. Includes aspects of the installation from and including the valve(s) on cold water inlet to the isolation valve fitted immediately prior to the point at which the system is connected to the hot water reticulation.

ZWS 746:2004**Fruit jams, jellies and marmalades**

Price Code: Gr.7
 26 pages
 Replaces ZWS S4: 1968

Covers the manufacture, production, processing or treatment of fruit jams, fruit jellies and marmalades.

ZWS 747:2003**Canned fruits**

Price Code: Gr. 8

70 pages

A revision of ZWSS7: 1971

Amended by MD597:1999

Specifies the manufacture, production, processing or treatment of canned fruits of different types and grade.

ZWS 748:2001**Vegetable cooking oil**

Price Code: Gr. 4

9 pages

Replaces ZWSS22: 1969

Reprinted 2004

Covers several types of refined /unrefined vegetables oils suitable for human consumption.

ZWS 749:2023**Requirements for a Hazard Analysis and Critical Control Point (HACCP) system.**

Price Code: Gr. 9

27 pages

Based on SABS 0330: 1999 and Codex guidelines on HACCP

First published 2001, as ZWS 749,

First reprinted 2004, as ZWS 749,

First revision 2009, as ZWS 749,

Reconfirmed 2018, as ZWS 749,

Second revision 2023, as ZWS 749

This Zimbabwe Standard specifies the requirements for a HACCP system for the development, implementation and effective management of a functional process hazard control programme in the food supply chain to enhance food safety.

ZWS 750:2002**Absorbent cotton wool**

Price Code: Gr. 4

9 pages

Based on SABS 228: 2000

Specifies requirements for the grades of absorbent cotton wool.

ZWS 754:2012**Window sills and copings**

Price Code: Gr. 6

22 pages

Specifies the requirements for window sills and copings of precast concrete and clayware.

ZWS 755:2002**Knee-high stockings and ankle socks**

Price Code: Gr. 4

11 pages

Based on SABS 1118-9: 2000

Covers the requirements for two types of knee-high stockings and two types of ankle socks for school wear.

ZWS 756:2002**Men's and women's hose for institutional use**

Price Code: Gr. 5

16 pages

Based on SABS 1382 Part 1: 1995

Specifies requirements for women's and men's hose.

ZWS 758:2008**Use of masonry- Structural use of unreinforced masonry**

Price Code: Gr. 9

99 pages

Gives recommendations for the structural design of unreinforced masonry constructed of brick masonry, block masonry, masonry of square dressed natural stone and random rubble masonry.

ZWS 759:2001**Dried salted fish**

Price Code: Gr. 4

11 pages

Based on KS 05:424: 1985

Species requirements and methods of test for dried salted fish.

ZWS 761:2000**Burnt clay paving units**

Price Code: Gr.7

16 pages

Reprinted 2004

Specifies the requirements for burnt clay pavers intended for use in the construction of paved surfaces subject to vehicle loading and pedestrian traffic.

ZWS 762:2017**Steel door frames**

Price Code: Gr.5

17 pages

Based on SANS 1129:2002

Reprinted 2004

This specification covers steel door frames (with or without fan-light frames) for walk-through doors.

ZWS 763:1999**Peanut butter**

Price Code: Gr. 4

12 pages

Replaces S31: 1971

Amended by 602:1999

Reprinted 2004

Covers the manufacturing, production, processing or treatment of peanut butter.

ZWS 764:2001**Cables and conductors – Dimensions of the components of electric cables – flexible cables and flexible cords**

Price Code: Gr .5

5 pages

Based on SABS Method495: 1990

Specifies a method of test for determining the dimensions of the components of electric cables, flexiblecords and flexible cables.

ZWS 765:2001**Cables and conductors – Flexing test on flexible cords**

Price Code: Gr. 3

7 pages

Based on SABS Methods 515: 1980

Specifies a method of test for flexing on flexible cords.

ZWS 766:2001**Cables and conductors – Kink resistance of circular flexible cords**

Price Code: Gr. 4

10 pages

Based on SABS Method 516: 1990

Specifies a method of test for kink resistance of circular flexible cords.

ZWS 767:2001
Cables and conductors – Conductor resistance
 Price Code: Gr. 4
 8 pages
 Based on SABS Method 523:1992

Specifies a method of testing the conductor resistance of cables.

ZWS 768:2001
Cables and conductors – Alternating current spark test on electric cables and cords
 Price Code: Gr.3
 5 pages
 Based on SABS Method 524: 1980

Specifies a method of determining the alternating current spark test on electric cables and conductors.

ZWS 769:2001
Cables and conductors – Power frequency voltage test on electric cables
 Price Code: Gr. 3
 6 pages
 Based on SABS Method 525: 1980

Specifies a method of testing the power frequency voltage on electric cables.

ZWS 770:2001
Cables and conductors – Dielectric resistance on electric cables
 Price Code: Gr. 3
 5 pages
 Based on SABS Method 526: 1980

Specifies a method of testing the dielectric resistance of electric cables.

ZWS 771:2001
Cables and conductors – Heat resistance of cables and flexible cords
 Price Code: Gr. 3
 5 pages
 Based on SABS Method 1204: 1992

Specifies a method for testing the electrical and mechanical integrity of a cable or flexible cord when in direct contact with a hot surface while under electrical high tension.

ZWS 772:2001
Cables and conductors – flexing test for extensible leads
 Price Code: Gr. 4
 7 pages
 Based on SABS 1205: 1996

Specifies a method of testing the ability of extensible lead to withstand flexing.

ZWS 773:2001
Cables and conductors – Wear resistance of braided and un-kinkable cords
 Price Code: 3
 5 pages
 Based on SABS Method 1200: 1996

Specifies a method of testing the ability of braided and unkinkable cords to withstand wear.

ZWS 774:2001
Cables and conductors – Bending test for highly flexible cords such as tinsel cords

Price Code: Gr.3
 5 pages
 Based on SABS Method 1207: 1992

Specifies a method for testing the ability of highly flexible cords to bend.

ZWS 775:2001
Cables and conductors – Extension test for extensible leads
 Price Code: Gr. 3
 5 pages
 Based on SABS Method 1208: 1992

Specifies a method of testing the extensibility of extensible leads.

ZWS 776:2001
Cables and conductors - Overall dimensions and ovality of electric cables and cords
 Price Code: Gr. 3
 5 pages
 Based on SABS Method 1209: 1992

Specifies a method determining the overall dimensions and ovality of electric cables and cords.

ZWS 777:2001
The Safety of water treatment chemicals for use in the food industry
 Price Code: Gr. 4
 12 pages
 Based on SABS 1822: 2000

Sets minimum requirements for the safety of water treatment chemicals, intended for use in portable/process water or boiler feed waters, where the treated water or steam produced might come into contact with food or food products.

ZWS 778:2012
Cleaning chemicals for use in the food industry
 Price Code: Gr. 5
 15 pages
 Based on SABS 1828: 2000
 Reprinted 2009

Specifies general requirements for cleaning chemicals intended for use in the food industry. Sets minimum requirements for the safety of such cleaning materials, which are intended for use on food processing equipment and might come into contact with food products.

ZWS 779:2001
Tobacco wrapping paper (moisture-barrier coated)
 Price Code: Gr. 4
 8 pages

Specifies tobacco wrapping paper coated in such a way as to effectively prevent the egress of moisture (i.e. loss of tobacco condition during transit).

ZWS 780:2001
Wooden clothes pegs
 Price Code: Gr. 5
 12 pages
 Based on SABS 1397: 1983

Covers the material, finish, dimensions and performance of wooden clothes pegs.

ZWS 781:2001**Safety matches**

Price Code: Gr. 7
25 pages

Specifies requirements for the safety, performance, classification and marking of matches, together with their match containers.

ZWS 782:2003**Pasteurized milk and pasteurized homogenized milk**

Price Code: Gr.4
7 pages
Based on MS 410: 1983

Described the requirements and the methods of sampling and testing for pasteurized milk pasteurized homogenized milk intended for human consumption.

ZWS 783:2005**Carbon steelwelded horizontal cylindrical storage tanks**

Price Code: Gr. 6
20 pages
Based on BS 2594: 1975

Specifies requirements for design and construction of carbon steel fusion welded horizontal cylindrical storage tanks with dished and flanged ends for the storage of liquids. It includes both above – ground tanks with saddle supports and underground tanks.

ZWS 784:2001**Adhesive for fixing ceramic tiles**

Price Code: Gr. 7
42 pages

Specifies performance requirements for organic-based adhesive, cement – based adhesives and cement-based mortars containing organic additives used as adhesives for the installation of ceramic wall and floor tiles and mosaics.

ZWS 785:2010**Electrical Security Installations – Electric Security Fences (Non – Lethal)**

Price Code: Gr. 7

25 pages
Based on SANS 10222-3: 2003

Gives the basic requirements for the planning, erection, installation and commissioning of electric fences. The requirements of this standard are in line with those in international electric fence standards but this standard gives additional requirements for situations that are unique to Zimbabwean conditions.

ZWS 786:1973**Sizes of paper**

Price Code: Gr. 6
18 pages
Reprint of ZWS P1: 1973

Covers trimmed sizes of paper used for administrative, commercial, and technical purposes and for certain classes of printed matter.

ZWS 787:2003**Skimmed milk powder/low fat dried milk**

Price Code: Gr. 3
6 pages
Based on MS 760: 1992

Specifies the requirements and methods of sampling and tests for skimmed milk powder/ low-fat dried milk, intended for human consumption.

ZWS 788:2003**Whole milk powder**

Price Code: Gr. 3
6 pages

Based on Codex standard no. 207: 1999

Specifies the requirements and methods of sampling and tests for whole milk powder, intended for human consumption.

ZWS 789:2003**Sterilized milk**

Price Code: Gr. 3
6 pages
Based on SABS 1678: 1997

Specifies the requirements and the methods of sampling and testing for sterilized milk intended for human consumption

ZWS 790:2003**Ultra high temperature milk**

Price code: Gr. 4
7 pages
Based on MS 411: 1986

Specifies the requirements for milk and homogenized milk which has been treated by the ultra high temperature method, either by the direct aulinary steam injection into the milk or by indirect heating.

ZWS 791:2015**Packaged drinking water other than natural mineral water**

Price Code: Gr. 7
10 pages

The standard specifies the description, treatment, testing, packaging and labelling of water that is not natural mineral water. Thewater maybe offered as packaged non-carbonated(still) water or as packaged carbonated (sparkling) water with or without permitted substances

ZWS 792:2015**Yoghurt (yogurt)**

Price Code: Gr. 4
5 pages
Based on codex alimentarius standard A-11 (a) 1975
First published 2003
First revision 2015

Specifies the requirements and the methods of sampling and testing for yoghurt.

ZWS 794:2016**Cultured milk**

Price Code: Gr. 4
3 pages
Based on codex alimentarius standard A-11 (a) 1975
First revision 2016

Specifies the requirements and methods of sampling and testing for cultured milk.

ZWS 795:1970**Genuine pure soap**

Price Code: Gr. 3
5 pages

Applies to genuine pure soap such as is supplied in bars, cakes or tablets to the general public.

ZWS 796:2003**Ice-creams and ice cream mixes**

Price Code: Gr. 4
9 pages
Based on standard no: 137: 1983

Specifies the requirements and the methods of testing and for sampling of ice-cream and mixes in liquid or powder form. Also applies to ice-cream part of foods which contain ice-cream as an ingredient.

ZWS 797:2003
Cream (for direct consumption)

Price Code: Gr. 4
8 pages

Based on Codex Alimentarius standard no. A-9: 1976

Specifies the requirements for cream, half-cream, whipping cream, whipped cream subjected to pasteurization, sterilization, ultra-high temperature (UHT) or ultra pasteurization intended for direct consumption.

ZWS 798:2003

Butter

Price Code: Gr. 4

7 pages

Based on Codex standard A-1: 1971

Specifies the requirements and methods of sampling and testing of butter intended for further processing.

ZWS 799:2003

Condensed milk

Price Code: Gr. 4

7 pages

Based on MS 25: 1983

Specifies the requirements of methods of analysis of condensed milk.

ZWS 800:2003

Cheese

Price Code: Gr. 4

8 pages

Based on Codex Alimentarius standard A- 6: 1996

Applies to all products intended for direct consumption or further processing in conformity with the definition of cheese in the standard.

ZWS 802:2004

Edam cheese

Price Code: Gr. 3

6 pages

Based on Codex Alimentarius standard C- 4: 1966

Prescribed the requirements and methods of sampling and testing for Edam cheese intended for human consumption.

ZWS 803:2004

Parmesan cheese

Price Code: Gr. 4

7 pages

Based on Codex Alimentarius standard C- 1: 1968

Specifies the requirements and methods of sampling and testing for Parmesan cheese intended for human consumption.

ZWS 804:2003

Cottage cheese and cream cheese

Price Code: Gr. 4

7 pages

Based on Codex Alimentarius standard C -16: 1968

Specifies the requirements for cottage cheese and cream cheese.

ZWS 805:2004

Hard cheese

Price Code: Gr. 4

7 pages

Based on Codex Alimentarius standard C -16: 1999

Prescribes the requirements and the methods of sampling and testing for hard cheese intended for human consumption.

ZWS 806:2021

Hazardous Waste Management

Price Code: Gr. 8

10 pages

First Revision of ZWS 806:2012

Specifies the minimum requirements for hazardous waste management (may also be applied in some part to the management of waste management of waste in general). It sets out the required procedures and practice on the safe management of hazardous waste.

ZWS 808:2002

Method of testing materials for resistance to fungal growth – Resistance of dried or cured adhesives and glues to fungal growth

Price Code: Gr. 3

6 pages

Based on AS 1157: Part 10: 1979

Described procedures for determining the resistance of water resistant and water sensitive adhesives and glues to fungal growth.

ZWS 809:2002

Adhesives – Glossary of terms used in the adhesives industry

Price Code: Gr. 7

39 pages

Based on AS 1309: 1974

Covers glossary of terms in the adhesives industry.

ZWS 810:2002

Ceramic floor and wall tiles– Determination of water absorption

Price Code: Gr. 3

5 pages

Based on EN 99: 1991

Defines a method of test for determining the water absorption of ceramic tiles.

ZWS 812:1972

Gypsum plasterboard (metric units)

Price Code: Gr. 4

11 pages

Based on SABS 266: 1971

Reprint of ZWS A42: 1972

Reprinted 2001

Reprinted 2004

Covers gypsum plasterboards for use as a building board in the interior buildings.

ZWS 813:1980

Portable fire extinguishers – Hand – operated fire extinguishers for aircraft and other purposes

Price Code: Gr. 4

11 pages

Reprint of ZWS A31: Part 5: 1974

Reprinted 2001

Reprinted 2004

Specifies performance requirements for hand-operated portable fire extinguishers for use in aircraft and other forms of transport.

ZWS 814:1968

Concrete pipe fittings including manholes and inspection covers

Price Code: Gr. 5
14 pages
Reprint of ZWS A29: 1968
Reprinted 2001

Covers fittings, including concrete collars and concrete junctions suitable for use with concrete pipes to ZWS 315, together with manholes and concrete inspection chambers for drainage purposes.

ZWS 815:1974

Materials for soil stabilization

Price Code: Gr. 5
12 pages
Reprint of ZWS A19 1974
Reprinted 2001

Covers two types of materials, hydrated (high calcium content) lime and cement, those being the two main materials presently used in soil stabilization.

ZWS 816:1968

Precast reinforced box culverts

Price Code: Gr. 5
16 pages
Reprint of ZWS A28: 1968
Reprinted 2001
Applies to precast reinforced concrete rectangular box culverts primarily intended for conveying highway vehicle loadings.

ZWS 817:2013

Coffins and caskets

Price Code: Gr. 6
19 pages

Covers the requirements for the materials, construction, basic dimensions, finish and performance of the following two types (each of six classes) of coffins/caskets for human remains.

ZWS 818:1964

Building limes

Price Code: Gr. 6
20 pages
Reprint of ZWS A15: 1963
Reprinted 2002

Covers four grades of hydrated lime and two grades of quick-lime intended for use in plastering and rendering.

ZWS 819:2010

Toothpaste

Price Code: Gr. 6
21 pages
Based on SABS 1302:2008

Covers the requirements and test methods for toothpastes (Flouridated and non-flouridated) intended for use with a tooth brush in the cleaning of natural teeth to promote oral hygiene.

ZWS 820:1968

Silver - plated copperware

Price Code: Gr.5
12 pages
Amended by MD 74:1968
Reprinted 2008

Specification lays down requirements for copperware electroplated with silver primarily intended for domestic use but excluding cutlery. It does not cover design except as far as serviceability is concerned.

ZWS 822:1969

Damp-proofing of buildings

Price Code: Gr. 5
14 pages
Based on BS CP 102
Reprint of ZWS CA6: 1969
Replaces ZWS H1:1962
Reprinted 2001

Sets out methods and makes recommendation for the damp-proofing of walls and floors at or near ground level.

ZWS 823:1975

Underfeed stokers (ram or screw type)

Price Code: Gr. 4
8 pages
Reprint of ZWS B1: 1967
Reprinted 2001

Specifies requirements for underfeed stokers of the ram or screw type, rated up to 550 kg or coal per hour and primarily intended for heating tobacco curing barns.

ZWS 824:2012

Files and Rasps

Part 1 Rasps and engineer's file

Price Code: Gr.7
33 pages
Reprinted 2012

Relates to the manufacture, dimensions and testing of the following patterns of rasps and engineer's files.

ZWS 825:1971

Steel tubes for general engineering purposes

Price Code: Gr. 5
11 pages
Reprint of ZWS B3 1971
Reprinted 2002

Covers the dimensional, material and mechanical requirements of plain carbon steel tubes not exceeding 0.165 m in outside diameter for general engineering purposes.

ZWS 826:1973

Industrial open type metal flooring and stair treads

Price Code: Gr. 5
14 pages
Reprint of ZWSB9 1973
Amended by MD 258: 2002
Reprinted 2002

Specifies requirements for the design, construction and testing of industry open metal flooring panels and stair treads.

ZWS 827:1960

Mastic asphalt for roads and footways (limestone aggregated)

Price Code: Gr. 4
10 pages
Reprint of A4 1960
Based on BS 1447: 1948
Reprinted 2001

Gives requirements for mastic asphalt with limestone aggregate for roads and footways.

ZWS 828:2002

Dimensions of hosiery

Price Code: Gr. 2

4 pages

Based on SABS Method 369: 1973

Specifies a test method for dimensions of hosiery.

ZWS 829:1973

Rubber reel hose for fire fighting purposes

Price Code: Gr. 8

8 pages

Reprint of ZWS A26: 1971

Based on BS 3169: 1978

Reprinted 2001

Specifies requirements for materials, construction and dimension for four types of rubber reel hose of 19 mm internal diameter for the fighting purposes.

ZWS 830:1979

Glazing putty for wood and steel sashes

Price Code: Gr.5

14 pages

Reprint of ZWS A24: 1967

Based on SABS 680: 1959

Reprinted 2002

Covers two types of putty for glazing window frames.

ZWS 831:2003

Cream powder

Price Code: Gr. 4

6 pages

Based on Codex standard 207: 1999

Specifies the requirements and methods of sampling and testing for cream powder intended for human consumption.

ZWS 832:1968

Distribution miniature circuit-breaker boards for low and medium voltages

Part 1: Single phase boards (80A max incoming load)

Price Code: Gr. 4

11 pages

Reprint of ZWS C9: Part 1: 1968

Reprinted 2002

Relates to single –phase distribution boards using miniature circuit breakers intended for use in alternating current electricity distribution systems.

ZWS 833:1971

Tubular steel poles

Price Code: Gr. 4

10 pages

Amended by MD 650: 2003

Reprint of ZWS C14: 1971

Reprinted 2002

Covers tubular steel poles and fittings for telephone and electric supply lines and similar purposes

ZWS 834:1972

Enamelled copper conductors (polyvinyl) acetal base with high mechanical properties

Part 1: Round wire

Price Code: Gr. 7

36 pages

Reprint of ZWS C15: 1972

Reprinted 2002

Specifies requirements and dimensions for round copper wire covered with a synthetic enamel with high mechanical properties based on a vinyl acetal resin.

ZWS 835:1971

Three-phase induction motors

Price Code: Gr. 7

40 pages

Reprint of ZWS C17: 1971

Reprinted 2003

Covers three phase alternating current induction motors of rating not exceeding 150 kW 1000 r.p.m for alternative voltages not exceeding 660 V between lines at a frequency of 50 Hz.

ZWS 836:1972

Electric kettles and similar appliances

Price Code: Gr. 7

26 pages

Reprint of ZWS C18: 1972

Reprinted 2002

Covers electrical kettles and similar portable electrical appliances for heating water and non-corrosive aqueous solutions intended for operation at voltages not exceeding 250 V to earth and having current ratings not exceeding 15 A.

ZWS 837:1972

Electrically-heated laboratory drying ovens

Price Code: Gr. 4

11 pages

Reprint of ZWS C19: 1972

Based on BS 2648: 1955

Reprinted 2002

Specifies the performance requirements of electrically heated laboratory ovens used for the determination of moisture by drying within the temperature range 95 °C to 110°C.

ZWS 838:1972

Bottle coolers

Price Code: Gr. 6

18 pages

Reprint of ZWS C20: 1972

Reprinted 2002

Refers to refrigerated cabinets designed for storage and display of soft drink at temperature between 5 and 10 °C.

ZWS 839:1970

Exhaust silencers for passenger cars

Price Code: Gr. 6

7 pages

Reprint of ZWS D6: 1970

Reprinted 2002

Covers the basic constructional requirements and materials used in the manufacture of exhaust silencers for passenger motor cars.

ZWS 840: 2002

Conditioning of textiles and standard temperature atmosphere for determining their physical and mechanical properties (metric units)

Price Code: Gr. 2

3 pages

Based on SABS Method 70: 1972

Describes a method for conditioning of textiles.

ZWS 841:1972
Safety razor blades

Price Code: Gr. 4
10 pages
Reprint of ZWSS36: 1972
Reprinted 2002

Set out the requirements for two qualities of safety razor blades.

ZWS 842:1971
Flexible vinyl flooring

Price Code: Gr. 6
19 pages
Reprint of ZWS A45: 1971
Amended by AM 649:2003
Reprinted 2002

Covers two thickness of flexible vinyl flooring (single -ply and laminated) in the form of sheeting and straight-sided tiles).

ZWS 843:1964
Internal plastering on solid ground

Price Code: Gr. 6
18 pages
Reprint of ZWS CA5: 1964
Reprinted 2002

Lays down recommendations for the proportioning of normal types of plaster and the application of the plaster or internal background.

ZWS 844:2014
Paper serviettes/napkins

Price Code: Gr. 3
7 pages
Based on KS 2000:2007

Specifies requirements and test methods for paper serviettes/napkins in sheet form for hygienic purposes.

ZWS 845:1971
Reflex -reflecting vehicle number plates

Price Code: Gr. 6
18 pages
Reprint of ZWS D8 1971
Reprinted 2002

Specifies requirements for reflex-reflecting number plates for fitting to vehicles.

ZWS 846:1973
Tobacco tying twine

Price Code: Gr. 3
6 pages
Reprint of ZWS N10: 1973
Reprinted 2002
Covers three tobacco tying twine.

ZWS 847:1972
Limestone flour for use in animal feeding stuffs

Price Code: Gr. 4
11 pages
Reprint of ZWS N8: 1972
Reprinted 2002

Covers the chemical composition, sampling, packing, marking and methods of test for limestone flour for use in animal feeding stuffs.

ZWS 848:1973
Portable and mobile screw conveyers for agricultural use

Price Code: Gr. 4
11 pages
Reprint of ZWS N9: 1973
Reprinted 2002

Covers requirements for portable and mobile screw conveyors of the tubular type constructed of mild steel.

ZWS 849:1969
Knapsack sprayers

Price Code: Gr. 5
15 pages
Amended by MD 649: 2003
Reprint of ZWS N6: 1969
Reprinted 2002

Applies to knapsack sprayers equipped with hand operated pump, pressure container and discharge line with a cut off device.

ZWS 850:1969
Solid copperware

Price Code: Gr. 3
4 pages
Reprint of ZWS H5: 1969
Reprinted 2002

Lays down requirements for solid copperware primarily intended for domestic use.

ZWS 851:2002
Cane Spirit and Vodka

Price Code: Gr. 3
5 pages
First reprint of CAS S28:2002
Reprinted 2009

Covers quality of alcohol content, sweetening chemical, physical, packaging and marking requirements for canned spirit and vodka

ZWS 853:1974
Beehives

Price Code: Gr. 5
15 pages
Reprint of ZWS N4: 1974
Reprinted 2002

Give the dimensions essential to secure interchangeability of the parts of beehives of the langstroth design.

ZWS 854:1974
Coated knitted fabrics for upholstered furniture (PVC) types

Price Code: Gr. 5
11 pages
Reprint of ZWS L 10 1972
Reprinted 2002

Specifies requirements for coated fabric for upholstered furniture.

ZWS 855:1971
Loomstate cotton duck

Price Code: Gr. 6
16 pages
Reprint of ZWS L 8: 1971
Reprinted 2002

Covers twelve qualities of plain woven cotton fabric in the loomstate suitable for tents, tarpaulins and equipage.

ZWS 856:1965
General purpose blankets for departmental and institutional use

Price Code: Gr. 4
9 pages
Reprint of ZWS L6: 1965
Reprinted 2002

Covers blankets with all wool weft and all cotton warp.

ZWS 857:1964

Printers metal
Price Code: Gr. 6
24 pages
Reprint of ZWS H2:1964
Reprinted 2002

Covers six grades of printers metal for mechanical type-casting machines.

ZWS 858:2005

Timber drums for insulated electric cables and bare conductors
Price Code: Gr. 7
26 pages
Based on AS/NZS: 2857: 1996
Amended No MD 662: 2009
Specifies requirements for timber drums up to 5t capacity lot transport and storage of insulated electric cables, bare conductors and other products for which drums are suitable.

ZWS 860:1967

Soft solders
Price Code: Gr. 4
9 pages
Reprint of H3: 1967
Reprinted 2002

Sets out requirements for antimonial and non-antimonial soft solders for general use and those for higher temperature.

ZWS 861:2003

Farm implements – Animal drawn plough shares
Price Code: Gr. 6
17 pages

Specifies the requirements of both the upset and flat shares.

ZWS 862:2004

The product, processing, labeling and marketing of organically produced foods
Price Code: Gr. 8
46 pages
Based on Codex GL, 32:1999, Rev 1: 2001

Standard applies to some products including unprocessed plants, livestock, processed agricultural crops etc. which carry or are intended to carry, descriptive labeling referring to organic production methods.

ZWS 863:2002

Micro-concrete roofing tiles
Price Code: Gr. 6
18 pages
Based on GS 529: 1994

Specifies the requirements for micro-concrete roofing tiles. It specifies the quality of raw materials, dimensional and performance requirements.

ZWS 864:2004

Quality assurance of pharmaceuticals – Good manufacturing practices and inspection
Part 1: Main principles for pharmaceutical products

Based on WHO Quality Assurance of Pharmaceuticals Vol 2: Good manufacturing practices and inspection: 1999

Replaces ZWS K30: 1971
Price Code: Gr. 8
65 pages

Shall be used to justify good manufacturing practices (GMP) status, which constitute one of the elements of WHO certification scheme on quality of pharmaceutical products moving in international commerce, through the assessment of applications for manufacturing authorizations and as basis for the inspection of manufacturing facilities.

Part 2: Starting Materials

Price Code: Gr. 7
30 pages

Outlines procedures and practices that manufacturers should employ to ensure that the methods, facilities and controls used for the production of active pharmaceutical excipients are operated or managed so that such products have quality and purity appropriate for their use in finished pharmaceutical products.

Part 3: Specific pharmaceutical products

Price Code: Gr. 7
42 pages

Stresses specific points for the manufacture of specific pharmaceutical products to minimize the risk of microbiological particulate and pyrogen contamination.

Part 4: Inspection

Price Code: Gr. 7
35 pages

Gives guidelines for the inspection of pharmaceutical manufacturers.

ZWS 865:1966

Black and white disinfectant fluids
Price Code: Gr. 4
7 pages
Reprint of ZWS K16: 1966
Reprinted 2002

Sets out the general requirements for disinfectant fluids of the coal tar type.

ZWS 866:2003

Fertilizers – Magnesium nitrate
Price Code: Gr. 3
6 pages
Specifies the requirements for magnesium nitrate for use as a fertilizer.

ZWS 867:2015

Fertilizers – Potassium sulfate
Price Code: Gr. 4
3 pages
Based on ES 268: 1990
First published 2003
First revision 2015

Specifies the requirements for potassium sulfate intended for use as a fertilizers

ZWS 868:2017

Fertilizers – Magnesium sulfate anhydrous
Price Code: Gr. 4
4 pages

Specifies the requirements for magnesium sulfate anhydrous intended for use as a fertilizer.

ZWS 869:2015
Fertilizers – Calcium Nitrate
Price Code: Gr. 4
3 pages
First published 2008
First revision 2015

Specifies the requirements for calcium nitrate intended for use as a fertilizer.

ZWS 870:2015
Fertilizers – Potassium nitrate (nitrate of potash)
Price Code: Gr. 4
3 pages
Based on ES 397: 2000
First revision 2015

Specifies the requirements for potassium nitrate (nitrate potash) intended for use as a fertilizer.

ZWS 871:2015
Fertilizers – Ammonium nitrate
Price Code: Gr. 4
2 pages
Based on ES 202: 1990
First revision 2015

Specifies the requirements for ammonium nitrate (coated) intended for use as a fertilizer.

ZWS 872:2015
Fertilizers – Monoammonium phosphate (MAP)
Price Code: Gr. 4
4 pages
Based on ES 196: 2000
First revision 2015

Specifies the requirements for monoammonium phosphate (MAP) intended for use as a fertilizer.

ZWS 873:2015
Fertilizers – Zinc sulfate monohydrate
Price Code: Gr. 4
3 pages
First published 2003
First revision 2015

Specifies the requirements for zinc sulfate monohydrate intended for use as a fertilizer.

ZWS 874:2015
Fertilizers – Urea
Price Code: Gr. 4
3 pages
Based on ES 264: 1990

Specifies the requirements for urea intended for use as a fertilizer.

ZWS 875:2015
Potassium chloride (muriate of potash) Fertilizer
Price Code: Gr. 4
3 pages

Specifies the requirements for potassium chloride (muriate of potash) intended for use as a fertilizer.

ZWS 878:2003
Snatch blocks
Price Code: Gr. 5
14 pages
Based on ZWS 1819: 2001

Specifies the requirements for snatch blocks intended for use in conjunction with scraper scoops in the underground mining and surface operations

ZWS 880:2010
Water quality – detection and enumeration of vibro cholera
Price Code :Gr.6
Based on SANS 6315:2003
16 pages

Specifies a method for the detection and enumeration of Vibrio cholerae in water.

ZWS 881:2013
B – Type bush pump
Price Code: Gr. 8
75 pages

Based on the Swiss Centre for Development Cooperation in Technology and Management-Hand pump Technology Network (SKAT-HTN), Bush pump Deep Hand pump: The B-type deep well hand pump suitable for lifting water from depths of 3 to 80m. However, pumps can be operated when installed up to 100m depth, although this puts a greater strain on the parts. For very deep installations the pump head is modified with 16mm side arms and modified pivot pins with a longer 3m handle.

ZWS 882:2005
Pipe threads for tubes and fittings where pressure –tight joint are made of the threads (metric dimensions)
Price Code: Gr. 7
29 pages
Based on BS 21: 1985

Specifies requirements for jointing threads and long screw threads. Gives methods of verification of jointing thread dimensions and form using recommended gauging systems.

ZWS 883:1970
White metal bearing alloy ingots
Price Code: Gr. 4
9 pages
Reprint of ZWS H6: 1970
Reprinted 2003

Specifies requirements for white metal bearing alloys in ingot form.

ZWS 884:2003
Magnetic particle flaw detection
Price Code: Gr. 8
2 pages
Based on BS 6072: 1981

Specifies techniques and procedures for magnetic particle flaw detection of ferromagnetic materials.

ZWS 886:1969
Laboratory glassware
Price Code: Gr. 3
6 pages
Reprint of ZWS R2: 1969
Reprinted 2003

Gives the requirements for general laboratory glassware, and the more detailed requirements for specific types of glassware in common use.

ZWS 887:2014
Ready to eat breakfast cereals

Price Code: Gr. 3
6 pages
Reprint of ZWSS3: 1967
Reprinted 2003
First revision 2014

Covers the preparation and packaging of the described types of breakfast cereals in a ready to eat condition.

ZWS 888:1972
Mayonnaise, salad cream or dressing and sandwich spread

Price Code: Gr. 5
13 pages
Reprint of ZWS S2 1972
Replaced S2
Amended by 593:1999, MD 637:2001
Reprinted 2003

Lays down the requirements for the manufacturing, sampling, labelling and testing of mayonnaise, salad cream or dressing and sandwich spread. Each of which shall be of one type and grade.

ZWS 889:2004
Conductors for overhead electrical transmission lines
Part 1: Stranded aluminum conductors

Price Code: Gr. 5
15 pages
Based on SABS 182-2: 2001

Applies to insulated, hard-drawn aluminum conductors for overhead transmission lines.

Part 2: Aluminum conductors, steel reinforced

Price Code: Gr. 6
15 pages
Based on SANS 182-3: 2001
Applies to uninsulated stranded hard-drawn aluminum conductors steel reinforced, for overhead transmission lines.

ZWS 890:2005
High voltage busbars and busbar connections

Price Code: Gr. 7
25 pages
Reprint of BS 159: 1992

Specifies requirements for both enclosed and open busbars and busbar connection which are components of a.c. high voltage electrical systems (above 1kV) and are composed of metal such as copper or aluminium, with air oil, gas, solid or semi solid materials as principal insulation.

ZWS 900:2004
Structured wall pipes and fittings of unplasticized poly (vinyl chloride) (PVC-U) for buried drainage and sewage systems

Price Code: Gr. 7
43 pages
Based on SANS: 1601: 2003

Covers unplasticized poly (vinyl chloride) wall pipes (including pipe fittings) with an essentially smooth inside surface, of nominal diameter 110 mm upto and including surface, of nominal diameter 110 mm upto and including 1000 mm. and intended for buried gravity drainage and sewage pipe systems for the transportation of soil and waste discharge of domestic and industrial origin.

ZWS 904:2008
Guidelines for the design of control measures for street vended foods in Zimbabwe

Price Code: Gr. 7
27 pages

Specify the general hygienic requirements and practices to be recommended for inclusion in Codes of Practice for the preparation and sale of street foods.

ZWS 905:1972
Ready – to – cook samosas

Price Code: Gr. 4 8 pages
Reprint of ZWS S15: 1972
Reprinted 2003

Covers the manufacture, packaging, labelling, sampling and testing of ready to cook samoosas.

ZWS 906:2010
Small domestic septic tanks and soil absorption systems

Price Code: Gr.10
87 pages
Revision of R.N.S No CA1:1973
Amended by MD 666:2010
Replaces ZWS 334:2008
Reprinted 2010

Sets out recommendations for the design, layout, construction and maintenance of septic tank installations, including disposal of tank effluent by means of absorption trenches. It is applicable to houses, flats etc where the contributors do not exceed 12 persons. It is not intended to include the treatment of sewage from groups of houses, large institutions, hospitals or the like.

ZWS 913.1:2012
The petroleum industry
Part 1: Storage and distribution of petroleum products in above ground bulk installations

Price Code: Gr. 7
86 pages
Identical to SANS 10089.1:2008
Supercedes ZWS CZ1:1963

Covers the layout and design of petroleum bulk depots and the installation of equipment of the tyres normally used for the handling storage and distribution of petroleum products and their derivatives other than equipment that is used for storage and dispensing on consumer premises (including service stations).

ZWS 913.2:2020
Petroleum Industry
Part 2: The installation of underground tanks, pumps/dispensers and pipework at service stations and consumer installations

Price Code: Gr.7
34 pages
Based on SANS 10089.3:1999

Covers provisions for the installation of underground storage tanks of individual capacity not exceeding 40 000l , pumps or dispensers and pipework at service stations and consumer installations.

ZWS 913.3:2011
Petroleum Industry – Requirements for above ground tanks with integral secondary containment and dispensers

Price Code: Gr.8
48 pages
Identical to AS 1940:2004

Sets out requirements for the safe storage and handling of flammable liquids of dangerous goods Class 3, as classified in the UN Recommendations for the Transport of Dangerous Goods.

ZWS 915:2014

Zimbabwe Organic Farming

Price Code: Gr. 8
72 pages

Applies to the following products which carry or are intended to carry, descriptive labeling referring to organic production methods.

ZWS 916:2011

Disposable portable condensed aerosol fire extinguishers

Price Code: Gr. 6
16 pages

Specifies the minimum requirements of disposable portable condensed aerosol fire extinguishers of charge mass not exceeding 1 000g and suitable for use on Class A,B,C and E fires.

ZWS 919:2011

Writing Equipment – Ballpoint Pens

Price Code: Gr. 6
18 pages

Replaced by ZWS X2:1968
Identical to SANS 785:2006

Specifies the requirements for single-cartridge ballpoint pens, replacement refills and direct-fill ballpoint pens which have black, blue green or red inks.

ZWS 922:2011

Safety tyre bands

Price Code: Gr. 5
9 pages

Covers requirements for safety tyre bands construction, dimensions, material composition and performance for wheel rim sizes 13 inches to 20 inches and 22,5 inches for light truck and bus tyres.

ZWS 923:2012

Sustainable Plantation Forest Management

Price Code: Gr. 7
33 pages

Applicable to all forest plantations within Zimbabwe seeking local and/or international certification.

ZWS 924:2012

Invert bitumen emulsions

Price Code: Gr. 4
7 pages
Identical to SANS 1260:2004

Covers the requirements for one type of invert bitumen emulsion intended for use as a primer on dry, firm and dust-free road bases and especially where rapid drying (within 48h) characteristics are requirements.

ZWS 925:2012

Cationic bitumen road emulsions

Price Code: Gr. 4
11 pages
Identical to SANS 548:2003

Covers the requirements for three types (of the appropriate grade (s) given in Table 1) of cationic bitumen road emulsions suitable for the

preparation and treatment of road and other surfaces carrying wheeled and foot traffic.

ZWS 926:2012

Anionic bitumen road emulsions

Price Code: Gr. 5
13 pages
Identical to SANS 309:2004

Covers the requirements for three types (each of grade 60) of anionic bitumen road emulsions suitable for the preparation and treatment of road and other surfaces carrying wheeled and foot traffic.

ZWS 927:2012

Hardwood furniture timber

Price Code: Gr. 7
24 pages
Identical to SANS 1099:2008

Covers three basic grades (i.e. clear grade, semi-clear grade and knotty grade) of rough-sawn hardwood timber and timber derived from trees of the *Podocarpus spp.*, of density (at a moisture content of 12 (m/m) at least 400kg/m³ and intended for use in the manufacture of furniture.

ZWS 928:2012

Cold mix premix

Price Code: Gr. 4
11 pages
Identical to AS 4283:1995

Specifies requirements for cold mix premix for use as a road maintenance patching and minor pavement construction material that is suitable for stockpiling prior to use. In particular this standard includes requirements for materials, typical mix proportions, production temperatures and sampling and testing methods.

ZWS 929.1:2012

Fibreboard products

Part 1: Uncoated fibreboards

Price Code: Gr. 5
16 pages
Identical to SANS 540.1:2009
Specifies the characteristics of uncoated fibreboards.

Part 2: Coated fibreboards

Price Code: Gr. 4
10 pages
Equivalent to SANS 540.2:2009

Specifies the characteristics of coated fibreboard.

ZWS 930:2012

Fibreboard – Measurement of dimensions of test specimens

Price Code: Gr. 2
4 pages
Identical to SANS 6174
Specifies a method of measuring the length, width and thickness of conditioned test specimens of fibreboard and fibreboard products.

ZWS 931:2012

Insulation board – Determination of bitumen content

Price Code: Gr. 3
5 pages
Identical to SANS 6177:2004
Specifies a method of determining the bitumen content of bitumen insulation board.

ZWS 932:2012
Thickness swelling and water absorption of fibre boards on immersion in water
 Price Code:Gr. 3
 6 pages
 Identical to SANS 6012:2004

Covers the determination of thickness swelling and water absorption of particle boards specimens when immersed in water.

ZWS 933:2012
Modulus of elasticity and modulus of rupture in static bending of fibreboards
 Price Code: Gr. 4
 9 pages
 Identical to SANS 6015:2004

Covers the determination of the apparent and of the true modulus of elasticity and of the modulus of rupture in static bending of fibreboard.

ZWS 934:2012
Fibreboard – Determination of density
 Price Code: Gr. 2
 4 pages
 Identical to SANS 6175:2004

Specifies a method of determining the density of fibreboard and fibreboard products.

ZWS 935:2012
Edge straightness of wooden board products
 Price Code: Gr. 3
 4 pages
 Identical to SANS 5970:2004

Covers the determination of edge straightness of wooden board products.

ZWS 936:2012
Flatness of wooden board products
 Price Code: Gr. 3
 5 pages
 Identical to 5969:2004

Covers the determination of flatness of wooden board products such as plywood and composite board and decorative melamine-faced boards.

ZWS 937:2012
Timber based board products – Squareness
 Price Code: Gr. 3
 5 pages
 Identical to SANS 5970:2004

Specifies a method of measuring the squareness of timber-based board products.

ZWS 938:2012
Screw holding strength of wood based panels
 Price Code: Gr. 3
 5 pages
 Identical to SANS 6018:2005

Covers the determination of the resistance to axial withdrawal of wood screws of a standard type inserted into the face and into the edge of wood-based panels.

ZWS 939:2012
Fibreboard – Determination of lateral nail holding strength

Price Code: Gr. 3
 5 pages
 Identical to SANS 5970:2004

Specifies a method of determining the lateral nail-holding strength of a fibreboard panel. The test simulates the condition encountered when forces tend to pull paneling or sheathing from a wall.

ZWS 940:2012
Fibreboard – Preparation of test specimens
 Price Code: Gr. 4
 9 pages
 Identical to SANS 6173:2004

Specifies a method of selecting, cutting and identification marking of test specimens of fibreboard.

ZWS 941:2012
Fibreboard – Determination of linear expansion as a result of water absorption
 Price Code: Gr. 3
 4 pages
 NS 6176:2004

Specifies a method of determining the linear dimensional changes of fibreboard as a result of water absorption.

ZWS 950:2012
Dimensional and mass stability of fibre boards with varying humidity
 Price Code: Gr. 4
 6 pages
 Equivalent to SANS 6013:2004

Covers the determination of the changes in dimensions (length and width) and in mass (equilibrium moisture content) of fibreboard exposed to two extremes of relative humidity.

ZWS 951:2012
Coated fibreboard – Determination of resistance to staining
 Price Code: Gr.4
 6 pages
 Equivalent to SANS 6180:2004

Specifies a method of determining the resistance of coated fibreboard to staining.

ZWS 952:2012
Coated fibreboard – Determination of resistance to steam
 Price Code: Gr. 3
 5 pages
 Identical to SANS 6181:2004

Specifies a method of determining the resistance of coated fibreboard to steam.

ZWS 953:2020
Unleaded petrol
 Price Code: Gr. 5
 5 pages
 Identical to SANS 1598

Specifies one grade of unleaded petrol with research octane number (RON) OF 93 and suitable for use in spark-ignition internal combustion engines other than aviation piston engines.

ZWS 954:2014
Ball studs and ball socket assemblies
 Price Code: Gr. 4
 8 pages

Identical to SAE J 491:1987

Established for the purpose of providing design criteria and suggested dimensional proportions which may be used for ball studs and ball stud socket assemblies as used on steering systems or control mechanisms of passenger vehicles trucks and off road equipment.

ZWS 956:2014

Ball joints

Price Code: Gr. 4
10 pages
Identical to SAE J 490:2012

Covers the general and dimensional data for various types of ball joints with inch threads commonly used on control linkages in automotive, marine and construction and industrial equipment applications.

ZWS 958:2012

Fibreboard – Determination of transverse internal bond strength

Price Code: Gr. 3
4 pages

Specifies a method of determining the transverse internal bond strength of fibreboards.

ZWS 960:2012

The handling, storage, distribution and maintenance of liquefied petroleum gas in domestic, commercial and industrial installations

Part 1: Liquefied petroleum gas installations involving gas storage containers of individual water capacity not exceeding 500L and a combined water capacity not exceeding 3 000L per installation

Price Code: Gr. 8
73 pages
Based on SANS 10087.1:2008

Specifies requirements for the materials, the methods of construction and the installation of equipment used in liquefied petroleum gas applications for domestic and commercial installations that involve gas storage containers of individual water capacity not exceeding 500 litres and of a combined water capacity not exceeding 3000 litres.

Part 2: Liquefied petroleum gas installations involving storage vessels of individual water capacity not exceeding 500 litres

Price Code: Gr. 8
55 pages
Based on SANS 10087.3:2008

Specifies requirements for the layout, design and installation of butane, propane and liquefied petroleum gas equipment and of storage vessels of individual water capacity exceeding 500 litres and associated vaporizers, pipework and fitting up to the outlet of the first pressure reduction stage in the line.

Part 3: Storage and filling premises for refillable liquefied petroleum gas (LPG) containers of gas capacity not exceeding 9 KG and the storage of individual gas containers not exceeding 48 KG

Price Code: Gr.7
35 pages
Based on SANS 10087.7:2011

Specifies the minimum requirements for the location and installation of and operations at filling premises for the filling of liquefied petroleum gas (LPG) containers of gas capacity not exceeding 48 kg.It

identifies safe methods of filling and storing refillable containers and makes recommendations towards safe working procedures that cover all aspects of the storage of containers.

Part 4:2016: The transportation of LP Gas including the design, construction, inspection, fittings, filling, maintenance and repair of LP gas bulk vehicles and rail tank cars

Price Code: Gr. 7
Identical to SANS 10087-4

Standard gives requirements for the design, construction, inspection, fittings and the filling ratio of pressure vessels including ISO containers and skid tanks, used in the transportation of LPG the design of vehicles and ancillary equipment, and operating practice.

ZWS 962:2022

Denatured fuel ethanol for blending with gasolines for use as automotive spark ignition engine fuel

Price Code: Gr. 5
9 pages
Identical to ASTM D4806 -11a:2011
First published 2012, as ZWS 962
First revision 2022, as ZWS 962

This specification covers nominally anhydrous denatured fuel ethanol intended to be blended with unleaded or leaded gasolines at 1 to 10 volume % for use as automotive spark-ignition engine fuel covered by Specification D4814.

ZWS 963:2012

Illuminating paraffin

Price Code:Gr. 5
9 pages
Based on SANS 342

Specifies illuminating paraffin. Illuminating paraffin (IP) is used extensively for heating and lighting in domestic and industrial sectors. IP is also used as a solvent in manufacturing processes of certain products such as paints, varnish, polish, insecticides and so on.

ZWS 964:2012

Ethanol

Part 1: E5

Price Code:Gr. 8
13 pages
Based on SANS 1598

Specifies one grade of ethanol blend with research octane number (RON) of 93 and suitable for use in spark-ignition internal combustion engines other than aviation piston engines. The grade shall contain oxygenates in the form of ethanol.

Part 2: E10

Price Code:Gr. 8
14 pages
Based SANS 1598

Specifies one grade of ethanol blend with research octane number (RON) of 93 and suitable for use in spark-ignition internal combustion engines other than aviation piston engines. The grade shall contain oxygenates in the form of ethanol.

Part 3:E20

Price Code:Gr. 7
13 pages
Based SANS 1598

Specifies one grade of ethanol blend with research octane number (RON) of 95 and suitable for use in spark-ignition internal com-

combustion engines other than aviation piston engines. The grade shall contain oxygenates in the form of ethanol.

Part 4: E85

Price Code: Gr. 8
10 pages
Based ASTM D5798:2011

Covers the requirements for automotive fuel blends of ethanol and gasoline for use in ground vehicles equipped with flexible-fuel spark-ignition engines. Fuel produced to this specification contains 51 to 83 volume % ethanol. This fuel is for use in flexible-fuel vehicles and is sometimes referred to as "Ethanol Flex-Fuel".

Part 5:2013

E 15
Price Code: Gr. 9
13 pages
Amended by AMD 672:2014
Specifies one grade of ethanol blend with research octane number (RON) of 95 and suitable for use in spark-ignition internal combustion engines other than aviation piston engines. The grade shall contain oxygenates in the form of ethanol.

ZWS 965:2012

Liquefied petroleum gases
Price Code: Gr. 4
10 pages
Based on SANS 1774:2007

Specifies requirements for liquefied petroleum gas mixture, commercial propane and commercial butane.

ZWS 966:2014

Civil engineering test methods

Part 1: Penetration grade bitumen

Price Code: Gr. 3
7 pages
Identical to SANS 4001-BT 1:2012

Applies to bituminous materials and covers the requirements for four penetration grades of bitumen suitable for road construction and similar purposes.

ZWS 967:2013

Quality management systems for fuel quality in the petroleum industry – Guidelines and requirements

Price Code: Gr. 10
18 pages

Applicable to all fuel industry players including fuel terminals, fuel importers/wholesalers, biofuel producers and retail sites who operate in Zimbabwe.

ZWS 968:2014

Diesel fuel oil, biodiesel blend (B5 TO B20)

Price Code: Gr. 10
19 pages
Identical to ASTM D7467:2010

Covers fuel blend grades 6 to 20 volume percent (%) biodiesel with the remainder being a light middle or middle distillate diesel fuel, collectively designated as B6 To B 20. These grades are suitable for various types of diesel engines.

ZWS 969:2017

Mixtures of CCA compounds for Timber preservatives

Price Code: Gr. 6
10 pages

Standard covers mixtures of copper-chromium-arsenic compounds (in the form of a powder, a granular powder, a paste, or a liquid) for timber preservation.

ZWS 970:2020

Guidelines for retail service stations for liquid fuels

Price Code: Gr. 7
26 pages
Supercedes ZWS 970:2017

Applicable to all fuel industry organizations including retail service stations and own use filling stations which are operated in Zimbabwe.

ZWS 972:2019

Selection, Installation and Maintenance of First-Aid Fire Extinguishers

Price Code: Gr. 7
24 Pages
Based on IS 2190 (fourth Edition):2010

Lays down recommendations for selection, installation, maintenance and testing of first aid fire extinguishers.

ZWS 973:2013

Fuel wholesalers – Guidelines and requirements

Price Code: Gr. 10
22 pages

Stipulates the requirements and guidelines for fuel importers, wholesalers and biofuel producers.

ZWS 974:2014

Tomato sauce / ketchup

Price Code: Gr. 5
16 pages
Based on SANS 301

Specification covers tomato sauce and ketchup of one type and grade.

ZWS 975:2014

Water for irrigation purposes

Price Code: Gr. 6
19 pages

Specifies requirements for the water used for irrigation purposes in relationship to the crops, soils and safety people handling the water.

ZWS 976:2015

Expanded polystyrene – Modular precast composite concrete panels building system

Price Code: Gr. 6
17 pages

Specifies guidelines on erecting built structures using the Expanded polystyrene – Modular precast composite concrete panels building system erected under the control of a registered engineer constructed in accordance with the manufacturer's detailed specifications and quality management manual

ZWS 977:2015
Air quality and emissions
 Price Code: Gr. 6
 24 pages

Specifies the minimum requirements for air quality and air emissions. It sets out the required limit values and also procedures for those aspects that may impact on air quality.

ZWS 984:2015
Breath alcohol testing devices other than those used for forensic law enforcement.
 Price Code: Gr. 8
 41 pages
 The standard specifies requirements for the performance, testing and marking of disposable and reusable breath alcohol testing devices other than those devices covered by OIML R126:2012, used for forensic law enforcement.

ZWS 985:2015
Paprika
 Price Code: Gr. 4
 5 pages
 Specifies requirements for the water for paprika (*Capsicum annum* Linnaeus) whole pods without calyx sold, without preparation or grading, called "non processed" NP paprika.

ZWS 987:2017
Microbiological water purifiers
 Price Code: Gr. 5
 23 pages
 Based on NFS Protocol P231
 Microbiological water purifiers use chemical, mechanical, and/or physical technologies to filter and treat waters of unknown microbiological quality but are presumed portable.

ZWS 988:2015
Milk fat products
 Price Code: Gr. 4
 4 pages
 The standard applies to anhydrous milk fat, milk fat, anhydrous butter oil, butter oil and ghee, which are intended for further processing or culinary use.

ZWS 989:2015
Cereal legume blend
 Price Code: Gr. 5
 5 pages
 The standard specifies requirements and the methods of test for cereal-legume blend

ZWS 990:2016
Cream Cheese
 Price Code: Gr. 5
 8 pages
 This standard applies to cream cheese intended for direct consumption or further processing in conformity with the description in clause 2.

ZWS 991:2015
The design, construction and maintenance of domestic waste water treatment system using biodigesters
 Price Code: Gr. 6
 13 pages

The standard specifies minimum requirements for the design, construction, operation and maintenance of domestic waste water treatment systems using biodigesters

ZWS 992:2019
HIV and Wellness Management Systems (HWMS)
 Price Code: Gr. 10
 16 pages

The standard specifies requirements for HWMS to any organization.

ZWS 993:2016
Fertilizers – Sampling of solid fertilizers
 Price Code: Gr. 3
 2 pages
 The standard specifies the sampling of solid fertilizers in bulk bins and bags

ZWS 994:2016
Transportation of liquid fuels – Operational requirements for road tank vehicles
 Price Code: Gr. 7
 27 pages
 The standard establishes guidelines for the safe operation and handling of road vehicles that are used for the conveyance of liquid fuels that is loading, driving and unloading.

ZWS 995:2016
Road tank vehicles for transportation of liquid fuels - Requirements
 Price Code: Gr. 8
 40 pages
 Standard covers the requirements for tank vehicles intended for use on public roads, for transportation, at temperatures below their boiling point, of normally stable liquid fuels

ZWS 996:2016
Fresh and frozen whole fish
 Price Code: Gr. 4
 4 pages
 This standard specifies requirements and methods of sampling and test for fresh and frozen whole fish.

ZWS 999:2023
Mahewu
 Price Code: Gr. 4
 8 pages
 First published 2016, as ZWS 999,
 First Revision 2023, as ZWS 999.

This standard specifies the requirements for commercially produced Mahewu.

ZWS 1000:2016
Cyanide use, storage and disposal in small scale mining - Requirements
 Price Code: Gr. 4
 6 pages

Specifies minimum requirements for safe manufacture, purchase, use, handling, storage and disposal of cyanide in small scale mining.

ZWS 1001:2017
Small scale mining mineral ore processing
Price Code: Gr. 4
7 pages

The code gives the minimum requirements for small scale mineral ore processing. It covers gold and diamond mineral ore processing at a small scale level.

ZWS 1003:2016
Blend of skimmed milk and vegetable fat in powdered form
Price Code: Gr. 4
5 pages

The standard applies to a blend of skimmed milk and vegetable fat in powdered form, intended for direct consumption, or further processing, in conformity with the description in clause 2 of this standard.

ZWS 1004:2016
Dairy fruit juice blend
Price Code: Gr. 4
4 pages

This standard specifies the requirements and methods of sampling and testing for a ready to drink blend of milk and fruit concentrate intended for direct human consumption

ZWS 1005:2017
Small scale surface mining
Price Code: Gr. 7
27 pages
The code provides minimum guidelines for the small-scale mining in Zimbabwe with special emphasis on gold.

ZWS 1006:2016 / IS 2189:2008
Selection, installation and maintenance of automatic fire detection, alarm system and Automatic fire extinguishing systems (IS 2189:2008 Selection, installation and maintenance of automatic fire detection and alarm system code of practice, MOD)
Price Code: Gr. 8
28 pages

Standard covers the planning, design, selection, installation and maintenance of automatic fire detection, alarm system and automatic fire extinguishing systems. It covers systems capable of providing signal to initiate, in the event of a fire, the operation of ancillary services, such as fire extinguishing systems and other necessary precautions but it does not cover the ancillary services.

ZWS 1007:2016
Performance of range tops
Price Code: Gr. 4
9 pages

These test methods cover the energy consumption and performance of range tops. The food service operator can use this evaluation to select a range top and understand its energy consumption.

ZWS 1008:2016
Induction cooktops, counter tops, drop-in mounted or floor standing
Price Code: Gr. 4
4 pages

This standard covers cooktops which utilize induction as a means for cooking and warming food in commercial and institutional food service establishments. Included are tabletop units, drop-in units and floor standing equipment with integral induction hobs.

ZWS 1009:2016
Vehicle security – Whole of vehicle marking Datadot systems
Price Code: Gr. 6
20 pages

This standard describes the characteristics and methods of application of unique identification carriers, called Datadots, to vehicles and also the processes required to ensure the integrity, authenticity and confidentiality of the entire Datadot production, supply, storage, and application systems

ZWS 1010:2016
Mercury use, storage and disposal in small scale mining
Price Code: Gr. 4
6 pages

This standard specifies minimum guidelines for the purchase, use, handling, storage and disposal of mercury in small-scale mining.

ZWS 1011:2016
Design, dewatering support of mining shafts in small scale mining
Price Code: Gr. 4
5 pages

This standard gives minimum guidelines for design, dewatering support of mining shafts in small scale mining.

ZWS 1012:2019
Requirements for certification of refrigeration and air conditioning practitioners
Price Code: Gr.
6 12 pages

This standard specifies the competence profiles and establishes procedures for assessing the competence of personnel who carry out refrigeration and air conditioning activities.

ZWS 1013:2017
Tomatoes
Price Code: Gr. 3
3 pages

This standard specifies the requirements and methods of sampling and testing for whole tomatoes of varieties (cultivars) grown from *Lycopers-sicum esculentum* Mill. Of the Solanaceae family supplied fresh to the consumer.

ZWS 1014:2023
Preservative-treated timber
Price Code: Gr. 7
29 pages

This standard specifies preservative treatment requirements (other than the method of treatment) for preservative-treated timber and timber products (other than for composite board products), that have an expected service life at various levels of preservative treatment which are considered to be acceptable for a range of hazard conditions.

Note. Timber used in ground contact and exterior above ground exposure, should have an expected life span of at least 20 years when treated in accordance with the requirements applicable to the exposure classes (see table 1).

This standard is not applicable to treatment with fire retardants or to treatments aimed at improving the physical properties of timber and timber products, nor does it cover the inherent quality of timber or timber products, or properties other than in respect of preservative treatment).

ZWS 1015:2017
Illuminating candles
 Price Code: Gr. 4 5
 pages
 Identical to SANS 1896:2013
 This standard specifies the requirements for candles suitable for illuminating purposes, but does not cover decorative candles.

ZWS 1016:2017
The installation, maintenance, repair and replacement of Domestic Solar Water heating systems
 Price Code: Gr. 7
 28 pages
 Direct adoption of SANS 10106

This standard covers requirements for the safe installation, retrofiting, maintenance, repair and replacement of domestic solar water heaters.

ZWS 1017:2017
Domestic Solar Water heaters – Mechanical Qualification Test Methods
 Price Code: Gr. 5
 9 pages

This standard specifies test methods for domestic solar water heaters.

ZWS 1018:2017
Ice
 Price Code: Gr. 4
 2 pages

This standard specifies the requirements for processing, testing, pack-aging, labelling, transportation and storage of ice intended for human consumption.

ZWS 1019:2017
Zimbabwe Horticulture – Good Agricultural practice (GAP)
 Price Code: Gr. 7
 20 pages
 Provides general requirements for good Agricultural Practices for use in the handling of fresh fruits and vegetables cultivated for human consumption in order to ensure a safe and wholesome product..

ZWS 1020:2017
Biogas systems
Part 1- Design, installation,operation and maintenace of biogas systems
 Price Code: Gr. 4
 27 pages

This Zimbabwean Code of Practice provides requirements for design, installation operation and maintenance of stand alone biogas systems. This standard shall be read in conjunction with ZWS 1020: Part 2.

ZWS 1020:2018
Biogas systems
Part 2- Micro grids
 Price Code: Gr. 4
 9 pages

This Zimbabwean Standard provides guidelines for the supply of biogas to third parties via micro grid connected to biogas plant(s) with one or more users in pipes. Shall be read together with ZWS 1020 :part 1.

ZWS 1021:2016
The safety of water treatment chemicals for use in the food industry
 Price Code: Gr. 3
 9 pages

The standard sets minimum requirements for the safety of water treatment chemicals, intended for use in potable/process waters or boiler feed waters, where the treated water or steam produced might come into contact with food or food products.

ZWS 1022:2018
Agriculture biotechnology products (ABPS)
 Price Code: Gr. 5
 9 pages

This document specifies requirements for Agricultural biotechnology products for plant applications.

ZWS 1023:2017
Re-usable sanitary Pads
 Price Code: Gr. 6
 19 pages

This specification covers the manufacturing and performance requirements for reusable sanitary pads used during menstruation and post-delivery.

ZWS 1024:2017
Interlocking stabilized soil block (ISSB) building system
 Price Code: Gr. 6
 19 pages

The standard contains guidelines on erecting built structures using the interlocking soil block system.

ZWS 1025:2017
Domestic Storage Solar Heating Systems
 Price Code: Gr. 6
 25 pages

This standard specifies the requirements for integral ,close-coupled and split domestic storage solar water heating systems and includes specific requirements for solar collectors for water heating systems.

ZWS 1026:2017
Fixed Electric Storage water Heaters
 Price Code: Gr. 8
 58 pages

This standard specifies the characteristics of thermostatically controlled fixed electric storage water heaters intended for indoor and outdoor domestic use and for operation on a.c supplies at voltages not exceeding 250V for single-phase and 418V for other appliances.

This standard replaces ZWS 213

ZWS 1027:2017
Good Agricultural Practice For Animal Production Food Safety (ZSGAPAFS)
 Price Code: Gr. 7
 25 pages

This standard shall address all those hazards whose control at farm level can have a beneficial or even decisive effect on the food safety of products of animal origin (including :milk and milk products)It shall apply to all types of farming systems and

shall cover all livestock and animal products at farm level in Zimbabwe .

ZWS 1028:2017

Good Agricultural Practice –Risk Assessment on social practice

Price Code: Gr. 4

7 pages

Provides guidance for producers or farm managers who are implementing a social management system according to the G.A.P GRASP GR 4.

ZWS 1029:2017

Thermostats For Electric Storage Water Heaters

Price Code: Gr. 6

12 pages

This standard covers two types of thermostat that have breakers of the air-break type ,for use in thermostatically controlled electric storage water heaters.The thermostats are intended for use in circuits at voltages not exceeding 250V to earth and current ratings not exceeding 30A.

ZWS 1030:2021

Water supply and distribution system components – Drain corks for water storage

Price Code: Gr. 6

7 pages

Identical to SANS 1808:53:2012

This standard specifies dimensional and performance requirements for copper alloy drain corks that are suitable for the draining of hot water storage containers that comply with ZWS 1026.

ZWS 1031:2017

The Installation, Maintenance, Replacement and Repair Of Fixed Electric Storage Water Heating Systems

Price Code: Gr. 7

28 pages

This standard covers requirements for the safe installation of new and replacement of fixed electric storage water heaters,complete with all the relevant and applicable safety and hydraulic control units.

ZWS 1032 Part 1:2017

Domestic Solar Water heaters –Thermal Performance Test Using Outdoor Method

Price Code: Gr. 6

13 pages

This part of ZWS 1032 describes an outdoor test method for the determination of the thermal performance of domestic solar heaters.

ZWS 1032 Part 2:2017

Domestic Solar Water heaters –Thermal Performance Test Using Indoor Method

Price Code: Gr. 5

6 pages

This part of ZWS 1032 specifies an indoor test method for the determination of the thermal performance of domestic solar water heating systems for potable water and storage capacity not exceeding 0,3m³

ZWS 1033:2017

Energy Efficiency Of Electrical And Electronic Apparatus

Price Code: Gr. 4

8 pages

This standard covers energy efficiency requirements ,measures methods and energy efficiency of the following electrical and electronic apparatus.

ZWS 1034:2017

Appliances operating on Liquefied Petroleum Gas (LPG) or Natural Gas (NG) – Safety Aspects

Price Code: Gr. 8

63 pages

Identical to SANS1539:2012

This standard covers the safety of appliances that operate on Liquefied Petroleum Gas (LPG) or Natural Gas (NG) at a consumption rate rate not exceeding 10kg/h for appliances operating on LPG and 500 MJ/h for appliances operating on NG.

ZWS 1036:2018

Animal Fats

Price Code: Gr 5

7 pages

Based on Codex STAN 211-2015

This standard applies to pure rendered lard,lard subject to subject to processing , rendered pork Fat

ZWS 1037:2018

Maximum road Speed governors For Motor vehicles- Requirements

Price Code: Gr. 6

12 pages

Based on Rwandan Standard RS 291:2015

Specifies requirements for the performance and installation of designed to control the speed and limit the maximum road speed of motor vehicles by control of engine power.

ZWS 1038:2018

Motor Vehicles, Tyres and Rims-Dimensions and Loads

Price Code: Gr. 6

10 pages

Identical to SANS 1038-1:2017

Specifies the general requirements for motor vehicle pneumatic tyres, giving the basic definitions, details of the parameters used for tyre marking requirements and a test method for the measurement of tyre dimensions.

It does not cover pedal cycles, motorcar racing or motorcycle racing applications.

Part 2: Passenger Car Tyre

Price Code: Gr. 4

1 page

Identical to SANS 1550-2:2017

Specifies requirements for passenger car tyres. It does not cover motor racing applications.

Part 3: Commercial Vehicle Tyres

Price Code: Gr. 5

8 pages

Identical to SANS 1550-3:2017

Covers commercial vehicles tyres.

Part 4: Motorcycles and Scooter Tyres

Price Code: Gr. 3

1 page

Identical to SANS 1550-3:2017

Covers motorcycles and scooter tyres.

ZWS 1038:2019

Part 5: Off-the-road Vehicle Tyres

Price Code: Gr. 4

2 pages

Identical to SANS 1550-5:2017

Covers off-the-road vehicle tyres.

Part 6: Agricultural Vehicle Tyres

Price Code: Gr. 3

2 pages

Identical to SANS 1550-6:2017

Covers off-the-road vehicle tyres

Part 7: Industrial Vehicles Tyres

Price Code: Gr. 3

2 pages

Identical to SANS 1550-7:2017

Covers industrial vehicle tyres.

Part 10: Rim Contours

Price Code: Gr. 4

2 pages

Identical to SANS 1550-10:2017

Covers contours and dimensions of rims for the range of tyre sizes available.

ZWS 1040 :2021

Leafy vegetables

Price Code: Gr. 5

6 pages

Applies to leafy vegetables of varieties (cultivars) the following species to be supplied fresh to the customer, leafy vegetables for industrial processing being excluded; covo, rape, lettuce, chomoulier, kale, green mustard/tsunga cucurbit, broccoli.

ZWS 1045:2019

Installation, commissioning and maintenance of fire hose reels

Price Code: Gr. 6

17 pages

This Standard specifies requirements for installation, commissioning and maintenance of fire hose reels.

ZWS 1047 :2021

Re-qualification of Liquefied Petroleum Gas (LPG) cylinders

Price Code: Gr. 5

9 pages

Based on AIGA 090/14

It guides on the key aspects of periodic inspection and retesting of liquefied petroleum gas cylinders and gives a structure for the retesting activity.

ZWS 1048 :2020

Fresh Onions

Price Code: Gr. 6

16 pages

Applies to onions of varieties grown from *Allium cepa* L to be supplied to the consumer in the natural state ,green onions with full leaves and onions for industrial processing being executed.

ZWS 1049:1970

Carbolic soap

Price Code: Gr. 6

9 pages

Applies to soap containing additions of phenolic substances, such as cresylic acid, in bar cake or tablet form.

ZWS 1050:2022

Instant cereal and pulse based porridge

Price Code: Gr. 5

8 pages

This Zimbabwe Standard applies to instant cereal and pulse based porridge product. This product can be fortified or unfortified.

ZWS 1051:2020

Good Agricultural Practices For free range poultry production

Price Code: Gr. 6

11 pages

Gives guidance on free range poultry production.

ZWS 1053:2022

Ceramic wall and floor tiles

Price Code: Gr. 8

44 pages

Identical to SANS 1449:2012

This standard specifies the requirements for glazed and unglazed ceramic wall and floor tiles. The standard does not cover unglazed dust-pressed tiles that have a water absorption exceeding 10%.

ZWS 1054:1971

Tennis shoes for adults

Price Code: Gr. 3

11 pages

First reprint of CAS Z15:1971

This standard relates to men's and women's quality tennis shoes having rubber soles and canvas uppers.

ZWS 1055:1969

Men's quality shoes for town and office wear

Price Code: Gr. 4

12 pages

First reprint of CAS Z11:1969

This specification covers two types of footwear for men's sizes 5 to 12, as follows:

Type 1: Oxford shoe with or without toe-cap.

Type 2: Gibson/Derby shoe with plain vamp, or with a straight or wing toe-cap or with vamp.

ZWS 1056:1961

Minimum requirements for youths' and men's footwear

Price Code: Gr. 4

10 pages

First reprint of R.N.S. Z1:1961

This standard lays down the minimum requirements for materials and construction of youths' and men's footwear of the normal recognized types including the following: Goodyear welted; stitchdown, staple welted; direct vulcanized and premoulded stuck-on soles. It does not include slippers, vulcanized rubber footwear, rope-soled footwear or footwear made on the California principle.

ZWS 1057:2022**Manned security services – cash and valuables in transit services (collection and delivery)**

Price	Code:	Gr.	6
14 pages			

This Zimbabwe Standard gives recommendations for the organization, staffing, operation and management of companies providing a cash and valuables-in-transit (CVIT) service (collection and delivery) on a contracted basis.

Note. It is recognized that CVIT companies might provide a wide range of services that are not specifically covered by this standard (e.g. ATM replenishment, cash processing)..

ZWS 1058:2020**General Washable Face Masks**

Price	Code:	Gr.	6
11 pages			

This specification covers the manufacturing and performance requirements for general washable/reusable barrier masks.

ZWS 1060: Part 1:2022**Adhesives for wood****Part 1: Terminology**

Price	Code:	Gr.	6
14 pages			

This part of ZWS 1060 provides definitions of terms relating to adhesives for wood.

ZWS 1060: Part 2:2022**Adhesives for wood****Part 2: Requirements for structural application**

Price	Code:	Gr.	6
9 pages			

This part of ZWS 1060 specifies requirements for adhesives to be used in load-bearing structures.

ZWS 1061:2022**Health, safety and environmental guidelines for the construction and operation of timber treatment plants**

Price	Code:	Gr.	8
37 pages			

This standard serves as a practical guide on occupational health and safety and environmental aspects in and around timber treatment plants with the intention to manage health and safety and environmental risks. It is applicable to any treatment process in which waterborne preservatives, flame-retardants, anti-sapstain chemicals, organic solvent-based preservatives or oil-borne preservatives are used.

ZWS 1062:2022**The preservative treatment of timber**

Price	Code:	Gr.	7
26 pages			

This standard covers the classification of timber preservatives, hazard conditions for timber, the solvents used for timber preservatives, the preparation of timber for treatment, the various treatment processes and the use of preservative-treated timber. Recommendations relating to the handling and safety of preservative-treated timber are also given. This standard does not cover the treatment of timber with fire retardants.

ZWS 1068:2023**Reusable menstrual cups**

Price	Code:	Gr.	6
14 pages			

This specification covers the manufacturing, distribution and performance requirements for reusable menstrual cups.

ZWS 1069:1994**Canned tomato juice, canned tomatojuice cocktail and canned tomato cocktail**

Price	Code:	Gr.	5
22 pages			

Amended by MD 457: 1979; MD 599: 1999

First published 1970, as CAS S24,

First Reprinted 2021, as ZWS 1069.

The specification covers the manufacture, production, processing and canning of tomato juice, tomato juice cocktail and tomato cocktail. No methods are given for bacteriological control. In this country, bacteriological testing of food products is regularly carried out by competent bacteriologists in the Public Health Laboratories of the main centres of population, using internationally accepted methods. For the purpose of this specification, reports on bacteriological testing issued by such laboratories shall be deemed satisfactory.

ZWS 1070:1999**Canned orange juice and canned grapefruit juice**

Price	Code:	Gr.	4
15 pages			

Amended by MD 601: 1999

First published 1971 as CAS S30,

First reprint 2021, as ZWS 1070

The specification covers the production, processing and canning of orange juice and grapefruit juice. No methods are given for bacteriological control. Locally, bacteriological testing of food products is regularly carried out by competent bacteriologists in the Public Health Laboratories of the main centres of population. For the purposes of this specification, reports on bacteriological testing issued by such laboratories shall be deemed satisfactory.

ZWS 1073:2001**Canned vegetables**

Price	Code:	Gr.	4
74 pages			

First published 1970 as CAS S5,

First reprint 2022, as ZWS 1073

This specification covers the manufacture, production, processing or treatment of canned vegetables (including spaghetti) of the following kinds and of the types and grades described herein: Asparagus, Beans (baked beans in tomato sauce, Beans (baked beans in tomato sauce with pork, Butter beans, Green beans, Beetroot, Carrots, Carrots and peas, Cauliflower, Green peas, Mixed vegetables, Mixed vegetables and meat, Mushrooms, Potatoes, Mashed potatoes, Sauerkraut, Spaghetti, Spaghetti and meat balls in gravy, Spaghetti bolognese, Sweetcorn - cream style, Sweetcorn - whole kernel, Tomatoes, Tomato-and-pimento concentrate, Tomato concentrate, Tomato paste, Tomato puree, Turnips. issued by such laboratories shall be deemed satisfactory.

ZWS 1074:1999**Vinegar**

Price	Code:	Gr.	7
6 pages			

First published, 1972 as CAS S41,

Second reprint 1999, as ZWS 1074

Replaces CAS S41:1972

This specification covers three distinct types of vinegar as follows: Malt vinegar; Fruit vinegar (cider, grape, etc.) and Spirit vinegar. No methods are given for bacteriological control. Local-

ly, bacteriological testing of food products is regularly carried out by competent population and in the laboratories of the Association, using internationally accepted methods.

ZWS 1075:1999

Quick frozen vegetables

Price	Code:	Gr.	6
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10 pages
 First published May 1967 as CAS S6,
 Second reprint 2022, as ZWS 1075
 Replaces CAS S6:1972

This specification covers the manufacture, production, processing or treatment of quick-frozen vegetables. No methods are given for bacteriological control. Locally, bacteriological testing of food products is regularly carried out by competent bacteriologists in the Public Health Laboratories of the main centres of population and in the laboratories of the Association, using internationally accepted methods. For the purpose of this specification, reports on bacteriological testing issued by such laboratories shall be deemed satisfactory.

ZWS 1076:1964

Concrete pipe laying design

Price	Code:	Gr.	8
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46 pages
 Endorsement of AS CA33:1962
 First reprinted 2022

Sets out recommended design practice for the laying of precast concrete drainage pipes. Includes methods of calculating loads according to installation conditions and gives the relevant load factors.

ZWS 1077:1979

Binder distributors for road surface dressing

Price	Code:	Gr.	7
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27 pages
 Reprinted 2006
 First reprint, 2022

Covers the design, testing and calibration of road binder distribution apparatus.

ZWS 1078:1974

Test methods for bitumen

Price	Code:	Grade	8
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66 pages
 Replaces: ZWS A11: 1961
 First reprinted, 2022
 This Zimbabwe standard gives methods of test for bitumens in bitumen containing compositions used for building, road engineering and electrical purposes.

ZWS 1079:2022

Uniform provisions concerning the approval of M2 and M3 small capacity vehicles with regard to their general construction

Price	Code:	Grade	5
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61 pages

This Regulation applies to single-deck rigid vehicles of categories M2 and M3 designed and constructed for the carriage of seated or standing persons and having a capacity not exceeding 22 passengers in addition to the driver.

ZWS 1080:2022

Nicotine-containing tobacco free oral product 3-(1- methyl, 2- Pyrrodinyl) Pyridine

Price	Code:	Grade	6
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14 pages

This Zimbabwean Standard gives guidance on ingredient requirements, nicotine limits, product information and labelling and product certification requirements for Tobacco-Free, Nicotine Containing Oral Products exclusively intended for oral use, where the recommended method of consumption results in uptake of the nicotine via the oral mucosa.

ZWS 1081:2022

Uniform provisions concerning the approval of vehicles with regard to specific requirements for the electric power train

Price	Code:	Grade	8
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87 pages

Part I: Safety requirements with respect to the electric power train of road vehicles of categories M and N , with a maximum design speed exceeding 25 km/h, equipped with one or more traction motor(s) operated by electric power and not permanently connected to the grid, as well as their high voltage components and systems which are galvanically connected to the high voltage bus of the electric power train. Part I of this regulation does not cover post-crash safety requirements of road vehicles.

Part II: Safety requirements with respect to the Rechargeable Energy Storage System (REESS), of road vehicles of categories M and N equipped with one or more traction motors operated by electric power and not permanently connected to the grid. Part II of this Regulation does not apply to REESS(s) whose primary use is to supply power for starting the engine and/or lighting and/or other vehicle auxiliaries systems.

ZWS 1082:2022

Uniform provisions concerning the approval of passenger cars powered by an internal combustion engine only, or powered by a hybrid electric power train with regard to the measurement of the emission of carbon dioxide and fuel consumption and/or measurement of electric energy consumption and electric range, and or categories M₁ and N₁ vehicles powered by an electric power train only with regard to the measurement of electric energy consumption and electric range

Price	Code:	Grade	8
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110 pages

This Regulation applies to vehicles of categories M1 and N1 with regard to: The measurement of the emission of carbon dioxide (CO₂) and fuel consumption and/or to the measurement of electric energy consumption and electric range of vehicles powered by an internal combustion engine only or by a hybrid electric power train, And to the measurement of electric energy consumption and electric range of vehicles powered by an electric power train only. It does not apply to a category N1 vehicle if both: The engine type fitted to that type of vehicle has received type approval pursuant to Regulation No. 49, and The total annual worldwide production of N1 vehicles of the manufacturer is less than 2,000 units.

ZWS 1083:2023

Uniform provisions concerning the approval of passenger cars powered by an internal combustion engine only, or powered by a hybrid electric power train with regard to the measurement of the emission of carbon dioxide and fuel consumption and/or measurement of electric energy consumption and electric range, and or categories M₁ and N₁ vehicles powered by an electric power train only with regard to the measurement of electric energy consumption and electric range

Price Code: Gr. 11
218 pages

This Regulation applies to:

1.1. Part I Specific components for vehicles of category M and N using compressed natural gas (CNG) and/or liquefied natural gas (LNG) in their propulsion system;

1.2. Part II Vehicles of category M and N1 with regard to the installation of specific components, for the use of compressed natural gas (CNG) and/or liquefied natural gas (LNG) for propulsion, of an approved type.

ZWS 1085:2022

Uniform provisions concerning the approval of specific LPG (liquefied petroleum gases) retrofit systems to be installed in motor vehicles for the use of LPG in their propulsion system and specific CNG (compressed natural gas) retrofit systems to be installed in motor vehicles for the use of CNG in their propulsion system

Price Code: Grade 8
58 pages

This Regulation applies to:

Part I: Specific LPG retrofit systems to be installed in motor vehicles for the use of LPG in the propulsion system.

Part II: Specific CNG retrofit systems to be installed in motor vehicles for the use of CNG in the propulsion system.

ZWS 1087:2022

Structural timber – characteristic values of strength-graded timber – sampling, full-size testing and evaluation

Price Code: Grade 7
36 pages

This standard provides requirements for sampling, testing and assessing the characteristic values of structural properties for specific grades and sizes of sawn timber, including finger-jointed timber and laminated timber. This standard does not apply to custom-designed laminated products, plywood or sleepers..

ZWS 1088:1975

Jelly powders

Price Code: Gr. 5
3 pages
First published 1968, as CAS S16,
First reprint 2022, as ZWS 1088.
Replaces CAS S16:1968

This specification applies to jelly powders made from gelatine, sugar, flavours and colouring materials, which may contain salts, fruit acids and buffering agents.

ZWS 1089:1999

Baking powder

Price Code: Gr. 5
5 pages
Replaces CAS S35:1999

This specification covers the manufacture, packing, labelling and testing of baking powder. No methods are given for bacteriological control. Locally, bacteriological testing of food products is regularly carried out by competent bacteriologists in the Public Health Laboratories of the main centres of population and the laboratories of the Association, using internationally accepted methods. For the purpose of this specification, reports on bacteriological testing issued by such laboratories shall be deemed satisfactory.

ZWS 1090:1999

Icing sugar

Price Code: Gr. 5
6 pages
First reprint 2022, as ZWS 1090
Replaces CAS S40:1999

This specification sets out the physical, chemical, microbiological packing, marking and sampling requirements for one grade of icing sugar. No methods are given for bacteriological control. Locally, bacteriological testing of food products is regularly carried out by competent bacteriologists in the Public Health Laboratories of the main centres of population and in the laboratories of the Association, using internationally accepted methods. For the purpose of this specification, reports on bacteriological testing issued by such laboratories shall be deemed satisfactory.

ZWS 1092:2023

Requirements for power operated threshing and shelling equipment

Price Code: Gr. 4
4 pages

This standard specifies the general requirements for power operated threshing and shelling equipment. This standard does not apply to manual threshers and shellers.

ZWS 1093:1974

Gravy Powder

Price Code: Gr. 4
6 pages
Replaces, ZWS S38
First Reprint 2022, as ZWS 1093

This specification covers the manufacture, packing, labelling and testing of gravy powder. No methods are given for bacteriological control. Locally, bacteriological testing of food products is regularly carried out by competent bacteriologists in the Public Health Laboratories of the main centres of population and in the laboratories of the Association, using internationally accepted methods. For the purpose of this specification, reports on bacteriological testing issued by such laboratories shall be deemed satisfactory.

ZWS 1094:1973

Chutney

Price Code: Gr. 6
10 pages
Replaces, ZWS S37
First Reprint 2022, as ZWS 1094

This specification covers the complete range of hot and mild condiments known as chutneys prepared from a wide variety of fruits and vegetables. No methods are given for bacteriological control. Locally, bacteriological testing of food products is regularly carried out by competent bacteriologists in the Public Health Laboratories of the main centres of population and in the laboratories of the Association, using internationally accepted methods. For the purpose of this specification, reports on bacteriological testing issued by such laboratories shall be deemed satisfactory.

ZWS 1096:2023

Laundry detergent (for use in non – automatic domestic washing machines)

Price Code: Gr. 4
7 pages

This Zimbabwe standard specifies characteristics of the type of laundry detergent intended for the washing (by hand and in non-automatic domestic washing machines) in either hard or soft water of textiles made of cotton or of cotton and synthetic fibre yarns.

ZWS 1097:2023

Distribution transformers

Price Code: Gr. 8
54 pages

This standard specifies requirements for single-phase and three-phase distribution transformers of the oil-immersed type, that

- a) Are category-sized in accordance with IEC 60076-1 up to and including 3150 kVA,
- b) Have rated maximum voltages (Um) that do not exceed 36 kV,
- c) Have uniformly insulated windings,
- d) Have a high-voltage and a low-voltage winding or, in the case of an auto-transformer, a series and a common winding and, in each case, if necessary, a stabilizing winding or an auxiliary winding, and
- e) Are suitable for de-energized tap changing only.

This standard covers transformer that have any combination of rated primary and secondary voltages.

ZWS 1098:2023

Boot and shoe laces

Price Code: Gr. 6
8 pages
First published 1973, as CAS Z23,
First Reprint 2023, as ZWS 1098
Replaces CAS Z23

This specification applies to various types of flat or tubular laces, including was-finished laces, braided from yarns of nylon, vinyl, rayon or cotton or from a combination of these materials. It lays down the requirements for make-up, colour, packing, sampling and methods of tests.

ZWS 1100:2023

Men's heavy Oxford style shoes for services use

Price Code: Gr. 6
13 pages
First Published in 1972 as CAS Z18
First Reprint 2023 as ZWS 1100

This specification covers men's heavy shoes, in sizes 5 to 14 by half sizes and fitting 6, as follows:
Oxford type shoes, with straight toe caps, good quality side leather uppers, leather, synthetic or fabric quarter linings and vamp linings, leather outer soles, and leather heels with rubber top pieces.

ZWS 1101:2023

Men's military style service boots

Price Code: Gr. 6
8 pages
First published 1972 as CAS Z20,
First Reprinted 2023 as ZWS 1101
Replaces CAS Z20

This Zimbabwe specification covers the following six types of men's military style boots of the Derby pattern, made according to the chain or lockstitch principle, or with stuck-on leather soles, or with rubber soles, or with vulcanized and bonded soles, in sizes 5 to 14 inclusive.

ZWS 1102:2023

Requirements for Agricultural/ General Purpose Tractors

Price Code: Gr. 4
7 pages

This specification covers the requirements for general purpose or agricultural tractors. This specification does not apply to:

- a) Tractors that have been previously registered in Zimbabwe;
- b) Experimental or prototype agricultural tractors that have been constructed or imported for the purpose of testing, assessment or development; and
- c) Industrial tractors, earthmoving tractors and purpose-built forestry tractors. Where a Zimbabwean national standard or an international standard is incorporated by reference into this specification, only the technical requirements/specifications for the tractor, and the tests to verify compliance, apply. This standard specifies the terminology for agricultural tractors designed primarily for safe use in agricultural operations for the production of food and fiber. This specification is intended to establish uniformity for general purpose or agricultural tractors.

ZWS 1103:2023

Redeposition index of laundry detergents

Price Code: Gr. 4
5 pages

This test method specifies a method for the determination of the redeposition index of laundry detergents.

ZWS 1104:2023

Fluorescent whitening agent content of laundry detergents

Price Code: Gr. 4
4 Pages

This test method specifies a method for the determination of the fluorescent whitening agent content of laundry detergents.

ZWS 1105:2023

Chemical damage to cotton fibres by laundry detergents

Price Code: Gr. 4
2 Pages

This test method specifies a method for the determination of the chemical damage to cotton fibres by laundry detergents.

ZWS 1106:2023

Water-insoluble matter content of laundry detergents

Price Code: Gr. 4
1 Page

This standard specifies a method for the determination of the water-insoluble matter content of laundry detergents.

ZWS 1107:2023

Cleaning efficiency of high-foam laundry detergents

Price Code: Gr. 4
5 Pages

This test method specifies a method for the determination of the cleaning efficiency of high-foam laundry detergents.

ZWS 1108:2023

London dry gin

Price Code: Gr. 2
2 pages

Amended by MD 643: 2002

Incorporates AMD 695

This specification covers quality of alcohol, alcohol content, flavouring, chemical, physical, packing and marking requirements of London Dry Gin.

ZWS 1111:2023

Cleaning efficiency of low-foam laundry detergents

Price Code: Gr. 4
5 Pages

This test method specifies a method for the determination of the cleaning efficiency of low-foam laundry detergents..

ZWS 1114:2023

Marking articles made of gold

Price Code: Gr. 4
4 Pages

Identical to R.N.S Z2:1961.

First published, 1961 as R.N.S Z2,

First reprint, 2023 as ZWS 1114

This specification covers the marking of gold articles manufactured in Zimbabwe.



ZWS EN ADOPTIONS

ZWS EN 196: 2000

Cement

Part 1: Determination of strength

Price Code: Gr. 6

17 pages

Identical to EN 196-1: 1994

Amended by MD 634: 2001

Replaces ZWS 307: 1993

Describes a method of determining the compressive and flexural strengths of cement mortar.

Part 2: Chemical analysis of cement

Price Code: Gr. 6

21 pages

Identical to EN 196: Part 2: 1994

Replaces ZWS 307: 1993

Describes the procedures for chemical analysis of cement.

Part 3: Determination of setting time and soundness of cements

Price Code: Gr. 4

8 pages

Identical to EN 196: Part 3: 1994

Replaces ZWS 307: 1993

Describes the methods for determination setting time and soundness of cement.

Part 5: Pozzolanicity test for pozzolanic cements

Price Code: Gr. 3

6 pages

Identical to EN 1996: Part 5: 1994

Replaces ZWS 307: 1993

Describes the method of measuring the pozzolanicity of pozzolanic cements conforming to ENV 197-1.

Part 6: Determination of fineness

Price Code: Gr. 4

9 pages

Identical to EN 1996: Part 6: 1989

Replaces ZWS 307: 1993

Describes two methods of determining the fineness of cement.

Part 7: Methods of taking and preparing samples of cement

Price Code: Gr. 5

13 pages

Identical to EN 196: Part 7: 1989

Replaces ZWS 307: 1993

Describes only the equipment to be used, the methods to be followed and the provisions to be complied with for taking samples of cement representatives of given lots for testing the quality of products prior to, during or after delivery.

Part 21: Determination of the chloride, carbon dioxide and alkali content of cement

Price Code: Gr. 5

13 pages

Identical to EN 196: Part 21: 1989

Replaces ZWS 307: 1993

Lays down the methods for the determination of the chloride, carbon dioxide and alkali content of cement

ZWS EN 197: Part 1:2011

Cement

Part 1: Composition, specifications and conformity criteria for common cements

Price Code:

33 pages

Identical to EN 197: Part 1: 2011

Supersedes ZWS EN 197: Part 1:2000

Replaces ZWS 307: 1993

Gr. 7

This European Standard defines and gives the specifications of 27 distinct common cements, 7 sulfate resisting common cements as well as 3 distinct low early strength blast furnace cements and 2 sulfate resisting low early strength blast furnace cements and their constituents. The definition of each cement includes the proportions in which the constituents are to be combined to produce these distinct products in a range of nine strength classes. The definition also includes requirements which the constituents have to meet. It also includes mechanical, physical, and chemical requirements. Furthermore, this standard states the conformity criteria and the related rules. Necessary durability requirements are also given. In addition to those sulfate resisting cements defined in the present document, other cements conforming either to this standard or to other standards, European or national, have been nationally demonstrated to have sulfate resisting properties. These cements which are listed in Annex A, are considered by different CEN Member countries as sulfate resisting within the limits of their territory.

ZWS EN 197: Part 2:2014

Cement

Part 2: Conformity evaluation

Price Code:

22 pages

Identical to EN 197: Part 2: 2014

Supersedes ZWS EN 197:2000

Replaces ZWS 307: 1993

Gr. 7

This European Standard specifies the scheme for the assessment and verification of constancy of performance (AVCP) of cements to their corresponding product specification standards, including certification of constancy of performance by a product certification body. The standard provides technical rules for factory production control by the manufacturer, including autocontrol testing of samples, and for the tasks of the product certification body. It also provides rules for actions to be followed in the event of non-conformity, the procedure for the AVCP and requirements for dispatching centres. In this European Standard, the word "cement" is used to refer both to common cements as defined in EN 197 1 and to other cements and binders for which the relevant product specification standard makes reference to this European Standard and which are submitted for certification. Such a cement is produced at a given factory and belongs to a particular type and a particular strength class, as defined and specified in the relevant product specification standard.

ZWS EN 197: Part 5:2021

Cement

Part 5: Portland-composite cement CEM II/C-M and composite cement CEM VI

Price Code:

6 pages

Identical to EN 197: Part 5: 2021

Gr. 7

This document deals with Portland-composite cement CEM II/C-M, not covered by EN 197-1, and a different type of Composite cement CEM VI, also not covered by EN 197-1, whose intended use is the preparation of concrete, mortar, grout etc. This document does not cover:

Common cement covered by EN 197-1; very low heat special cement covered by EN 14216; supersulfated cement covered by EN 15743;

calcium aluminate cement covered by EN 14647; and masonry cement covered by EN 413-1.

ZWS EN 413: Part 1:2011

Masonry cement

Part 1: Composition, specifications and conformity criteria

Price Code:

Gr. 7

21 pages

Identical to EN 413: Part 1:2011

Supersedes ZWS ENV 413-1:2004

Replaces ZWS A22: 1967

This European Standard specifies the definition and composition of masonry cements as commonly used in Europe for the production of mortar for bricklaying and blocklaying and for rendering and plastering. It includes physical, mechanical and chemical requirements and defines strength classes. EN 413-1 also states the conformity criteria and the related rules. Necessary durability requirements are also given.

Part 2: Test methods

Price Code: Gr. 5

13 pages

Identical to ENV 413: Part 2: 1994

Replaces ZWS A22: 1967

Describes reference and alternative test methods to be used when testing masonry cement to assess the conformity to ZWS ENV Part 1. It gives the tests on fresh mortar for consistence water retention, an contact and workability.

ZWS EN 1435:2002

Non-destructive examination of welds –Radiographic examination of welded joints

Price Code: 6

21 pages

Identical to EN 1435: 1997

Specifies fundamental techniques of radiography.

ZWS EN 1561:2003

Founding – grey cast irons

Price Code: Gr. 6

17 pages

Identical EN 1561: 1997

Specifies the properties of unalloyed and low-alloyed grey cast iron used for castings, which have been manufactured in sand moulds or in moulds with comparable thermal behavior.

ZWS EN 1659:2023

In vitro diagnostic systems - culture media for microbiology – Terms and definitions

Price Code: Gr. 4

3 pages

Identical EN 1659:1996

This European Standard provides terms for different classifications of culture media used in microbiology (bacteriology and mycology).

ZWS EN 12322:1999

In vitro diagnostic medical devices – Culture media for microbiology – Performance criteria for culture media

Price Code: Gr. 7

20 pages

Identical to EN 12322:1999

This European Standard specifies requirements for the performance of culture media. It is concerned with the traceability, comparability, reproducibility and suitability of culture media used in microbiological laboratories. These characteristics are achieved by applying the quality criteria outlined in this standard. This European Standard is applicable to :

Commercial organizations distributing media to microbiology laboratories in ready-to-use form, as dehydrated media or as semi-finished media (see 2.5 in EN 1659 : 1996);

Non commercial organizations that distribute media to satellite locations;

Laboratories that prepare culture media for their own use.

Cell culture media are not covered by this standard.

ZWS EN 14683:2019

Medical face masks –Requirements and Test Methods

Price

Code:

Gr.

7

11 pages

Identical to EN 14683

Specifies construction, design, performance requirements and test methods for medical face masks intended to limit the transmission of infective agents from staff to patients during surgical procedures.

ZWS IEC ADOPTIONS

ZWS IEC 76:1998

Part 5: Ability to withstand short circuit

Price Code: Gr. 4

12 pages

Identical to IEC 76 Part 5: 1982

Contains requirements with regards to ability to withstand short circuit and demonstration of thermal and dynamic ability to withstand short circuit.

ZWS IEC 335-2-24:1998

Safety of household and similar electrical appliances

Part 2-24: Particular requirements for refrigerators, food freezers and ice-makers

Price Code: Gr. 7

37 Pages

Identical to IEC 335: Part 2: 24: 1992

Specifies the essential characteristics for household frozen food storage cabinets and food freezers which are wholly factory assembled.

ZWS IEC 432:1995

Safety specifications for incandescent lamps

Part 1: Tungsten filament lamps for domestic and similar general lighting purposes

Price Code: Gr. 7

80 pages

Identical to IEC 432: Part 1: 1993

Specifies the safety and interchangeability requirements of tungsten filament incandescent lamps for general lighting service.

ZWS IEC 439

Low-voltage switchgear and control gear assemblies

Part 1: 1996: Type-tested and partially type-tested assemblies

Price Code: Gr. 9

103 pages

Amended by MD 1: 1998

Identical to IEC 439: Part 1: 1992

Applies to low voltage switchgear and control gear assemblies, type-tested assemblies (TTA) and partially type-tested assemblies (PTTA), the rated voltage of which does not exceed 1 000 V A.C at frequencies not exceeding 1 000Hz or 1 500 V D.C.

ZWS IEC 439

Part 2:1998 Particular requirements for bus bar trunking systems (busways)

Price	Code:	Gr.	6
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8 pages

Identical to IEC 439: Part 2: 1996

Applies to busbar trunking systems intended to supply luminaires.

Part 2:1998 Particular requirements for bus bar trunking systems (busways)

Price	Code:	Gr.	6
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8 pages

Identical to IEC 439: Part 2: 1996

Applies to busbar trunking systems intended to supply luminaires.

Part 3: 1998: Particular requirements for low-voltage switchgear and controlgear assemblies to be installed in places where unskilled persons have access to their use – Distribution boards

Price Code: Gr. 9

31 pages

Identical to IEC 439: Part 3: 1990

Give supplementary requirements for such enclosed distribution boards (DBU), which are stationary, type tested assemblies (TTA) for indoor use.

Part 4:1998 Particular requirements for assemblies for construction sites (ACS)

Price Code: Gr. 8

46 pages

Identical to IEC 439 Part 4: 1990

Applies to type-tested assemblies (TTA) intended for use on construction sites.

Part 5: Particular requirements for assemblies intended to be installed outdoors in public places – Cable distribution cabinets (CDCs) for power distribution in networks

Price Code: Gr. 7

26 pages

Identical to IEC 439: Part 5: 1996

Gives supplementary requirements for cable distribution cabinets (CDCs), which are stationary, type-tested assemblies (TTA) for outdoor installation in places which are exposed to the public.

ZWS IEC 947:1998

Low-voltage switchgear and control gear

Part 1: General rules

Price Code: Gr. 10

307 pages

Identical to IEC 947: Part 1: 1996

Applies to switchgear and control gear intended to be connected to circuits, the rated voltage of which does not exceed 1 000 V A.C or 1 500 V D.C.

Part 2: Circuit-breakers

Price Code: Gr. 9

127 pages

Replaces ZWS 299: 1991

Identical to IEC 947: Part 2: 1995

Applies to circuit-breakers the main contacts of which are intended to be connected to circuits, the rated voltage of which does not exceed 1 000 V A.C or 1 500 V D.C.

Part 3: Switch-disconnectors, and fuse-combination units

Price Code: Gr. 8

54 pages

Identical to IEC 947: Part 3: 1990

Applies to switches, disconnectors, switch-disconnectors and fuse-combination units to be used in distribution circuits and motor circuits of which the rated voltage does not exceed 1 000 V A.C.

ZWS IEC 60034.1:2014

Rotating electrical machine

Part 1: Rating and performance

Not for sale

140 pages

Identical to IEC 60034.1:2010

Applicable to all rotating electrical machines except those covered by other IEC standards.

Part 3:2017 Specific requirements for synchronous generators driven by steam turbines or combustion gas turbines
Not for sale
27 pages
Identical to IEC 60034.3:2007

Applies to three-phase synchronous generators, having rated outputs of 10MVA and above driven by steam turbines or gas turbines.

Part 4:2017 Methods for determining synchronous machine quantities from tests
Not for sale
75 pages
Identical to IEC 60034.4:2008

Applies to three-phase synchronous machines of 1kVA rating and larger with rated frequency of not greater than 500Hz and not less than 10 Hz.

Part 5: Degree of protection provided by the integral design of rotating electrical machines (IP CODE) Classification
Not for sale
41 pages
Identical to IEC 60034.5:2006

Applies to the classification of degrees of protection provided by enclosures for rotating electrical machines. It defines the requirements for protective enclosures that are in all other respects suitable for their intended use and which from the point of view of materials and workmanship ensure that the properties dealt with in this standard are maintained under normal conditions of use.

Part 6: Methods of cooling (IC CODE)
Not for sale
39 pages
Identical to IEC 60034.6:2010

Part 7: Classification of types of construction, mounting arrangements and terminal box position (IM CODE)
Not for sale
49 pages
Identical to IEC 60034.7:2010

Specifies the IM code a classification of types of construction, mounting arrangements and the terminal box position of rotating electrical machines.

Part 8: Terminal marking and direction of rotation
Not for sale
33 pages
Identical to IEC 60034.8:2010

Applies to a.c. and d.c. machines. Turbine type synchronous machines are excluded from this standard.

Part 11: Thermal protection
Not for sale
25 pages
Identical to IEC 60034.11:2004

Specifies requirements relating to the use of thermal protectors and thermal detectors incorporated into the stator windings or placed in other suitable positions in induction machines in order to protect them against serious damage due to thermal overloads.

Part 22: AC Generators for reciprocating internal combustion (RIC) engine driven generating sets
Not for sale
20 pages
Identical to IEC 60034.22:2009

Establishes the principal characteristics of a.c. generators under the control of their voltage regulators when used for reciprocating internal combustion (RIC) engine driven generating set applications and supplements the requirements.

Part 23: Specification for the refurbishing of rotating electrical machines
Not for sale
45 pages
Identical to IEC 60034.22:2009

Covers the activities necessary to ensure the satisfactory rewinding and refurbishment of all types and sizes of rotating electrical machines.

ZWS IEC 60050:2017 International Electrotechnical Vocabulary Part 601: Generation, transmission and distribution of electricity - General
Not for sale
21 pages
Identical to IEC 60050-601:1985

Part 602: Generation, transmission and distribution of electricity - Generation
Not for sale
30 pages
Identical to IEC 60050-602:1983

Part 603: Generation, transmission and distribution of electricity - Power system planning and management
Not for sale
33 pages
Identical to IEC 60050-603:1986

Part 605: Generation, transmission and distribution of electricity - Substations
Not for sale
27 pages
Identical to IEC 60050-605:1983

ZWS IEC 60071.2:2014 Insulation co-ordination Part 1:2017 Definitions, principles and rules
Not for sale
35 pages
Identical to IEC 60071.1:2006

Applies to three-phase a.c. systems having a highest voltage for equipment above 1 kV. Specifies the procedure for the selection of the rated withstand voltages for the phase-to-earth, phase to phase and longitudinal insulation of the equipment and the installations of these systems.

Part 2: Application guide
Not for Sale
251 pages
Identical to IEC 60071-2: 1996

Deals with the selection of insulation levels of equipment or installations of three phase electrical systems. Gives guidance for the determination of the rated withstand voltages for ranges I and II of IEC 71-1 and to justify the association of these rated values with the standardized highest voltages for equipment.

ZWS IEC 60076.2:2014**Power Transformers****Part 2: Temperature rise for liquid – immersed transformers**

Not for Sale

47 pages

Identical to IEC 60076-2: 2011

Identifies power transformers according to their cooling methods, defines temperature rise limits and gives the methods for temperature rise tests.

ZWS IEC 60076.3:2017**Power Transformers****Part 3: Insulation levels, dielectric tests and external clearances in air**

Not for Sale

56 pages

Identical to IEC 60076-3: 2013

Gives details of the applicable dielectric tests and minimum dielectric test levels. Recommended minimum external clearances in air between live parts and earth are given for use when these clearances are not specified by the purchaser.

ZWS IEC 60076.8:2014**Power Transformers****Part 8: Application guide**

Not for Sale

157 pages

Identical to IEC 60076-8: 1997

Provides information to users about certain fundamental service characteristics of different transformer connections and magnetic circuit designs with particular reference to zero-sequence phenomena.

ZWS IEC 60076.10:2014**Power Transformers****Part 10: Determination of noise levels**

Not for Sale

69 pages

Identical to IEC 60076-10: 2001

Defines sound pressure and sound intensity measurement methods by which sound power levels of transformers, reactors and their associated cooling auxiliaries may be determined.

ZWS IEC 60076-10-1:2017**Determination of sound levels – Application guide**

Not for sale

44 pages

Identical to IEC 60076-10-1:2016

Practical guidance on marking measurements is given, and factors influencing the accuracy of the methods are discussed. Indicates why values measured in the factory may differ from those measured in service.

ZWS IEC 60076.14:2014**Power Transformers****Part 14: Liquid-immersed power transformers using high-temperature insulation materials.**

Not for Sale

57 pages

Identical to IEC 60076-14: 2013

Applies to liquid-immersed power transformers employing either high-temperature insulation or combinations of high-temperature and conventional insulation, operating at temperatures above conventional limits.

ZWS IEC 60193:2017**Hydraulic turbines, storage pumps and pump-turbines – Model acceptance tests.**

Not for sale

569 pages

Identical to IEC 60193:1999

Applies to laboratory models of any type of impulse or reaction hydraulic turbine, storage pump or pump-turbine. Models of phototype machines either with unit power greater than 5 MW or with reference diameter greater than 3m.

ZWS IEC 60282.1:2017**High-voltage fuses****Part 1: Current-limiting fuses**

Not for sale

83 pages

Identical to IEC 60282.1:2009

Applies to all types of high-voltage current-limiting fuses designed for use outdoors or indoors on alternating current systems of 50 Hz and 60 Hz and of rated voltages exceeding 1000 V.

ZWS IEC 60335.1:2007**Household and similar electrical appliance safety****Part 1: General requirements**

Price Code: Gr. 12

147 pages

Identical to IEC 60335-1: 1991

Amended by MD621:2000: MD661:2008

Replaces ZWS 129: 1995

Deals with the safety of electrical appliance for household and similar purposes, their rated voltage being not more than 250 V for single phase appliances and 480 V for other appliances.

Part 2.2:2013 Particular requirements for vacuum cleaners and water suction cleaning appliances

Not for sale

58 pages

Identical to IEC 60335.2.2:2009

Deals with the safety of electric vacuum cleaners and water suction cleaning appliances for household and similar purposes, including vacuum cleaners for animal grooming their rated voltage being not more than 250V. It also applies to centrally sited vacuum cleaners and automatic battery powered cleaners.

Part 2.3: Particular requirements for electric irons

Not for sale

19 pages

Identical to IEC 60335.2.3:2013

Deals with the safety of electric dry irons and steam irons, including those with a separate water reservoir or boiler having a capacity not exceeding 5l, for household and similar purposes their rated voltage being not more than 250V.

Part 2.5: Particular requirements for dishwashers

Not for sale

21 pages

Identical to IEC 60335.2.5:2012

Deals with the safety of electrical dishwashers for household and similar purposes that are intended for washing and rinsing dishes, cutlery and other utensils their rated voltage being not more than 250V for single-phase appliances and 480V for other appliances.

Part 2.6: Particular requirements for stationary cooking ranges, hobs, ovens and similar appliances

Not for sale
78 pages

Identical to IEC 60335.2.6:2008

Deals with the safety of stationary electric cooking ranges, hobs, ovens and similar appliances for household use, their rated voltage being not more than 250V for single-phase appliances connected between one phase and neutral and 480V for other appliances.

Part 2.7: Particular requirements for washing machines

Not for sale
34 pages

Identical to IEC 60335.2.7:2012

Deals with the safety of electric washing machines for household and similar use that are intended for washing clothes and textiles their rated voltage being not more than 250V for single-phase appliances and 480V for other appliances.

Part 2.9: Particular requirements for grills, toasters and similar portable cooking appliances

Not for sale
41 pages

Identical to IEC 60335.2.9:2012

Deals with the safety of electric portable appliances for household and similar purposes that have a cooking function such as baking, roasting and grilling their rated voltage being not more than 250V.

Part 2.12: Particular requirements for warming plates and similar appliances

Not for sale
13 pages

Identical to IEC 60335.2.12:2008

Deals with the safety of electric warming plates, warming trays and similar appliances intended to keep food or vessels warm, for household and similar purposes their rated voltage being not more than 250V.

Part 2.14: Particular requirements for kitchen machines

Not for sale
70 pages

Identical to IEC 60335.2.14:2012

Deals with the safety of electric kitchen machines for household and similar purposes, their rated voltage being not more than 250V

Part 2.25: Particular requirements for microwave ovens, including combination microwave ovens

Not for sale
31 pages

Identical to IEC 60335.2.25:2010

Deals with the safety of microwave ovens for household and similar use, their rated voltage being not more than 250V

Part 2.30:2013 Particular requirements for room heaters

Not for sale
30 pages

Identical to IEC 60335.2.30:2009

Deals with the safety of electric room heaters for household and similar purposes their rated voltage being not more than 250V for single-phase appliances and 480V for other appliances.

Part 2.41: Particular requirements for pumps

Not for sale
18 pages

Identical to IEC 60335.2.41:2012

Deals with the safety of electricity pumps for liquids having a temperature not exceeding 90°C intended for household and similar purposes their rated voltage being not more than 250V for single-phase appliances and 480V for other appliances.

Part 2-76:2007 Particular requirements for electrical fence energizers

Price Code: Gr. 9

91 pages

Identical to IEC 60335-2-76: 2006

Replaces ZWS 859

Deals with the safety of electrical fence energizers the rated voltage of which is not more than 250 V and by means of which fence wires in agricultural, domestic/feral animal control fences and security fences may be electrified or monitored.

Part 2.80:2013 Particular requirements for fans

Not for sale

15 pages

Identical to IEC 60335.2.80: 2008

Deals with the safety of electric fans for household and similar purposes their rated voltage being not more than 250V for single-phase appliances and 480V for other appliances.

ZWS IEC 60364:Part 4-42:2014

Low voltage electrical installations

Part 4-42 Protection for safety – protection against thermal effects

Not for sale

4 pages

Identical to IEC 60364-4-42:2014

The particular requirements of this part of IEC 60364 apply to the electrical installations of PV power supply systems including systems with AC modules.

ZWS IEC 60364-7-712:2002

Electrical installation of buildings

Part 7-712 Requirements for special installations of locations – Solar photovoltaic (PV) power supply systems

Not for sale

23 pages

Identical to IEC 60364-7-712:2002

The particular requirements of this part of IEC 60364 apply to the electrical installations of PV power supply systems including systems with AC modules.

ZWS IEC 60545:2017

Guide for commissioning, operation and maintenance of hydraulic turbines

Not for sale

39 pages

Identical to IEC 60545:1976

To establish, in general way, suitable procedures for commissioning hydraulic turbines and associated equipment, and to indicate how such turbines and equipment should be operated and maintained.

ZWS IEC 60652:2014

Loading tests on overhead line structures

Not for sale

23 pages

Identical to IEC 60652:2002

It codifies the methods of testing supports for overhead lines for voltage above 45kV. It can serve as reference to the testing of lower voltage supports.

ZWS IEC 60826:2017
Loading tests on overhead line structures
Not for sale
23 pages
Identical to IEC 60826:2003

Specifies the loading and strength requirements of overhead lines derived from reliability based design principles. These requirements apply to lines 45 kV and above, but can be applied to lines with a lower nominal voltage.

ZWS IEC 60903:2017
Loading tests on overhead line structures
Not for sale
58 pages
Identical to IEC 60903:2014

It is applicable to electrical insulating gloves and mitts that provide protection of the worker against electric shock.

ZWS IEC 60904-9:2016
Photovoltaic devices – Solar simulator performance requirements
Not for sale
15 pages
Identical to IEC 60904-9:7

Define classifications of solar simulators for use in indoor measurements of terrestrial photovoltaic devices, solar simulators are classified as A, B, or C for each of the three categories based on criteria of spectral distribution match, irradiance non-uniformity on the test plane and temporal instability.

ZWS IEC 60921:2016
Ballasts for tubular fluorescent lamps – Performance requirements
Not for sale
63 pages
Identical to IEC 60921:2004

Specifies performance requirements for ballasts, excluding resistance types, for use on a.c. supplies up to 1 000 V at 50 Hz or 60 Hz, associated with tubular fluorescent lamps with pre-heated cathodes operated with or without a starter or starting device and having rated wattages, dimensions and characteristics as specified in IEC 60081 and 60901.

ZWS IEC 61000.4.30:2014
Electromagnetic compatibility (EMC)
Not for sale
62 pages
Identical to IEC 61000.4.30: 2008

Defines the methods for measurement and interpretation of results for power quality parameters in 50/60 Hz a.c. power supply systems.

ZWS IEC 61089:2013
Amendment 1
Round wire concentric lay overhead electrical stranded conductors.
Not for sale
16 pages
Identical to 61089:1997

Specifies the electrical and mechanical characteristics of round wire, concentric lay, overhead, electrical and stranded conductors made of combinations of any of the mentioned metal wires.

ZWS IEC 61215:2016
Crystalline silicon terrestrial photovoltaic (PV) modules – Design qualification and type approval
Not for sale
47 pages
Identical to IEC 61215:2005

It lays down IEC requirements for the design qualification and type approval of terrestrial photovoltaic modules suitable for long term operation in general open-air climates, as defined in IEC 60721-2-1.

ZWS IEC 61284:2017
Overhead lines –Requirements and tests for fittings
Not for sale
131 pages
Identical to IEC 61284:1997

Applies to fittings for overhead lines of nominal voltage above 45kV. It may also be applied to fittings for overhead lines of lower nominal voltage and to similar fittings for substations.

ZWS IEC 61362:2017
Guide to specification of hydraulic turbine governing systems
Not for sale
66 pages
Identical to IEC 61362:2012

Includes all relevant technical data necessary to describe hydraulic turbine governing systems and to define their performance. It will also serve as a basis for setting up technical guarantees.

ZWS IEC 61378.3:2017
Converter transformers
Part 3: Application guide
Not for sale
91 pages
Identical to IEC 61378.3:2015

Provides information to users about specific topics related to industrial and HVDC converter transformers with design, construction, testing and operating conditions differing from conventional transformers used in power systems

ZWS IEC 61646:2016
Thin film terrestrial photovoltaic (PV) modules – Design qualification and type approval
Not for sale
40 pages
Identical to IEC 61646:2008

It lays down IEC requirements for the design qualification and type approval of terrestrial thin-film photovoltaic modules suitable for long term operation in general open-air climates, as defined in IEC 60721-2-1.

ZWS IEC 61683:2016
Photovoltaic systems – power conditioners – Procedures for measuring efficiency
Not for sale
20 pages
Identical to IEC 61683:1999
Describes guidelines for measuring the efficiency of power conditioners used in stand alone and utility-interactive photovoltaic systems, where the output of the power conditioner is a stable a.c. voltage of constant frequency or a stable d.c. voltage. The effi-

ciency is calculated from direct measurement of input and output power in the factory.

ZWS IEC 61773:2014

Overhead lines – Testing of foundations for structures

Not for sale

91 pages

Identical to IEC 61773: 2014

Provide procedures which apply to the investigation of the load-carrying capacity and/or the load response (deflection or rotation) of the total foundation as an interaction between the foundation and the surrounding soil and/or rock.

ZWS IEC 61851: Part 1:2017

Electric vehicle conductive charging system

PART 1: General requirements

Not for sale

287 pages

Identical to IEC 61851-1:2017

This part of IEC 61851 applies to EV supply equipment for charging electric road vehicles, with a rated supply voltage up to 1000 V AC or up to 1500 V DC and a rated output voltage up to 1000 V AC or up to 1500 V DC.

ZWS IEC 61851: Part 21-1:2017

Electric vehicle conductive charging system

PART 21-1: Electric vehicle on-board charger EMC requirements for conductive connection to AC/DC supply

Not for sale

47 pages

Identical to IEC 61851-21-1:2017

This part of IEC 61851, together with IEC 61851-1:2010, gives requirements for conductive connection of an electric vehicle (EV) to an AC or DC supply. It applies only to on-board charging units either tested on the complete vehicle or tested on the charging system component level (ESA-electronic sub assembly)

ZWS IEC 61851: Part 21-2:2018

Electric vehicle conductive charging system

Part 21-2: Electric vehicle requirements for conductive connection to an AC/DC supply – EMC requirements for off-board electric vehicle charging systems

Not for sale

95 pages

Identical to IEC 61851-21-2:2018

This part of IEC 61851 defines the EMC requirements for an off-board component or equipment of such systems used to supply or charge electric vehicles with electric power by conductive power transfer (CPT) with a rated input voltage, according to IEC 60038:2009, up to 1000 V AC or 1500 V DC and an output voltage up to 1000 V AC or 1500 V DC.

ZWS IEC 61851: Part 23:2014

Electric vehicle conductive charging system

Part 23: DC electric vehicle charging station

Not for sale

159 pages

Identical to IEC 61851-23:2014

This part of IEC 61851-24:2014, together with IEC 61851-23, applies to digital communication between a d.c. EV charging station and an electric road vehicle (EV) for control of d.c. charging, with an a.c. or d.c. input voltage up to 1 000 V a.c. and up to 1 500 V d.c. for the conductive charging procedure. The EV charging mode is mode 4, according to IEC 61851-23. Annexes A, B, and C give descriptions of digital communications for control of d.c. charging

specific to d.c. EV charging systems A, B and C as defined in Part 23.

ZWS IEC 61851: Part 24:2014

Electric vehicle conductive charging system

Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging

Not for sale

63 pages

Identical to IEC 61851-24:2014

This part of IEC 61851-24:2014, together with IEC 61851-23, applies to digital communication between a d.c. EV charging station and an electric road vehicle (EV) for control of d.c. charging, with an a.c. or d.c. input voltage up to 1 000 V a.c. and up to 1 500 V d.c. for the conductive charging procedure. The EV charging mode is mode 4, according to IEC 61851-23. Annexes A, B, and C give descriptions of digital communications for control of d.c. charging specific to d.c. EV charging systems A, B and C as defined in Part 23.

ZWS IEC 61854:2014

Overhead lines – Requirements and test spacers

Not for sale

81 pages

Identical to IEC 61854: 1998

Applies to spacers for conductor bundles of overhead lines. It covers rigid spacers, flexible spacers and spacer dampers.

ZWS IEC 61936.1:2017

Power installations exceeding 1kV a.c.

Part 1: Common rules

Not for sale

210 pages

Identical to IEC 61936.1:2010

Provides common rules for the design and the erection of electrical power installations in systems with nominal voltage above 1 kV a.c. and nominal frequency up to and including 60Hz, so as to provide safety and proper functioning for the use intended.

ZWS IEC 61952:2014

Insulators for overhead lines – Composite line post insulators for A.C. systems with a nominal voltage greater than 1 000 V – Definitions, test methods and acceptance criteria

Not for sale

27 pages

Identical to IEC 61952:2008

Applies to composite line post insulators consisting of a load-bearing cylindrical insulating solid core consisting of fibre – usually glass – in a resin based matrix, a housing (outside the insulating core) made of polymeric material and end fittings permanently attached to the insulating core.

ZWS IEC 61980: Part 1: 2020

Electric vehicle wireless power transfer (WPT) systems

Part 1: General requirements

Not for sale

42 pages

Identical to IEC 61980-1:2020

This part of IEC 61980 applies to the supply device for charging electric road vehicles using wireless methods at standard supply voltages per IEC 60038 up to 1 000 V AC and up to 1 500 V DC. Electric road vehicles (EV) covers road vehicles, including plug-in hybrid road vehicles (PHEV) that derive all or part of their energy from on-board rechargeable energy storage systems (RESS). This document also applies to wireless power transfer

(WPT) equipment supplied from on-site storage systems (e.g. buffer batteries).

ZWS IEC TS 61980: Part 2: 2019

Electric vehicle wireless power transfer (WPT) systems

Part 2: Specific requirements for communication between electric road vehicle (EV) and infrastructure

Not for sale

84 pages

Identical to IEC 61980-2:2019

This Part of IEC 61980, which is a Technical Specification, applies to communication between electric road vehicle (EV) and wireless power transfer (WPT) systems when connected to the supply network, at standard supply voltages per IEC 60038 up to 1000 V AC and up to 1500 V DC. This document also applies to wireless power transfer equipment supplied from on-site storage systems (e.g. buffer batteries) at standard supply voltages per IEC 60038 up to 1000 V AC and up to 1500 V DC.

ZWS IEC 62109-1:2016

Safety of power converters for use in photovoltaic power systems – General requirements

Not for sale

150 pages

Identical to IEC 62109-1:2010

Provides general requirements applicable to all types of PV PCE. There are additional parts of this standard that provide specific requirements for the different types of power converters.

ZWS IEC 62116:2016

Utility-interconnected photovoltaic inverters – Test procedures of islanding prevention measures

Not for sale

25 pages

Identical to IEC 62116:2014

Describes a guideline for testing the performance of automatic islanding prevention measures installed in or with single or multi-phase utility interactive PV inverters connected to the utility grid.

ZWS IEC 62124:2016

Photovoltaic (PV) stand-alone systems – Design verification

Not for sale

77 pages

Identical to IEC 62124:2004

Covers systems containing one or more PV modules, a support structure, storage batteries, a charge controller and typical DC loads such as lights, radio, television and refrigerators AC loads with dedicated inverters are considered as DC loads.

ZWS IEC 62196: Part 1:2014

Plugs, socket-outlets, vehicle connectors and vehicle inlets – conductive charging of electric vehicles

Part 1: General requirements

Not for sale

86 pages

Identical to IEC 62196-1:2014

This part of IEC 62196 is applicable to plugs, socket-outlets, vehicle connectors, vehicle inlets, herein referred to as "accessories", and to cable assemblies for electric vehicles (EV) intended for use in conductive charging systems which incorporate control means, with a rated operating voltage not exceeding:

– 690 V AC 50 Hz to 60 Hz, at a rated current not exceeding 250 A;
– 1 500 V DC at a rated current not exceeding 800 A. These accessories and cable assemblies are intended to be installed by instructed persons (IEV 195-04-02) or skilled persons (IEV 195-04-01) only.

These accessories and cable assemblies are intended to be used for circuits specified in IEC 61851 (all parts), which operate at different voltages and frequencies, and which can include extra-low voltage and communication signals. These accessories and cable assemblies are intended to be used at an ambient temperature between –30 °C and +40 °C.

ZWS IEC 62196: Part 2:2016

Plugs, socket-outlets, vehicle connectors and vehicle inlets – conductive charging of electric vehicles

Part 1: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories

Not for sale

122 pages

Identical to IEC 62196-2:2016

This part of IEC 62196 applies to plugs, socket-outlets, vehicle connectors and vehicle inlets with pins and contact-tubes of standardized configurations, herein referred to as accessories. They have a nominal rated operating voltage not exceeding 480 V a.c., 50 Hz to 60 Hz, and a rated current not exceeding 63 A three-phase or 70 A single phase, for use in conductive charging of electric vehicles. This part of IEC 62196 covers the basic interface accessories for vehicle supply as specified in IEC 62196-1, and intended for use in conductive charging systems for circuits specified in IEC 61851-1:2010.

ZWS IEC 62257.9-5:2013

Recommendations for small renewable energy and hybrid systems for rural electrification.

Part 9-5 Integrated system – selection of stand-alone lighting kits for rural electrification

Not for sale

27 pages

Identical to IEC 62257.9-5:2013

Applies to stand-alone rechargeable electric lighting appliances or kits that can be installed by a typical user without employing a technician.

ZWS IEC 62257.9-8:2020

Recommendations for small renewable energy and hybrid systems for rural electrification.

Part 9-8: Integrated system – requirements for stand alone renewable energy products with power rating less than or equal to 350W

Not for sale

71 pages

Identical to IEC 62257.9-8:2020

This part of IEC 62257 provides baseline requirements for quality, durability and truth in advertising protect consumers of off-grid renewable energy products. Evaluation of these requirements is based on tests described in IEC TS 62257-9.5. This document can be used alone or in conjunction with other international standards that address the safety and durability of components of off-grid renewable energy products.

ZWS IEC 62430:2019

Environmentally conscious design – principles, requirements and guidance

Not for sale

22 pages

Identical to IEC 62430:2019

This document describes principles, specifies requirements and provides guidance for organizations intending to integrate environmental aspects into the design and development in order to minimize the adverse environmental impacts of their products.

This document applies to processes on how ECD (environmentally conscious design) are integrated into the design and development. This document applies to any organization, regardless of its size, type or sector.

ZWS IEC 62504:2014

General lighting – LEDs and LED modules – terms and definitions

Not for sale

15 pages

Identical to IEC 62504:2011

This technical specification presents terms and definitions relevant for lighting with LED light sources. It provides both descriptive terms (Such as built-in LED module) and measurable terms (such as “luminance”)

ZWS IEC 62509:2016

Battery charge controllers for photovoltaic systems – Performance and functioning

Not for sale

27 pages

Identical to IEC 62509:2010

Establishes minimum requirements for the functioning and performance of battery charge controllers used with lead acid batteries in terrestrial photovoltaic (PV) systems. To ensure BCC reliability and to maximize the life of battery. The standard addresses the following battery charge control features;- PV generator charging of a battery; load control; protection functions; interface functions.

ZWS IEC 62552: Part 1:2015

Household refrigerating appliances – Characteristics and test methods:

Part 1: General requirements

Not for sale

62 pages

Identical to IEC 62552: Part 1:2015

This part of IEC 62552 specifies the essential characteristics of household refrigerating appliances, cooled by internal natural convection or forced air circulation, and establishes test methods for checking the characteristics. For the purposes of declaration, the tests defined in this part of IEC 62552 are considered to be type tests to assess the fundamental design and operation of a refrigerating appliance. This part of IEC 62552 does not define requirements for production sampling or conformity assessment or certification.

ZWS IEC 62552: Part 2:2015

Household refrigerating appliances – Characteristics and test methods:

Part 2: Performance requirements

Not for sale

43 pages

Identical to IEC 62552: Part 2:2015

This part of IEC 62552 describes the methods for the determination of performance requirements. Although there is some commonality in the set-ups for different tests (and so it may be an advantage to apply them all to one sample), these are separate tests to evaluate specific characteristics of the sample being tested. This part of IEC 62552 does not specify a procedure to generalise the results from sample test results to a prediction of the characteristics of the whole population from which that sample was selected.

ZWS IEC 62552: Part 3:2015

Household refrigerating appliances – Characteristics and test methods:

Part 3: Energy consumption and volume

Not for sale

155 pages

Identical to IEC 62552: Part 3:2015

This part of IEC 62552 describes the methods for the determination of energy consumption characteristics and defines how these can be assembled to estimate energy consumption under different usage and climate conditions. This part of IEC 62552 also defines the determination of volume.

ZWS IEC 62560:2014

Self-ballasted LED-Lamps for general lighting services by voltages >50 V – Safety specification

Not for sale

24 pages

Identical to IEC 62560:2011

Specifies the safety and interchangeability requirements, together with the test methods and conditions required to show compliance of LED-lamps with intergrated means for stable operation

ZWS IEC 62576:2018

Electric double-layer capacitors for use in hybrid electric vehicles – test methods for electrical characteristics

Not for sale

30 pages

Identical to IEC 62576:2018

This document describes the methods for testing electrical characteristics of electric double-layer capacitor cells (hereinafter referred to as "capacitor") used for peak power assistance in hybrid electric vehicles. All the tests in this document are type tests. This document can also be applicable to the capacitor used in idling reduction systems (start and-stop systems) for the vehicles. This document can also be applicable to the capacitor modules consisting of more than one cell.

ZWS IEC 62612:2014

Self-ballasted LED-Lamps for general lighting services with supply voltages >50 V – Performance requirements

Not for sale

42 pages

Identical to IEC 62612:2013

Standard specifies the performance requirements, together with the test methods and conditions, required to show compliance of LED lamps with integral means for stable operation, intended for domestic and similar general lighting purposes.

ZWS IEC 62840: Part 1:2016

Electric vehicle battery swap system

Part 1: General and guidance

Not for sale

27 pages

Identical to IEC 62840-1:2016

This part of IEC 62840, which is a Technical Specification, gives the general overview for battery swap systems, for the purposes of swapping batteries of electric road vehicles (EVs) when the vehicle powertrain is turned off and when the battery swap system is connected to the supply network at standard supply voltages according to IEC 60038 with a rated voltage up to 1 000 V AC and up to 1 500 V DC. This document is applicable for battery swap systems for EV equipped with one or more swappable battery system (SBS).

ZWS IEC 62840: Part 2:2016

Electric vehicle battery swap system

Part 2: Safety requirements

Not for sale

26 pages

Identical to IEC 62840-2:2016

This part of IEC 62840 provides the safety requirements for a battery swap system, for the purposes of swapping swappable battery system (SBS) of electric vehicles. The battery swap system is intended to be connected to the supply network. The power supply is up to 1 000 V AC or up to 1 500 V d.c, in accordance with IEC 60038. This standard also applies to battery swap systems supplied from on-site storage systems (e.g. buffer batteries).

ZWS IEC 62840: Part 3:2021

Electric vehicle battery swap system

Part 3: Particular safety and interoperability requirements for battery swap systems operating with removable RESS/battery systems

Not for sale

39 pages

Identical to IEC 62840-3:2021

This document applies to battery swap systems for removable RESS of electric road vehicle when connected to the supply network, with a rated supply voltage up to 480 V AC or up to 400 V DC, for battery systems with a rated voltage up to 120 V DC.

ZWS IEC 63119: Part 1:2019

Information exchange for electric vehicle charging roaming service

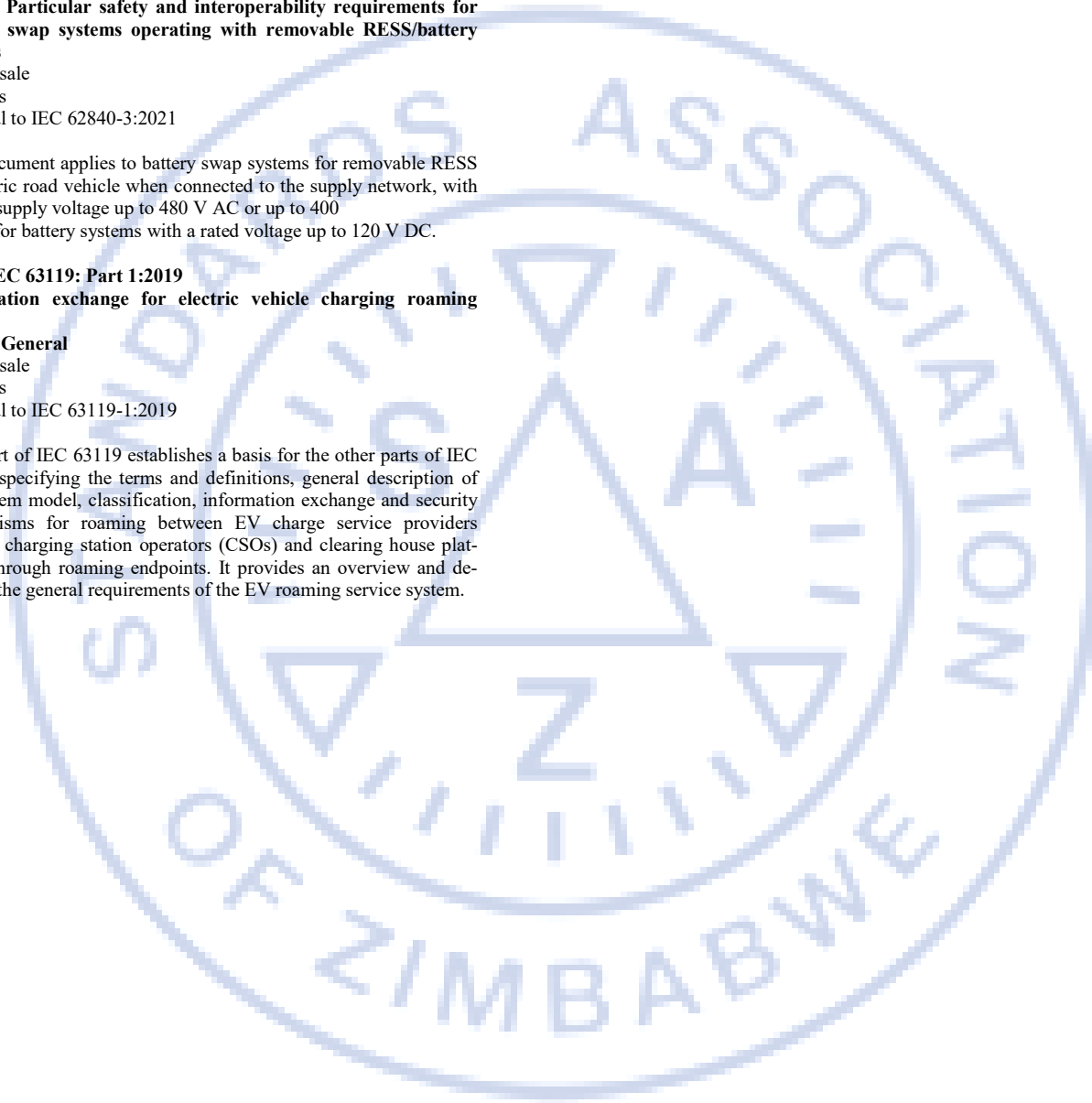
Part 1: General

Not for sale

14 pages

Identical to IEC 63119-1:2019

This part of IEC 63119 establishes a basis for the other parts of IEC 63119, specifying the terms and definitions, general description of the system model, classification, information exchange and security mechanisms for roaming between EV charge service providers (CSPs), charging station operators (CSOs) and clearing house platforms through roaming endpoints. It provides an overview and describes the general requirements of the EV roaming service system.



ZWS ISO ADOPTIONS

ZWS ISO IEC Guide 21:2005

Regional or national adoption of international standards and other international deliverables Part 1: adoption of international standards

Price Code: Gr. 6

23 pages

Identical to ISO/IEC: Guide 21:1: 2005

Provides methods for determining the degree of correspondence regional or national standards and relevant international standards.

Part 2: Adoption of international deliverables other than international standards

Price Code: Gr. 4

9 pages

Identical to ISO/IEC: Guide 21.2: 2005

Provides the methods for adoption of international of international standards as regional or national deliverables.

ZWS ISO/IEC Guide 23:2005

Methods of indicating conformity with standards for third-party certification systems

Price Code: Gr. 3

4 pages

Identical to ISO/IEC: Guide 23: 1992

Lays down methods of indicating conformity with standards and reference thereto in standards.

ZWS ISO/IEC Guide 27:2005

Guidelines for corrective action to be taken by a certification body in the event of misuse of its mark of conformity

Price Code: Gr. 3

4 pages

Identical to ISO/IEC Guide 27: 2005

Identifies a series of procedures which a national certification body should consider in deciding how to respond to reported misuse of its registered mark of conformity or a situation in which a certified product is found to be hazardous.

ZWS ISO/IEC Guide 28:2005

Conformity assessment Guidance on a third party certification systems for products

Price Code:

Gr. 5

16 pages

Identical to ISO/IEC Guide 28 2004

Gives general guidelines for a specific product certification system.

ZWS ISO/IEC Guide 43:2003

Proficiency testing by inter-laboratory comparisons

Part 1: Development and operation of proficiency testing Schemes

Price Code: Gr.5

16 pages

Identical to ISO/IEC Guide 43.1

Defines principles of inter-laboratory comparisons and describes the factors which should be taken into account in the organization and conduct of proficiency testing schemes.

ZWS ISO/IEC Guide 53:2006

Conformity assessment – Guidance on the use of an organization's quality management system in product certification

Price Code: Gr. 6

21 pages

Identical to ISO IEC Guide 53: 2005

Outlines a general approach by which certification bodies can develop and apply product certification schemes utilizing requirements for an organization's quality management.

ZWS ISO/IEC Guide 60:2005

Conformity assessment – Code of good practice

Price Code: Gr. 3

5 pages

Identical to ISO/IEC Guide 65: 1996

Recommends good practices for all elements of conformity assessment, including normative documents, bodies, systems, schemes and results.

ZWS ISO/IEC Guide 64:2009

Guide for addressing environmental issues in product standards

Price Code: Gr. 7

36 pages

Identical to ISO/IEC Guide 64: 2008

Provides guidance on addressing environmental issues in product standards. It is primarily intended for product standards writers.

ZWS ISO/IEC Guide 65:2005

General requirements for bodies operating product certification systems

Price Code: Gr. 5

8 pages

Identical to ISO/IEC Guide 65: 1996

Specifies general requirements that a third party operating a product certification system shall meet if it is to be recognized as competent and reliable.

ZWS ISO/IEC Guide 67: 2005

Conformity assessment – Fundamentals of product certification

Price Code: Gr. 4

9 pages

Identical to ISO/IEC Guide 67: 2004

Give guidance on product certification systems by identifying their various elements based on current practices.

ZWS ISO/IEC Guide 68:2005

Arrangements for the recognition and acceptance of conformity assessment results

Price Code: Gr. 4

8 pages

Identical to ISO Guide 68: 2002

Provides an introduction to the development, issuance and operation of arrangements for the recognition and acceptance of results produced by bodies undertaking similar conformity assessments and related activities.

ZWS ISO/IEC GUIDE 73:2011

Risk Management – Vocabulary

Price

Code:

Gr.6

13 pages

Identical to ISO/IEC Guide 73:2009

Provides the definitions of generic terms related to risk management. It aims to encourage a mutual and consistent understanding of and a coherent approach to the description of activities relating to the management of risk and the use of uniform risk management terminology in processes and frameworks dealing with the management of risk.

ZWS ISO 186:1999

Paper and board – Sampling to determine average quality

Price Code: Gr. 3

5 pages

Identical to ISO 186: 1994

Specifies a method of obtaining a representative sample from a lot of paper of paper or board for testing to determine whether or not its average quality complies with specification including solid and corrugated fibreboard.

ZWS ISO 188:2008

Rubber, vulcanized or thermoplastic – accelerated ageing and heat resistance tests

Price Code: Gr. 6

17 pages

Identical to ISO 188:2007

Specifies accelerated ageing or heat resistance tests on vulcanized or thermoplastic rubbers.

ZWS ISO 361:1975

Basic Ionizing radiation symbol

Price Code: Gr. 2

1 pages

Identical to ISO 361:1975

Specifies the symbol to be used to signify the actual or potential presence of ionizing radiation and to identify objects, devices, materials or combinations of materials which emit ionizing radiation.

ZWS ISO 488:2008

Milk – Determination of fat content – Gebber butyrometers

Price Code: Gr. 6

14 pages

Identical to ISO 488:2008

Specifies the characteristics of seven types of butyrometer for use in the determination of the fat content of whole milk partly skimmed milk and skimmed milk.

ZWS ISO 527:1998

Plastics – Determination of tensile properties

Part 3: Test conditions for films and sheets

Price Code: Gr. 3

5 pages

Identical to ISO 527: 1998

Specifies the conditions for determining the tensile properties of plastics films or sheets less than 1 mm thick.

ZWS ISO 607:1980

Surface active agents and detergents – methods of sample division

Price Code: Gr. 5

8 pages

Identical to ISO 607:1980 (confirmed 2022).

This International Standard specifies methods for obtaining a reduced sample of surface active agent or detergent suitable for use with single or mixed products, in the form of powders, pastes

or liquids. The sample reduction process may be required for the following reasons :

a) the preparation of a final sample or a laboratory sample of mass greater than 250 g from a blended bulk sample of mass greater than 500 g;

b) the preparation of several equivalent laboratory samples and/or reference samples and/or storage samples, each of mass greater than 250 g, from a final sample;

c) the preparation of a test sample from a laboratory sample.

ZWS ISO 697:1981

Surface active agents — Washing powders — Determination of apparent density — Method by measuring the mass of a given volume

Price Code: Gr. 4

Identical to ISO 697: 1981

This International Standard specifies a method for the determination of the apparent density of washing powders by measuring the mass of a given volume.

ZWS ISO 707:2008

Milk and milk products – Guidance on sampling

Price Code: Gr. 5

36 pages

Gives guidance on methods of sampling milk and milk products.

ZWS ISO 712:1996

Cereals and cereal products – Determination of moisture content (Routine reference method)

Price Code: Gr. 4

8 pages

Identical to ISO 712: 1995

Specifies a routine reference method for the determination of moisture content of cereals and cereal products.

ZWS ISO 750:1998

Fruit and vegetable products – Determination of titratable acidity

Price Code: Gr. 3

4 pages

Identical to ISO 750:1998

Specifies two methods for the determination of the titratable acidity of fruit and vegetable products, a potentiometric reference method, a routine method using a coloured indicator. By convention the latter method does not apply to wines.

ZWS ISO 751:1998

Fruit and vegetable products – Determination of water insoluble solids

Price Code: Gr. 3

4 pages

Identical to ISO 751:1998

Specifies a method for the determination of the content of water-insoluble solids in the edible parts of fruit and vegetable products.

ZWS ISO 762:2003

Fruit and vegetable products – Determination of mineral impurities content

Price Code: Gr. 3

5 pages

Identical to 762:2003

Specifies a method for the determination of the mineral impurities content (impurities generally originating from the soil) of fruit and vegetable products.

4 pages

ZWS ISO 763:1982**Fruit and vegetable products – Determination of ash insoluble in hydrochloric acid**Price Code: Gr. 2
4 pages

Identical to ISO 763:2003

Specifies a method for the determination of the hydrochloric acid in soluble ash yielded by fruit and vegetable products.

ZWS ISO 780:2015**Packaging – Distribution packaging – Graphical symbols for handling and storage of packages**Price Code: Gr. 6
12 pages

Identical to ISO 780:2015

This International Standard specifies a set of graphical symbols conventionally used for marking of distribution packages in their physical distribution chain to convey handling instructions. The graphical symbols should be used only when necessary. This International Standard is applicable to packages containing any kind of goods, but does not include instructions specific to handling of dangerous goods.

ZWS ISO 789:1999**Agricultural tractors – Test procedures****Part 4: Measurement of exhaust smoke**

Price Code: Gr. 4

7 pages

Identical to ISO 789:Part 4 1986

Specifies a method for measuring the smoke emitted by the engines of agricultural tractors operating as steady speed.

ZWS ISO 862:1984**Surface active agents – vocabulary**

price Code: Gr. 7

35 pages

Identical to ISO 862:1984

This International Standard defines terms frequently used in the field of surface active agents.

ZWS ISO 1026:1982**Fruit and vegetable products – Determination of dry matter content by drying under reduced pressure and of water content by Azeotropic distillation**

Price Code: Gr. 2

4 pages

Identical to ISO 1026:1982

Specifies a method for the determination of the dry matter content of fruit and vegetable products by drying under reduced pressure and a method for the determination of water content by azeotropic distillation.

ZWS ISO 1042:1998**Laboratory glassware – one-mark volumetric flasks**

Price Code: Gr. 5

8 pages

Identical to ISO 1042:1998 (confirmed in 2019).

This International Standard specifies requirements for an internationally acceptable series of one-mark volumetric flasks, suitable for general laboratory purposes.

ZWS ISO 1133:2000**Plastics – Determination of the mass-flow rate (MFR) and the melt-volume flow rate (MVR) of thermoplastics**

Price Code: Gr. 4

Identical to ISO 1133: 1997

Specifies a method for the determination of the melt mass flow rate (MFR) and the melt volume-flow rate (MVR) of thermoplastic materials under specifies conditions of temperature and load.

ZWS ISO 1167: Part 1:2006**Thermoplastics pipes, fittings, and assemblies for the conveyance of fluids – Determination of the resistance to internal pressure****Part 1: General method**

Price Code: Gr. 5

8 pages

Identical to ISO 1167: Part 1:2006

This part of ISO 1167 specifies a general test method for determining the resistance to internal hydrostatic pressure at a given temperature of thermoplastics pipes, fittings and piping systems for the transport of fluids. The method accommodates water in water, water in air and water in liquid tests.

ZWS ISO 1167: Part 2:2006**Thermoplastics pipes, fittings, and assemblies for the conveyance of fluids – Determination of the resistance to internal pressure****Part 2: Preparation of pipe test pieces**

Price Code: Gr. 5

4 pages

Identical to ISO 1167: Part 2:2006

This part of ISO 1167 specifies the dimensions and method for preparation of extruded, or injection-moulded tubular, test pieces used to determine the resistance of thermoplastics pipes to internal hydrostatic pressure according to ISO 1167-1.

ZWS ISO 1167: Part 3:2007**Thermoplastics pipes, fittings, and assemblies for the conveyance of fluids – Determination of the resistance to internal pressure****Part 3: Preparation of components**

Price Code: Gr. 5

9 pages

Identical to ISO 1167: Part 3:2007

This part of ISO 1167 specifies the procedure for the preparation of components, i.e. fittings and valve bodies, for the determination of their resistance to internal hydrostatic pressure according to ISO 1167-1.

ZWS ISO 1167: Part 4:2007**Thermoplastics pipes, fittings, and assemblies for the conveyance of fluids – Determination of the resistance to internal pressure****Part 4: Preparation of assemblies**

Price Code: Gr. 5

6 pages

Identical to ISO 1167: Part 4:2007

This part of ISO 1167 specifies the procedure for the preparation of both end load bearing and non end load bearing assemblies, for the determination of their resistance to internal hydrostatic pressure according to ISO 1167-1.

ZWS ISO 1211:2002**Milk – Determination of fat content – Gravimetric method (Reference method)**

Price Code: Gr. 5

14 pages

1 pages Identical to ISO 1211: 1999

Specifies the reference method for the determination of the fat content of milk.

ZWS ISO 1442:1998
Meat and meat products – Determination of moisture content
Price Code: Gr. 2
4 pages
Identical to ISO 1442: 1992

Specifies a reference method for the determination of the total moisture content of meat and meat products

ZWS ISO 1443:1998
Meat and meat products – Determination of total fat content
Price Code: Gr. 1
2 pages

Specifies a reference method for the determination of the total fat content of meat and meat products.

ZWS ISO 1461:2001
Hot-dip galvanized coating on iron and steel articles
Price Code: Gr. 6
18 pages
Technically identical to ISO 1461: 1999
Replaces ZWS 648: 1998

Specifies the general properties and methods of test for coatings applied by hot dipping in zinc (containing not more than 2 % of other metals) on fabricated iron and steel articles.

ZWS ISO 1516:2002
Determination of flash/no flash – Closed cup equilibrium method
Price Code: Gr. 5
9 pages
Identical to ISO 1516:2002

Specifies a method to determine if paints, varnishes, paint binders, solvents, petroleum or related products when maintained at a selected equilibrium temperature and under the conditions of the test give off sufficient flammable vapour to cause ignition on application of an external source of flame applied in a standard manner

ZWS ISO/IEC 1523:2002
Determination of flash point – Closed cup equilibrium method
Price Code: Gr. 5
11 pages
Identical to ISO/IEC 1523

Specifies a method to determine the flash point of paints, varnishes, paint binders, solvents, petroleum or related products.

ZWS ISO 1572:2003
Tea-preparation of ground sample of known dry matter content
Price Code: Gr. 2
2 pages
Identical to ISO 1572: 1980

Specifies a method of preparing ground sample of tea and of determining its dry content for use in analytical determinations which require the results to be expressed on the dry basis.

ZWS ISO 1573:2003
Tea-Determination of loss in mass 103°C
Price Code: Gr. 2
2 pages
Identical to ISO 1573: 1980

Specifies a method for the determination of the loss in mass when tea is heated in air at 103°C.

ZWS ISO 1575: 2003
Tea – Determination of total ash
Price Code: Gr. 2
2 pages
Identical to ISO 1575 1987

Specifies a method for the determination of total ash from tea

ZWS ISO 1576:2003
Tea – Determination of water – soluble ash and water in soluble ash
Price Code: Gr. 2
2 pages
Identical to ISO 1576: 1988

Specifies a method for the determination of water soluble ash and water soluble ash tea.

ZWS ISO 1577:2003
Tea – Determination of acid insoluble ash
Price Code: Gr. 2
2 pages
Identical to ISO 1577 1987

Specifies a method for the determination of the acid – in soluble ash from tea.

ZWS ISO 1578:2003
Tea – Determination of alkalinity of water-soluble ash
Price Code: Gr.2
2 pages

Specifies the reference method for the determination of the fat content of all types of cheese and processed cheese products.

ZWS ISO 1736:2009
Dried milk and dried milk products – Determination of fat content – Gravimetric method (Reference method)
Price Code: Gr. 4
Identical to ISO 1736:2000

14 pages

Specifies the reference method for the determination of the fat content of dried milk products.

ZWS ISO 1737:2002
Evaporated milk and sweetened condensed milk – Determination of fat content – Gravimetric method (Reference method)
Price Code: Gr. 7
14 pages
Identical to ISO 1737: 1999

Specifies the reference method for the determination of the fat content of all types of evaporated milk and sweetened condensed milk.

ZWS ISO 1738:2001
Butter – Determination of salt content
Price Code: Gr. 2
5 pages
Identical to ISO 1738: 1997

Specifies a method for the determination of the salt content of butter. Method is applicable to all types of butter containing more than 0.1 % (m/m) of salt.

ZWS ISO 1739:2006**Butter – Determination of refractive index of the fat (Reference method)**

Price Code: Gr. 4

4 pages

Identical to ISO 1738: 1997

Specifies a reference method for the determination of the refractive index of the fat obtained by melting butter

ZWS ISO 1740:2005**Milk fat products and butter – Determination of fat acidity (Reference method)**

Price Code: Gr. 4

7 pages

Identical to ISO 1740: 2004

Specifies a method for the determination of acidity of the fat contained in milk fat products and in butter.

ZWS ISO 1839:2003**Tea – Sampling**

Price Code: Gr. 3

3 pages

Identical to ISO 1839: 1980

Specifies the method for sampling tea. Applies to sampling from containers of all sizes.

ZWS ISO 1841:1998**Meat and meat products – Determination of chloride content****Part 2: Potentiometric method**

Price Code: Gr. 2

3 pages

Identical to ISO 1841: Part 2: 1996

Specifies a method for the determination of the chloride content of meat and meat products.

ZWS ISO 1842:1991**Fruit and vegetable products – Determination of pH**

Price Code: Gr. 2

2 pages

Identical to ISO 1842:1991

Specifies a potentiometric method of measuring the pH of fruit and vegetable products.

ZWS ISO 1854:2009**Whey cheese – Determination of fat content – Gravimetric method**

Price Code: Gr.5

Identical to ISO 1854:2008

14 pages

Specifies the reference method for the determination of fat content of whey cheese. It is not applicable to products which do not dissolve completely in ammonia solution or which contain free fatty acids in significant quantities.

ZWS ISO 1924:1999**Paper and Board – Determination of tensile properties****Part 1: Constant rate of loading method**

Price Code: Gr. 4

5 pages

Identical to ISO 1924: part 1: 1992

Specifies a method of measuring the tensile strength, of paper and board using an instrument operating at a constant rate of application of tensile force.

Part 2: Constant rate of elongation method

Price Code: Gr. 4

8 pages

Identical to ISO 1924: Part 2: 1994

Specifies a method of measuring the tensile strength, stretch at break and tensile energy absorption of paper and board using a test instrument operating at a constant rate of elongation.

ZWS ISO 1955:1982**Citrus fruits and derived products – Determination of essential oil content (Reference Method)**

Price Code: Gr. 2

3 pages

Identical to ISO 1955:1982

Specifies the reference method for the determination of the total essential oils content of citrus fruits and their derived products (whole fruits, fruits cut into small pieces, skins, juices, concentrates, beverage bases, sweetened products etc.

ZWS ISO 2170:1998**Cereals and pulses – Sampling of milled products**

Price Code: Gr. 4

8 pages

Identical to ISO 2170: 1980

Specifies general conditions retaining to the sampling for assessment of quality and condition of milled products from cereals and pulses, intended for human or animal consumption in power, particulate or agglomerated form.

ZWS ISO 2171:2002**Cereals and milled cereals products – Determination of total ash**

Price Code: Gr. 3

5 pages

Identical to ISO 5171: 1993

Specifies a method for the determination of ash yield by cereals and milled cereals products.

ZWS ISO 2172:1983**Fruit juice – Determination of soluble solids content – Pycnometric method**

Price Code: Gr. 2

3 pages

Identical to ISO 2172:1983

Applicable to fruit juice containing no suspended matter and to clear concentrated juice. It is not applicable to other fruit and vegetable products, for which the method specified in ISO 2173 should be used.

ZWS ISO 2173:2003**Fruit and vegetable products – Determination of soluble solids – Refractometric method**

Price Code: Gr. 3

8 pages

Identical to ISO 2173:2003

Specifies a refractometric method for the determination of the soluble solids in fruit and vegetable products.

ZWS ISO 2294:1998**Meat and Meat products – Determination of total phosphorous content (reference method)**

Price Code: Gr. 2

3 pages

Identical to ISO 2294: 1974

Specifies a reference method for the determination of the total phosphorus content of meat and meat products.

ZWS ISO 2307:2000

Ropes – Determination of certain physical and mechanical properties

Price Code: Gr. 4

9 pages

Identical to ISO 2307: 2000

Specifies, for ropes of different kinds, a method of determination of certain physical and mechanical properties.

ZWS ISO 2446:2008

Milk – Determination of fat content

Price Code: Gr. 5

12 pages

Specifies the Gerber method for the determination of fat content of milk and includes guidance on the determination of the appropriate capacity of the milk pipette.

ZWS ISO 2450:2011

Cream – Determination of fat content – Gravimetric method (Reference method)

Price Code: Gr. 5

14 pages

Identical to ISO: 2450: 2008

Replaces ZWS ISO 2450:2001

Specifies the reference method for the determination of fat content of raw, processed and sour cream in which no appreciable separation or breakdown of fat, due to lipolysis, has occurred.

ZWS ISO 2469:2009

Paper, Board and pulp – Measurement of diffuse reflectance factor

Price Code: Gr. 4

7 pages

Identical to ISO 2469: 1994

Specifies the equipment for measuring the diffuse reflectance factor of pulp, paper and board the procedures for calibrating that equipment.

ZWS ISO 2505:2005

Thermoplastics pipes — Longitudinal reversion — Test method and parameters

Price Code:

5 pages

Identical to ISO 2505:2005

Gr. 4

This International Standard specifies a method for determining the longitudinal reversion of thermoplastics pipes, to be carried out in either a liquid or in air. In case of dispute, heated liquid is used as the reference. This International Standard is applicable to all thermoplastics pipes with smooth internal and external walls of constant cross section. It is not applicable to non smooth structured wall thermoplastics pipes. The parameters appropriate to the pipe material and recommendations for the maximum levels of reversion as a function of the pipe material are given in Annex A.

ZWS ISO 2859:2003

Sampling procedures for inspection by attributes

Part 0: Introduction to ZWS ISO 2859 attribute sampling system

Price Code: Gr. 8

56 Pages

Identical to ISO 2859: 1995

Explains the terms used in acceptance sampling, describes the various schemes and plans, gives practical advice on sampling inspection and discusses some of the theoretical aspects.

Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot by lot inspection

Price Code: Gr.

8

Identical to ISO 2859-1: 1999

Specifies an acceptance sampling system for inspection by attributes. Indexed in terms of the acceptance quality limit.

Part 2: Sampling plans indexed by limiting quality (LQ) for isolate lot inspection

Price Code: Gr. 6

21 pages

Identical to ISO 2859-2: 1985

Establishes LQ sampling plans and procedures for inspection by attributes compatible with ISO 2859-1 that can be used when switching rules given in ISO 2859-1 are not applied.

Part 3: Skip lot sampling procedures

Price Code: Gr. 5

16 pages

Identical to ISO 2859-2: 1993

Specifies generic attributes skip-lot sampling procedures for reducing the inspection effort on products submitted by those suppliers who have demonstrated their ability to enroll, in an effective manner, all facets of quality and who consistently produce lot which meet requirements.

Part 4: Procedures for assessment of declared quality levels

Price Code: Gr. 5

12 pages

Identical to ISO 2859-4: 2002

Establishes sampling plans and procedures that can be used to assess whether the quality level of an entity (lot, process etc) conforms to a declared value.

ZWS ISO 2911:2005

Sweetened condensed – milk-determination of sucrose content – polarimetric method

Price Code: Gr. 5

7 pages

Identical to ISO 2911: 2004

Specifies a method for the determination of sucrose in sweetened condensed milk. This method is applicable to sweetened condensed milk of normal composition from whole partially skimmed or skimmed milk and sucrose only and containing no altered sucrose.

ZWS ISO 3057:1998

Non-Destructive testing –Metallographic replica techniques of surface examination

Price Code: Gr. 2

2 pages

Identical to ISO 3057:1998

Specifies techniques of surface examination in which transparent nitrocellulose varnish, or plastic material, with or without supports, is used to record inhomogeneities, both mechanical and metalurgical, in the condition of a metal surface.

87 pages

ZWS ISO 3058:1998
Non-Destructive testing –Aids to visual inspection – Selection of low-power magnifiers
 Price Code: Gr. 5
 6 pages
 Identical to ISO 3058:1998

Specifies the characteristics of the (single element magnifier, multi-element magnifier and twin system magnifiers) of low-power magnifiers and gives recommendations for their selection for the inspection of surfaces.

ZWS ISO 3059:2012
Non-Destructive testing –Penetrant testing and magnetic particle testing –Viewing conditions
 Price Code: Gr. 4
 5 pages
 Identical to ISO 3059: 2012

Specifies the control of the viewing conditions for magnetic particle and penetrant testing. It includes minimum requirements for the illuminance and UV-A irradiance and their measurement.

ZWS ISO 3093:1996
Cereals – Determination of falling number
 Price Code: Gr. 5
 13 pages
 Identical to ISO 3093: 1982

Specifies a method for the determination of the falling number of cereals, as a measure of alpha-amylase activity.

ZWS ISO 3103:2003
Tea – Preparation of liquor for use in sensory tests
 Price Code: Gr. 3
 4 pages
 Identical to ISO 3103: 1980

Specifies a method for the preparation of a liquor of tea for use in sensory tests, by means of infusing the leaf.

ZWS ISO 3104:1994
Petroleum products – Transparent and opaque liquids – Determination of kinetic viscosity and calculation of dynamic viscosity
 Price Code: Gr. 5
 13 pages
 Identical to ISO 3104:1994

Specifies a procedure for the determination of the kinematic viscosity, ν of liquid petroleum products both transparent and opaque by measuring the time for a volume of liquid to flow under gravity through a calibrated glass capillary viscometer.

ZWS ISO 3127:1994
Thermoplastics pipes – Determination of resistance to external blows – Round-the-clock method
 Price Code: Gr. 6
 11 pages
 Identical to ISO 3127:1994

This International Standard specifies a method for the determination of the resistance to external blows of thermoplastics pipes of circular cross-section; it is called the round-the-clock method. This method is applicable to isolated batches of pipe tested at 0 °C (information is also given for sampling from the continuous production of pipe).

ZWS ISO 3173:1999
Road vehicles – Apparatus for measurement of opacity of exhaust gas from diesel engines operating under steady state conditions
 Price Code: Gr. 7
 28 pages
 Identical to ISO 3173: 1974

Specifies the general requirement and the installations of instruments for measuring the light obscuration of exhaust gas from diesel engines for driving road vehicles, operating under steady state conditions.

ZWS ISO 3219:1993
Plastics – Polymers/resins in the liquid state or as emulsions or dispersions – Determination of viscosity using a rotational viscometer with defined shear rate
 Price Code: Gr. 4
 11 pages
 Identical to ISO 3219:1993

Specifies the general principles of a method for determining the viscosity of polymers and resins in the liquid, emulsified or dispersed state, including polymer dispersions at a defined shear rate by means of rotational viscometers with standard geometry.

ZWS ISO 3356:2001
Milk and dried milk, buttermilk and buttermilk powder, whey and whey powder – Determination of phosphates activity (Reference method)
 Price Code: Gr. 2
 2 pages

Specifies a reference method for the determination of the phosphates activity in milk and dried milk, buttermilk and buttermilk powder, whey and whey powder.

ZWS ISO 3394:2012
Packaging – Complete, filled transport packages and unit loads – Dimensions of rigid rectangular packages
 Price Code: Gr. 5
 9 pages
 Identical to ISO 3394:2012

This International Standard sets forth a series of dimensions for rigid rectangular transport packages, based on the standard plan dimension (module) of 600 mm × 400 mm, 600 mm × 500 mm and 550 mm × 366 mm, as outlined in ISO 3676, which defines the plan dimensions of four series (1 219 mm × 1 016 mm, 1 200 mm × 1 000 mm, 1 200 mm × 800 mm, 1 100 mm × 1 100 mm).

ZWS ISO 3432:2008
Cheese – Determination of fat content butyrometer for van gulik method
 Price Code: Gr. 5
 7 pages
 Identical to ISO 3432:2008

Specifies the characteristics of a butyrometer for the determination of the fat content, in the range 0% mass fraction to 40% mass fraction, of cheese by the van gulik method and illustrates suitable devices for weighing and introducing the cheese test portion.

ZWS ISO 3433:2008
Cheese – Determination of fat content - Van Gulik method
 Price Code: Gr. 5
 7 pages
 Identical to ISO 3433:2008

Gr. 5

Specifies the Van Gulik method for the determination of the fat content, as a mass fraction, of cheese.

ZWS ISO 3452:2012

Non-Destructive testing –Penetrant testing

Part 1: General Principles

Price Code: Gr. 6

22 pages

Identical to ISO 3059.1: 2012

Specifies the method of penetrant testing used to detect discontinuities eg cracks, laps, folds, porosity and lack of fusion , which are open to the surface of the material to be tested mainly applied to metallic material but can also be performed on other materials provided that they are inert to the test media and not excessively porous.

Part 2:2013 Testing of penetrant materials

Price Code: Gr. 5

25 pages

Identical to ISO 3059.2: 2013

Specifies the technical requirements and test procedures for penetrant materials for their type testing and batch testing covers the temperature range 10°C to 50 °C.

Part 3: Reference test blocks

Price Code: Gr. 4

6 pages

Identical to ISO 3059.3: 2013

Specifies the two types of reference blocks, type 1 blocks used to determine the sensitivity levels of both fluorescent and colour contrast penetrant product family and type 2 blocks used for routine assessment of the performance of both fluorescent and colour contrast penetrant testing.

Part 4:1998 Equipment

Price Code 5

5 pages

Specifies the characteristics of equipment used in penetrant testing depending on the number of tests to be made and on the size of the components to be tested.

Part 5:2008 Testing of penetrant materials

Price Code: Gr. 5

7 pages

Identical to ISO 3059.5: 2008

Specifies the testing requirements particular to applications at higher temperatures over 50 °C and also the method for qualification of suitable testing products. It applies only to material qualified for the relevant temperature range used in accordance with the manufacturer's instruction.

Part 6:2008 Penetrant testing at temperatures lower than 10°C

Price Code: Gr. 5

5 pages

Identical to ISO 3059.6: 2008

Specifies the testing requirements particular to applications at low temperatures lower than 10 °C as well as the method for qualification of suitable testing products. It applies only to material qualified for the relevant temperature range used in accordance with the manufacturer's instruction.

ZWS ISO 3679:2004

Determination of flash point rapid equilibrium closed cup method

Price Code:Gr. 4

18 pages

Identical to ISO 3679:2004

Specifies a method for the determination of the closed cup flash point of paints (including water-borne paints), varnishes, paint binders, adhesives, solvents, petroleum and related products having closed cup flash points within the range of -30°C to 300°C. When used in conjunction with the flash detector (A.1.6), it is also suitable for the determination of the flash point of fatty acid methyl esters (FAME).

ZWS ISO 3680:2004

Determination of flash/no flash – Rapid equilibrium closed cup method

Price Code:Gr. 6

19 pages

Identical to ISO 3680:2004

Specifies a method for the determination of the ability of paints (including waterborne paints), varnishes, paint binders, adhesives, solvents and petroleum and related products, when maintained at a selected test temperature within the range of -30°C to 300°C and under the conditions of test to yield sufficient flammable vapour at this temperature to cause ignition on the application of a test flame in a standard manner.

ZWS ISO 3720:2003

Black Tea – Definition and basic requirements

Price Code: Gr. 2

Identical to ISO 3720

2 pages

Specifies the parts of a named plant that are suitable for making black tea for consumption as a beverage and the chemical requirements for tea that are used to indicate that tea from that source has been produced in accordance with good production practice, also specifies the packing and marking requirements for black tea in containers

ZWS ISO 3727:2005

Butter – Determination of moisture, non-fat solids and fat contents

Part 1: Determination of moisture content (Reference method)

Price Code: Gr. 3

Identical to ISO 3727-1: 2005

6 pages

Specifies a method for the determination of the moisture content of butter.

Part 2: Determination of non-fat solids content (Reference method)

Price Code: Gr. 4

Identical to ISO 3727-2: 2001

Specifies a method for the determination of the moisture content of butter.

6 pages

ZWS ISO 3728:2001

Ice-cream and milk ice – Determination of total solids content (Reference method)

Price Code: Gr. 2

3 pages

Identical to ISO 3728: 1977

Specifies a reference method for the determination of the total solids content of ice-cream, milk ices and similar products.

ZWS ISO 3740:2000
Acoustic – Determination of sound power levels of noise sources - guidelines for the use of basic standards
 Price Code: Gr. 7
 25 pages
 Identical to ISO 3747:2010

Standard gives guidance for the use of a series of nine international standards describing various methods for determining the sound power levels from all types of machinery and equipment. It applies only to airborne sound

ZWS ISO 3747:2010
Acoustic – Determination of sound power levels and sound energy levels of noise sources using sound pressure – Engineering/survey methods for use in situ in a reverberant environment
 Price Code: Gr. 7
 43 pages
 Identical to ISO 3747:2010

Specifies a method for determining the sound power level or sound energy level of a noise source by comparing measured sound pressure levels emitted by a noise source (machinery or equipment) mounted in situ in a reverberant environment, with those from a calibrated reference sound source. The sound power level (or in the case of noise bursts or transient noise emission, the sound energy) produced by the noise, in frequency bands of width one octave, is calculated using those measurements.

ZWS ISO 3758:2000
Textiles – Care labeling code using symbols
 Price Code: Gr. 3
 6 pages
 Identical to ISO 3758: 1991

Establishes a system of graphic symbols, intended for use in permanent marking of textiles articles, providing information essential for their proper care, and specifies the use of these symbols in care labeling.

ZWS ISO 3779:1998
Road vehicles-Vehicles identification number (VIN) Content and structure
 Price Code: Gr. 2
 3 pages
 Identical to ISO 3779: 1983

Specifies the content and structure of a vehicle identification number (VIN) in order to establish, on a world-wide basis, a uniform identification numbering system for road vehicles

ZWS ISO 3780:1998
Road vehicles – World manufacturer identifier (WMI) code
 Price Code: Gr. 1
 2 pages
 Identical to ISO3780: 1983

ZWS ISO 3781:1998
Paper and board – Determination of tensile strength after immersion in water
 Price Code: Gr. 2
 4 pages
 Identical to ISO3781: 1983

Specifies methods for the determination of tensile strength after it has immersed in water for a specified method.

ZWS ISO 3801:1998
Textiles – Woven fabrics – Determination of mass per unit length and mass per unit area
 Price Code: Gr. 2
 Identical to ISO 3801: 1977
 4 pages

Specifies methods for determination of mass per unit length and the mass per unit area of woven fabrics.

ZWS ISO 3833:1998
Road vehicles – Types – Terms and definitions
 Price Code: Gr. 5
 Identical to ISO3833: 1978
 11 pages

Defines terms relating to some types of road vehicles designated according to certain design and technical characteristics.

ZWS ISO 3837:1993
Liquid petroleum products – Determination of hydrocarbon types – Fluorescent indicator absorption method
 Price Code: Gr. 5
 8 pages
 Identical to ISO 3837:1993

Specifies a fluorescent indicator absorption method for the determination of hydrocarbon types over the concentration ranges from 5% (V/V) to 99% (V/V) aromatic hydrocarbons, 0.3% (V/V) to 55% (V/V) olefins and 1% (V/V) to 95% (V/V) saturated hydrocarbons in petroleum fractions that distill below 315°C.

ZWS ISO 3890:2009
Milk and milk products – Determination of residues of organochlorine compounds (pesticides)
Part 1: General considerations and extraction methods
 Price Code: Gr. 6
 17 pages
 Identical to ISO 3890.1:2009

Describes general considerations and specifies extraction methods for the determination of residues of organochlorine pesticides in milk and milk products.

Part 2: Test methods for crude extract purification and confirmation
 Price Code: Gr. 7
 31 pages
 Identical to ISO 3890.2:2009

Specifies test methods for the purification of the crude extracts obtained by the general methods given in ISO 3890.1| DF 75-1. It also gives recommended methods for the determination of the residues of organochlorine compounds in milk and milk products, together with confirmatory tests and clean up procedures.

ZWS ISO 3894:2010
Road Vehicles – Wheels / Rims for commercial vehicles – Test methods
 Price Code: Gr. 5
 10 pages
 Identical to ISO 3894:2005

Specifies three laboratory methods for testing certain essential strength characteristics of disc wheels and demountable rims intended for road use on commercial vehicles, buses, trailers and multipurpose passenger vehicles, as defined in ISO 3833.

ZWS ISO 3929:1999**Road vehicles – Measurement methods for exhaust gas emissions during inspection or maintenance**

Price Code: Gr. 3

6 pages

Identical to ISO 3929:1995

Establishes the test procedures for direct measurement of the concentration of exhaust gas emissions from road vehicles.

ZWS ISO 3930:2001**Instruments for measuring vehicle exhaust emissions**

Price Code: Gr. 7

27 pages

Identical to ISO 3930:2000

Specifies the metrological and technical requirements and tests for measuring instruments that serve to determine the volume fraction of certain components of the exhaust gases emanating from motor vehicles.

ZWS ISO 3932:1998**Textiles – Woven fabrics – Measurement of width of pieces**

Price Code: Gr. 2

4 pages

Identical to ISO 3932:1976

Specifies two methods for the determination of the width of pieces of woven fabrics that are in the state of relaxation obtained by exposure (free from applied tension) to the standard atmosphere for testing.

ZWS ISO 3933:1998**Textiles – Woven fabrics – Measurement of length of pieces**

Price Code: Gr. 2

3 pages

Identical to ISO 3933:1976

Specifies two methods for the determination of the length of pieces (of any length) of woven fabrics that are in the state of relaxation obtained by exposure (free from applied tension) to the standard atmosphere for testing.

ZWS ISO/TR 4011:1999**Road vehicles – Apparatus for measurement of opacity of exhaust gas from diesel engines**

Price Code: Gr. 6

17 pages

Identical to ISO /TR 4011:1976

Establishes the specifications for devices for measuring the opacity of exhaust gas from diesel engines for road vehicles, and for their installations.

ZWS ISO 4074:2003**Natural latex rubber condoms – Requirements and test methods**

Price Code: Gr. 7

46 pages

Identical to ISO 4074: Part 1:1976

Replaces ZWS ISO 4074: Part 1 – 10:1999

Amended by COR 1:2004

Specifies the minimum requirements and the test methods to be used for condoms made from natural rubber latex which applied to consumers for contraceptive purposes and to assist in the prevention of sexually transmitted infections.

ZWS ISO 4100:1998**Road vehicles – World parts manufacturer identifier (WPMI) code**

Price Code: Gr. 2

3 pages

Identical to ISO 4100:1980

Specifies the content and structure of an identifier in order to establish, on a world-wide basis, the identification of the manufacturer of parts for road vehicles.

ZWS ISO 4198:1984**Surface active agents – Detergents for washing fabrics – guide for comparative testing of performance**

Price Code: Gr. 5

10 pages

Identical to ISO 4198:1984

This International Standard establishes guidelines for carrying out comparative tests for determining the principal performance characteristics of detergents, solid or liquid, for domestic hand dishwashing which are of interest to the consumer. It lists and defines the performance characteristics considered; it gives details of the variables to be considered, indicates their significance and provides a basis for designing adequate comparative test methods.

ZWS ISO 4219:1999**Air quality – Determination of gaseous sulfur compounds in ambient air sampling equipment**

Price Code: Gr. 2

4 pages

Identical to ISO 4219

Specifies general requirements for the equipment for the sampling of ambient air in order to determine gaseous sulphur compounds, particularly sulphur dioxide.

ZWS ISO 4220:1999**Ambient air – Determination of gaseous acid pollution index – Trirometric method with indicator or potentiometric end point detection**

Price Code: Gr. 3

5 pages

Identical to ISO 4220:1983

Specifies a Thorn spectrometric method for the determination of sulphur dioxide in ambient air.

ZWS ISO 4221:1999**Air quality – Determination of mass concentration of sulfur dioxide in ambient air -**

Price Code: Gr. 4

7 pages

Identical to ISO 4221:1980

Specifies a thorn spectrophotometric methods for the determination of the mass concentration of sulfur dioxide in ambient air.

ZWS ISO 4225:2000**Air quality – General aspects - Vocabulary**

Price Code: Gr. 4

11 pages

Identical to ISO 4225:1994

Explains the meanings of a selection of terms commonly used in connection with the sampling and measurement of gases, vapours and particles for the determination of air quality.

ZWS ISO 4226:1999
Air quality – General aspects – Units of measurement

Price Code: Gr. 1
2 pages
Identical to ISO 4226:1993

Lays down the units and symbols to be used when reporting results of air quality measurements.

ZWS ISO/TR 4227:1999
Planning of ambient air quality monitoring

Price Code: Gr. 5
15 pages
Identical to ISO 4227: 1998

Establishes a classification scheme which should form a general basis for international standardization of ambient air quality monitoring and permits comparison between existing and planned ambient air quality monitoring systems.

ZWS ISO 4312:1989
Surface active agents - Evaluation of certain effects of laundering - Methods of analysis and test for unsoiled cotton control cloth

Price Code: Gr. 7
50 pages
Identical to ISO 4312: 1989

Specifies the methods to be used to determine, under strictly controlled conditions, certain characteristics of unsoiled cotton control cloth, namely intrinsic greying and yellowing, increase in organic deposit content and incineration residue, the Overall decrease in breaking strength, the decrease in breaking strength resulting from Chemical degradation of the cellulose and the decrease in breaking strength resulting from mechanical factors in laundering both before and after processing, so that certain effects of laundering can be evaluated.

ZWS ISO 4319:1977
Surface active agents - Detergents for washing fabrics - Guide for comparative testing of performance

Price Code: Gr. 7
Identical to ISO 4319: 1977

This International Standard constitutes a guide for carrying out comparative tests of fabric washing products in such a way as to realistically reflect the performance of the products likely to be used by consumers. It gives details of the variables to be considered, indicating the significance and importance of each of these variables, and provides a basis for the drawing up of adequate comparative test methods which will give a valid estimation of the performance of a fabric washing product when two or more products are compared during the same series of tests.

ZWS ISO 4427:2007
Plastics piping systems - Polyethylene (PE) pipes and fittings
Part 1: General

Price Code: Gr. 6
14 pages
Identical to ISO 4427.1: 2007
Amended by MD684

Specifies the general aspects of polyethylene (PE) piping systems (mains and service pipes) intended for the conveyance of water for human consumption, including raw water prior to treatment and water for general purpose.

Part 2: Pipes
Price Code: Gr. 6
18 pages

Identical to ISO 4427.2: 2007

Specifies the pipes made from polyethylene (PE) intended for the conveyance of water for human consumption, including raw water prior to treatment and water for general purposes.

Part 3: Fittings
Price Code: Gr. 7
31 pages
Identical to ISO 4427.3: 2007

Specifies the general aspects of fittings made from polyethylene (PE) for piping systems intended for the conveyance of water for human consumption, including raw water prior to treatment and water for general purposes.

Part 5: Fitness for purpose
Price Code: Gr. 5
7 pages
Identical to ISO 4427.5: 2007

Specifies the characteristics of the fitness for purpose of assembling piping systems made from polyethylene (PE) intended for the conveyance of water for human consumption, including raw water prior to treatment and water for general purpose.

ZWS ISO 4593:2000
Plastics – Film sheeting – Determination of thickness by mechanical scanning

Price Code: Gr. 1
Identical to ISO 4593: 1993

2 pages

Specifies a method for the determination of thickness of a sample of plastics film or sheeting by mechanical scanning.

ZWS ISO 4831:2007
Microbiology of food and animal feeding stuffs - Horizontal method for the detection and enumeration coliforms- most probable number technique

Price Code: Gr 4
Identical to ISO 4831 : 2006
Replaces ZWS ISO 5541:2005 50 pages

11 pages

Gives general guidelines for the detection and enumeration of coliforms. It is applicable to products intended for human consumption and for the feeding of animals and environmental samples in the area of food production and food handling.

ZWS ISO 4832:2007
Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of coliforms – Colony count technique.

Price Code Gr 3
Identical to ISO 4832:2006

6 pages

Gives general guidelines for the enumeration of coliforms. It is applicable to products intended for human consumption and for the feeding of animals and environmental samples, in the area of food production and food handling.

ZWS ISO 4833:2005
Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of microorganisms – Colony-count technique at 30°C.

Price Code Gr 4
9 pages
Identical to ISO 4833:2003

Specifies a horizontal method for the enumeration of microorganisms, by counting plates from ISO 4427 solid medium

after aerobic incubation at 30°C. Subject to the limitations discussed, this standard is applicable consumption or the feeding of animals.

ZWS ISO 4880:2011

Burning behavior of textiles and textile products - Vocabulary
Price Code: Gr. 5
14 pages
Identical to ISO 4880:1997

Defines terms used in testing the burning behavior of textiles and textile products.

ZWS ISO 4925:2020

Road vehicles – Specification of non-petroleum-based brake fluids for hydraulic system
Price Code: Gr. 7
24 pages
Identical to ISO 4925:2020

This document provides the specifications, requirements and test methods, for non-petroleum-based fluids used in road-vehicle hydraulic brake and clutch systems that are designed for use with such fluids and equipped with seals, cups or double-lipped type gland seals made of styrene-butadiene rubber (SBR) and ethylene-propylene elastomer (EPDM).

ZWS ISO 4926:2020

Road vehicles – Hydraulic braking systems – Non-petroleum-based reference fluid
Price Code: Gr. 2
2 pages
Identical to ISO 4926:2020

This document specifies the composition and characteristics of a reference fluid used for the compatibility testing of hydraulic braking systems and components mounted on road vehicles.

ZWS ISO 5077:1998

Textiles – Determination of dimensional change in washing and drying.
Price Code Gr 2
3 pages
Identical to ISO 5077 Part 2 1984

Specifies a method for determination of the dimensional change of fabrics, garments or other textile articles when subjected to an appropriate combination of specified washing and drying procedures.

ZWS ISO 5081:1998

Textiles – Woven fabrics – Determination of breaking strength and elongation (strip method)
Price Code: Gr. 4
8 pages
Identical to ISO 5081:1977

Specifies a method known as the “strip” method, for the determination of the breaking strength and elongation at break of woven textile fabrics, (except woven elastic fabrics).

ZWS ISO 5082:1998

Textiles – Woven fabrics – Determination of breaking strength – Grab method.
Price Code; Gr. 4
7 pages
Identical to ISO 5082:1982

Specifies a method, known as the “grab” method, for the determination of the breaking strength of woven textile fabrics.

ZWS ISO 5263:2001

Pulps – Laboratory wet disintegration
Price Code: Gr 3
Identical to ISO 5263:1997

5 pages

Specifies apparatus and a method for the laboratory wet disintegration of pulp.

ZWS ISO 5349.1:2001

Mechanical vibration – Measurement and evaluation of human exposure to hand-transmitted vibration
Part:1 General Requirements
Price code: Gr 7
25 pages
Identical to ISO 5349.1:2001

Specifies general requirements for measuring and reporting hand transmitted vibration exposure in three orthogonal axes. It defines a frequency weighting and band-limiting filters to allow uniform comparison of measurements.

Part 2: Practical guidance for measurement at the workplace

Price code: Gr 7
37 pages
Identical to ISO 5349.2:2001
Describes the precautions to be taken to make representative vibration measurements and to determine the daily exposure time for each operation in order to calculate the 8-h energy equivalent vibration total value (daily value exposure).

ZWS ISO 5517:1978

Fruits, vegetables and derived products – Determination of iron content – 1,10 – Phenanthroline photometric method
Price Code: Gr. 3
3 pages
Identical to ISO 5517:1978

Specifies a 1,10 phenanthroline photometric method for the determination of the iron content of fruits, vegetables and derived products.

ZWS ISO 5518:2007

Fruits, vegetables and derived products – Determination of benzoic acid content – Spectrometric Method
Price Code: Gr. 3
5 pages
Identical to ISO 5518:2007

Specifies a method for determining the benzoic acid content of fruits, vegetables and derived products.

ZWS ISO 5519:2008

Fruits,vegetables and derived products – Determination of sorbic acid content
Price Code: Gr. 5
9 pages
Identical to ISO 5519:2008

Specifies a method for extracting the sorbic acid present in fruits, vegetables and derived products and two techniques for determining the sorbic acid extracted.

ZWS ISO 5520:1981

Fruits, vegetables and derived products – Determination of alkalinity of total ash and of water-soluble ash
Price Code: Gr. 2
3 pages
Identical to ISO 5520:1981

Specifies a method for the determination of the alkalinity of the total ash and a method for the determination of the alkalinity of the water-soluble ash from fruits, vegetables and derived products.

ZWS ISO 5522:1981

Fruits,vegetables and derived products – Determination of total sulphur dioxide content

Price Code: Gr.2
7 pages
Identical to ISO 5522:1981

Specifies a method for the determination of the total sulphur dioxide content of fruits, vegetables and derived products, whatever the sulphur dioxide content.

ZWS ISO 5531:1998

Wheat flour – Determination of wet gluten .

Price Code: Gr 2
3 pages
Identical to ISO 5531:1978

Specifies a method for the determination of wet gluten in wheat flour.

ZWS ISO 5534:2002

Cheese and processed cheese – Determination of total solids content (Reference method)

Price Code: Gr 2
2 pages
Identical to ISO 5534:1985

Specifies a method for the determination of the total solids content of cheese and processed cheese.

ZWS ISO 5536:2009

Milk fat products – Determination of water content – Karl Fischer method

Price Code: Gr.3
8 pages
Identical to ISO 5536:2009

Specifies a method for the determination of the water content of milk fat products by the Karl Fischer (KF) method. The method is applicable to butteroil (anhydrous butteroil, anhydrous butterfat, anhydrous milk fat) with a water content not exceeding 1,0% mass fraction.

ZWS ISO 5542:2002

Milk – Determination of protein content – Amido black dye binding method (Routine method)

Price Code: Gr 3
5 pages
Identical to ISO 5542:1984

Describes the amido black dye-binding method used as routine method for the determination of the protein content of milk.

ZWS ISO 5544:2008

Caseins – Determination of fixed ash (Reference method)

Price Code: Gr. 4
5 pages
Identical to ISO 5544:2008

Specifies a reference method for the determination of the fixed ash of caseins, as a percentage by mass, obtained by acid precipitation or lactic fermentation, of ammonium caseinates, of their mixtures with rennet casein and with caseinates, and of caseins of unknown type.

ZWS ISO 5545:2008

Rennet caseins and caseinates – Determination of ash (Reference method)

Price Code: Gr 3
Identical to ISO 5545:2008
5 pages
Specifies a reference method for the determination of the ash of caseins obtained by rennet precipitation and of caseinates, with the exception of ammonium caseinate.

ZWS ISO 5547:2009

Caseins – Determination of free acidity (Reference Method)

Price Code: Gr 3
4 pages
Identical to ISO 5547:2008

Specifies a reference method for the determination of the free acidity of caseins obtained by acid precipitation or lactic fermentation and of rennet caseins

ZWS ISO 5550:2006

Cheese – Determination of fat content butyrometer for van gulik method

Price Code: Gr 5
Identical to ISO 5550:2006
8 pages

Specifies the reference method for the determination of the moisture content of all types of caseins and caseinates

ZWS ISO 5554:1998

Meat and meat products – Determination of starch content (reference method)

Price Code: Gr 3
Identical to ISO 5554:1978
5 pages

Specifies a reference method for the determination of the starch content of meat products.

ZWS ISO 5576:1997

Non-destructive testing – Industrial radiographic illuminators – Minimum requirements

Price Code: Gr 5
Identical to ISO 5576:1997
7 pages

The standard defines terms used in industrial radiographic testing

ZWS ISO 5579:2013

Non-Destructive testing – radiographic testing of metallic materials using film and X – or gamma rays – Basic Rules

Price code: Gr 5
11 pages
Identical to ISO 5579:2013

Outlines the general rules for industrial X – and gamma-radiology for flaw-detection purposes, using film techniques, applicable to the inspection of metallic products and materials

ZWS ISO 5580:1985

Non-Destructive testing – Industrial radiographic illuminators – minimum requirements

Price code: Gr 4
4 pages
Identical to ISO 5580:1985

Specifies the minimum requirements for industrial illuminators used for viewing radiographs

ZWS ISO 5725:2003**Accuracy (trueness and precision) of measurement methods and results****Part 1: General principles and definitions**

Price Code: Gr 5

17 pages

Identical to ISO 5725-1:1994

Defines values which describe in quantitative terms, the ability of a measurement method to give a correct result (trueness) or to replicate a given result (precision).

Part 2: Basic method for the determination of repeatability and reproducibility of standard measurement method.

Price Code: Gr 7

42 pages

Identical to ISO 5725-2:1994

Amplifies general principles to be observed in designing experiments for the numerical estimation of the precision of measurement methods by means of a collaborative interlaboratory experiment.

Part 3: Intermediate measures of the precision of a standard measurement method

Price Code: Gr 6

25 pages

Identical to ISO 5725-3:1994

Specifies four intermediate precision measures due to changes in observation conditions (time, calibration, operator and equipment) within a laboratory.

Part 4: Basic methods for the determination of the trueness of a standard measurement method

Price Code: Gr 6

23 pages

Identical to ISO 5725-4:1994

Provides basic methods for estimating the bias of a measurement method and the laboratory bias when a measurement method is applied.

Part 5: Alternative methods for the determination of the precision of a standard measurement method.

Price Code: Gr 7

56 pages

Identical to ISO 5725-5:1998

Provides detailed description of alternatives to the basic method of determining the repeatability and reproducibility standard deviations of a standard measurement method, namely the split-level design and a design for heterogeneous materials.

Part 6: Use in practice of accuracy values

Price Code: Gr 7

41 pages

Identical to ISO 5725-6:1994

Gives some indications of the way in which accuracy data can be used in practical situations.

ZWS ISO 5739:2005**Caseins and Caseinates – Determination of contents of scorched particles and of extraneous matter.**

Price Code: Gr 5

12 pages

Identical to ISO 5739:2003

Specifies a method for the determination of the contents of scorched particles and of extraneous matter in caseins and caseinates.

ZWS ISO 5815.2:2003**Water quality – Determination of biochemical oxygen demand after n days (BOD_n)****Part 2: Method for undiluted samples**

Price Code: Gr 5

13 pages

Identical to ISO 5815-2:2003

Specifies determination of the biological oxygen demand (BOD) of waters of undiluted samples. Applicable to all waters having biochemical oxygen demand greater than or equal to 0,5 mg/l of oxygen (the limit of determination) not exceeding 6 mg/l of oxygen.

ZWS ISO 6009:2016**Hypodermic needles for single use – Colour coding for identification**

Price Code: Gr 4

6 pages

Identical to ISO 6009:2016

Establishes a colour code for the identification of single-use hypodermic needles of designated metric size in the range 0,18mm (34 gauge) to 3,4mm (10 gauge). It applies to regular-walled, thin walled and extra-thin-walled and ultra-thin needles and to opaque and translucent colours

ZWS ISO 6078:2003**Black tea – vocabulary**

Price Code: Gr 6

22 pages

Identical to ISO 6078:1982

Provides a list of terms and definitions, applicable to the techniques of processing and assessing black tea for commerce.

ZWS ISO 6079:2003**Instant tea in solid form**

Price Code: Gr 2

2 pages

Identical to ISO 6079:1990

Specifies requirements for instant tea in solid form.

ZWS ISO 6092:1980**Dried milk – Determination of titratable acidity (Routine method)**

Price Code: Gr

3 pages

Identical to ISO 6092:1980

Specifies a routine method for the determination of the titratable acidity of all types of dried milk.

ZWS ISO 6091:2001**Dried milk – Determination of tritritable acidity (Reference method)**

Price Code: Gr 1

2 pages

Identical to ISO 6091:1980

Specifies a reference method for the determination of the tritritable acidity of all types of dried milk.

ZWS ISO 6252:2000**Plastics – Determination of environmental stress cracking (ESC)- Constant-tensile-stress-method.**

Price Code: Gr 4

8 pages

Identical to ISO 6252:1992

Specifies methods for the determination of environmental stress cracking (ESC) of plastics when they are subjected to a constant tensile force in the presence of chemical agents.

ZWS ISO 6460:1999

Road vehicles – Measurement method of gaseous pollutants emitted by motorcycles equipped with a controlled ignition engine.

Price Code: Gr 5

14 pages

Identical to ISO 6460:1981

Specifies methods of measurement of gaseous pollutants emitted by motorcycles.

ZWS ISO 6506:1995

Metallic materials – Hardness test Brinell test

Price Code: Gr 4

10 pages

Identical to ISO 6506:1981

Specifies the method for the Brinell hardness test for metallic materials.

ZWS ISO 6507:1996

Metallic materials – Hardness test – Vickers test

Part 1: HV 5 to HV 100

Price Code: Gr 6

19 pages

Identical to ISO 6507 Part 1982

Specifies the method of Vickers hardness test HV 5 to HV 100 (test forces from 49.03 to 980.7N) for metallic materials.

Part 2: HV 0,2 to less than HV 5

Price Code: Gr 6

19 pages

Identical to ISO 6507: Part 2: 1983

Specifies the method of Vickers hardness test HV 5 (test forces from 1.961 to less than 49.03 N) for metallic materials.

Part 3: Less than HV 0,2

Price Code: Gr 4

10 pages

Identical to ISO 6507:Part 3:1989

Specifies a method of determining a Vickers hardness of less than HV 0,2 (test force less than 1,961N) for metallic materials.

ZWS ISO 6508:2001

Metallic materials – Rockwell hardness test

Part 1: Test method (Scales A, B, C, D, E, F, G, H, K, N, T)

Price Code: Gr 5

15 pages

Replaces SZS ISO 6508:1996

Identical to ISO 6508-1:1999

Specifies the method for Rockwell and Rockwell superficial hardness tests for metallic material.

Part 2: Verification and calibration of testing machines (Scale A, B, C, D, E, F, G, H, K, N, T)

Price Code: Gr 4

10 pages

Identical to ISO 6508-2 1999

Specifies a method of verification of testing machines for determining Rockwell hardness.

Part 3: Calibration of reference blocks (Scales A, B, C, D, E, F, G, H, K, N, T)

Price Code: Gr4

Identical to ISO 6508-3 1999

7 pages

Specifies a method for the calibration of reference blocks to be used for the indirect verification of Rockwell hardness testing machines as specified in ZWS ISO 6508 Part 2.

ZWS ISO 6540:2002

Maize-Determination of moisture content (on milled grains and on whole grains)

Price Code: Gr 4

11 pages

Identical to ISO 6540: 1980

Specifies the reference method for the determination of the moisture content of maize grains and ground whole maize.

ZWS ISO 6591:1996

Packaging –Sacks- Description and method of measurement

Part 2: Empty sacks made from thermoplastic flexible film.

Price Code: Gr 4

11 pages

Identical to ISO 6591 Part 2 1985

Specifies a method for measuring and expressing the dimensions of empty sacks of thermoplastic flexible film. It is primarily intended for application to plastic sacks as specified in ISO 6590: Part 2.

ZWS ISO 6610:2001

Milk and milk products – Enumeration of colony- forming units of micro-organisms-Colony count technique at 30°C

Price Code: Gr 2

5 pages

Specifies a method for the enumeration of colony forming units (CFU) of micro-organisms in milk and milk products by means of a colony-count technique at 30°.

ZWS ISO 6509 Part 1:2014

Test Methods

Corrosion Of Metals and alloys- determination of Dezincification resistance Of copper alloys with Zinc

Price Code: Gr 4

7 pages

This part of ISO 6509 specifies a method for the determination of dezincification depth of copper alloys with a mass fraction of zinc more than 15%.

ZWS ISO 6611:2005

Milk and milk products – Enumeration of colony- forming units of yeasts and/ or moulds – Colony-count technique at 25°C.

Price Code : Gr 3

6 pages

Identical to ISO 6611 1992

Specifies a method for the detection and enumeration of colony-forming units (CFU) of viable yeasts and or moulds in milk and milk products by means of the colony-count technique at 25°C.

ZWS ISO 6730:2006

Milk – Enumeration of colony – forming units of psychrotrophic micro-organisms – Colony- count technique 6.5°C

Price Code: Gr 4

8 pages

Identical to ISO 6730:2005

Specifies a method for the enumeration of colony forming units (CFU) of psychrotrophic microorganisms in raw and heat – treated milk by means of the colony-count technique at 6.5°C.

ZWS ISO 6731:2002

Milk, cream and evaporated milk – Determination of total solids content (Routine method)

Price Code : Gr 2

3 pages

Identical to ISO 6731:1989

Specifies the reference method for the determination of the total solids content of milk, cream and evaporated milk.

ZWS ISO 6734:2005

Sweetened condensed milk – Determination of total solids content (Reference method).

Price Code: Gr 3

3 pages

Specifies the reference method for the determination of the total solids content of solids content of sweetened condensed milk.

ZWS ISO 6767:2000

Ambient air – Determination of the mass concentration of sulphur dioxide – Tetrachloromercurate (TCM) pararosaniline method.

Price Code: Gr 4

10 pages

Identical to ISO 6767:1990

Specifies a spectrophotometric method, known as the tetrachloromercurate method.

ZWS ISO 6768:2000

Ambient air – Determination of mass concentration of nitrogen dioxide – modified griess-saltzman method.

Price Code: Gr 4

10 pages

Identical to ISO 6768:1998

Specifies a modified Griess-Saitzman method for the determination of the mass concentration of nitrogen dioxide present in ambient air.

ZWS ISO 6770:2003

Instant tea – Determination of free-flow and compacted bulk densities

Price code: Gr 4

6 pages

Identical to ISO 6770:1982

Specifies two methods for the determination of the bulk density of instant tea.

ZWS ISO 6780:2000

General – purpose flat pallets for through transit of goods principal dimension and tolerances.

Price Code: Gr 4

7 pages

Identical to ISO 6780:1994

Specifies overall dimensions for single-deck and double –deck non-reversible pallets for through transit of goods, and dimensions related of their handling by pallet trucks, fork lift trucks and other appropriate handling equipment.

ZWS ISO 6785:2005

Milk and milk products – Detection of Salmonella ssp

Price Code:Gr 6

23 pages

Specifies a method for the detection of Salmonella ssp in milk and milk products.

ZWS ISO 6835:1981

Surface active agents – Washing Powders – Determination of total boron content – Titrimetric Method

Price Code: Gr 4

5 pages

Identical to ISO 6835:1981

Specifies a titrimetric method for the rapid determination of the total boron content of commercial washing powders, without interference from other compounds usually present. The method may be used in the presence of sequestering agents..

ZWS ISO 6855:1999

Road vehicles – Measurement methods for gaseous pollutants emitted by mopeds equipped with a controlled ignition engine.

Price Code: Gr 5

13 pages

Identical to ISO 6855:1983

Specifies the measurement methods for gaseous pollutants emitted by mopeds.

ZWS ISO 6879:2000

Air quality – Performance characteristics and related concepts for air quality measuring methods.

Price Code: Gr 3

6 pages

Identical to ISO 6879:1995

Defines terms and performance characteristics related to air quality measuring method.

ZWS ISO 6892:1996

Metallic materials – Tensile testing

Price Code: Gr. 7

37 pages

Identical to ISO 6892:1984

Specifies the method of tensile testing of metallic materials and defines the mechanical properties which can be determined thereby.

ZWS ISO 6940:2011

Textile fabrics – Burning behavior – Determination of ease of ignition of vertically oriented specimens

Price Code: Gr. 5

14 pages

Identical to ISO 6940:2004

Specifies a method for the measurement of ease of ignition of vertically oriented textile fabrics and industrial products in the form of single or multi-component fabrics when subjected to a small defined flame.

ZWS 6941:2011

Textile fabrics – Burning behavior – Measurement of flame spread properties of vertically oriented specimens

Price Code:Gr. 5

13 pages

Identical to ISO 6941:2003

Specifies a method for the measurement of flame spread times of vertically oriented textile fabrics and industrial products in the form of single or multi-component fabrics when subjected to a small defined flame.

ZWS ISO 6970:1999
Motorcycle and mopeds – Pollution tests – Chassis dynamometer bench.

Price Code: Gr 4

9 pages

Identical to ISO 6970:1994

Specifies the performance of a universal chassis dynamometer bench and a simplified bench, with a single roller, for laboratory tests of mopeds and motorcycles.

ZWS ISO 7023:1996
Packaging – Sacks – Method of sampling empty sacks for testing

Price Code: Gr 4

8 pages

Identical to ISO 7023:1983

Specifies a method of obtaining a representative sample of empty sacks for testing.

ZWS ISO 7101:2023
Healthcare organization management — Management systems for quality in healthcare organizations — Requirements

Price Code:

Gr. 7

38 pages

Identical to ISO 7101:2023

The purpose of this document is to provide organizations with requirements to deliver high-quality healthcare and specifies requirements for management systems for quality in healthcare organizations when an organization desires to:

- demonstrate its ability to consistently meet service user, stakeholder, and applicable statutory and regulatory requirements;
- enhance service user experience during the continuum of care and continually improve healthcare quality; and
- create and maintain processes that ensure timely, safe, effective, efficient, equitable, and people-centred care. The requirements of this document are based on recognized best practices and are intended to be applicable to any organization providing healthcare services, regardless of its type, size, or the services it provides.

ZWS ISO 7168:1999
Air quality – Exchange of data

Part 1: General data format

Price Code: Gr 8

49 pages

Identical to ISO 7168 part 1 1999

Specifies a general format for the exchange of air quality data and related information.

Part 2: Condensed data format

Price

Code:

Gr

6

23 pages

Identical to ISO 7168 Part 2 1999

Specifies a condensed data format for presentation of air quality data.

ZWS ISO 7211:1998
Textiles – Woven fabrics – Construction – Methods of analysis.
Part 2: Determination of number of threads per unit length.

Price Code: Gr 3

6 pages

Identical to ISO 7211:1984

Specifies three methods of the determination of the number of thread per centimetre in woven fabrics.

ZWS ISO 7212:1986
Enclosure For Protective Against Ionizing Radiation Lead Shielding Units for 50mm And 100mm Thick walls

Guidelines

Price

Code:

Gr.

7

54 pages

Identical to ISO 7212:1986

This document provides guidelines on managing risk faced by organisations. The application of these guidelines can be customized to any organization and its context. It provides a common approach to managing any type risk of risk and is not industry or sector specific

ZWS ISO 7238:2005
Butter – Determination of pH of the serum – potentiometric method.

Price Code : Gr 5

Identical to ISO 7238:2005

5 pages

Specifies a potentiometric method of the determination of the pH of the serum from all types of butter.

ZWS ISO 7251:2005
Microbiology – General guidance for enumeration of presumptive Escherichia coli – most probable number technique.

Price Code: Gr 4

Identical to ISO 7251

7 pages

Gives general guidance for the enumeration of presumptive Escherichia coli products intended for human consumption or feeding of animals, by means of the Liquid-medium culture technique and calculation of the most probable number (MPN) after incubation at 35°C or 37°C, then incubation at 45°C.

ZWS ISO 7256:2000
Sowing equipment
Part 1: Single seed drills (precision drills)

Price Code: Gr 5

14 pages

Identical to ISO 7256 part 1 1984

Specifies test methods for single seed drills (precision drills)

Part 2: Seed drills for sowing in lines

Price Code: Gr 4

12 pages

Identical to ISO 7256 part 2 1984

Specifies a test method for seed drills for sowing in lines, including seed drills attached to a basic machine.

ZWS ISO 7302:2003
Cereals and cereal products – Determination of total fat content

Price Code: Gr 2

3 pages

Identical to ISO 7302: 1982

Specifies a method for the determination of the total fat content of cereals and cereal products intended for human consumption, including baked products and pasta.

ZWS ISO 7328:2009
Milk based edible ices and ice mixes – Determination of fat content – Gravimetric method (Reference method)

Price Code: Gr 5

15 pages

Identical to ISO 7328:1999

Specifies the reference method for the determination of the fat content of most milk based edible ices and ice mixes.

ZWS ISO 7439:2011
Copper-bearing contraceptive intrauterine devices – Requirements and tests

Price Code: Gr. 4
11 pages
Identical to ISO 7439:2011

Specifies requirements and tests for single-use, copper-bearing contraceptive intrauterine devices (IUDs) and their insertion instruments.

ZWS ISO 7447:1998
Fruit and vegetable products – Determination of tin content

Price Code: Gr. 3
4 pages
Identical to ISO 7447:1998

Specifies a method for the determination of the tin content in fruit and vegetable products.

ZWS ISO 7458:2000
Glass containers – Internal pressure resistance

Price Code: Gr 4
2 pages
Identical to ISO 7458: 1984

Specifies two test methods for the internal pressure resistance of glass containers.

ZWS ISO 7513:2003
Instant tea in solid form – Determination of moisture content (loss in mass at 103°C)

Price Code: Gr 2
2 pages
Identical to ISO 7513:1990

Specifies a method for the determination of the moisture content of instant tea in solid form as received (loss in mass at 103°C.).

ZWS ISO 7514:2003
Instant tea in solid form – Determination of total ash

Price Code: Gr 2
2 pages
Identical to ISO 7514:1990

Specifies a method for the determination of the total ash of instant tea in solid form.

ZWS ISO 7516:2003
Instant tea in solid form – Sampling

Price Code: 4
4 pages
Identical to ISO 7516:1984

Specifies method of sampling instant tea in solid form. It applies to sampling from containers of all sizes.

ZWS ISO 7535:1984
Surface active agents — Detergents for domestic machine dishwashing — Guide for comparative testing of performance

Price Code: Gr. 4
9 pages
Identical to ISO 7535:1984

This International Standard establishes guidelines for carrying out comparative tests on machine dishwashing products solid or liquid, in an attempt to reflect realistically the performance of products likely to be used by consumers. It lists and defines the performance characteristics considered; it gives details of the variables to be

taken into account, indicates their significance and provides a basis for designing adequate comparative test methods.

ZWS ISO 7708 :1999
Air quality – particle size fraction definitions for health related sampling

Price Code: Gr 4
9 pages
Identical to ISO 7708:1995

Defines sampling conventions for particle size fractions for use in assessing possible health effects of airborne particles in the workplace and ambient environment.

ZWS ISO 7857:1999
Intra-uterine devices
Part 1: Determination of breaking force

Price Code: Gr 1
1 page
Identical to ISO 7857 Part 1 1983

Specifies a method for the determination of the breaking force of intra-uterine devices (IUDs) with or without thread.

Part 3: Packaging and labeling

Price Code: Gr 1
2 pages
Identical to ISO 7857: Part 3 1983

Specifies requirements for the packaging and labeling of intra-uterine devices (IUDs).

ZWS ISO 7864:2004
Sterile hypodermic needles for single use

Price Code: Gr 5
11 pages
Identical to ISO 8786:1993

Specifies requirements for sterile hypodermic needles for single use of normal diameters 0.3mm and 1.2mm.

ZWS ISO 7886:2005
Sterile hypodermic syringes for single use
Part 1: Syringes for manual use

Price Code: Gr 5
23 pages
Identical to ISO 7886: Part 1 1983

Specifies requirements for sterile single use hypodermic syringes made of plastic materials and intended for the aspiration of fluids immediately after filling.

Part 2: Syringes for use with power driven syringe pumps

Price Code: Gr 5
14 pages
Identical to ISO 7886:Part 2 1996

Specifies requirements for sterile single use hypodermic syringes of nominal capacity 5ml and above, made of plastic materials intended for use with power-driven syringe pump.

Part 3: Auto-disable syringes for fixed-dose immunization

Price Code: Gr 5
13 pages
Identical to ISO 7886: Part 3 2005

Specifies the properties and performance of sterile single-use hypodermic syringes with or without needle, made of plastic materials and stainless steel and intended for the aspiration of vaccines or for the injection of vaccines immediately after filling.

Part 4:2011 Sterile hypodermic syringes for single use – Syringes with re-use prevention failure

Price Code: Gr.4
12 pages
Identical to ISO 7886.4:2006

Specifies requirements for sterile single-use hypodermic syringes made of plastics material with or without needle and intended for the aspiration of fluids or for the injection of fluids immediately after filling and of design such that the syringe can be rendered unusable after use.

ZWS ISO 7889:2005
Yogurt – Enumeration of characteristic microorganisms colony-count technique at 37°C
Price Code: Gr 5
11 pages
Identical to ISO 7889:2003

Specifies a method for the enumeration of characteristic microorganisms in yogurt by means of the colony-count technique at 37°C.

ZWS ISO 7934:2000
Stationary source emissions – Determination of the mass concentration of sulphur dioxide - Hydrogen peroxide/barium perchlorate/Thorin method
Price Code: Gr 4
6 pages
Identical to ISO 7934:1989

Specifies a hydrogen peroxide/barium perchlorate/Thorine method for the determination of the mass concentration of dioxide emitted from combustion facilities and technical processes with negligible amount of sulphur acid.

ZWS ISO 7935:2000
Stationary source emissions – Determination of the mass concentration of sulphur dioxide – Performance characteristics of automated measuring methods.
Price Code: Gr 4
11 pages
Identical to ISO 7935:1992

Specifies a complete set of values of performance characteristics for automated measuring systems for the continuous measurement of the mass concentrations of sulphur dioxide in stationary source emissions.

ZWS ISO 7954:2005
Microbiology – General guidance of enumeration of yeasts and moulds – Colony-count technique at 30°C
Price Code: Gr 3
3 pages

Gives general guidance for the enumeration of viable yeasts and moulds in products intended for human consumption or feeding of animals by means of the colony count technique at 25°C.

ZWS ISO 7965
Packaging – sacks – drop test
Part 1:1999 Paper sacks
Price Code: Gr 4
8 pages
Identical to ISO 7965:1984

Specifies a method vertical impact testing on a filled paper sack by dropping.

Part 2: 1996 Sacks made from thermoplastic flexible film.
Price Code: Gr 5
15 pages
Identical to ISO 7965: Part 2 1993

Specifies a method of vertical impact testing on a filled sack made from thermoplastic flexible film, by dropping.

ZWS ISO 7971:1996
Cereals – Determination of bulky density, called “mass per hectoliter” (Reference method)
Price Code: Gr 4
11 pages
Identical to ISO 7971:1986

Specifies the reference method for the determination of the bulky density, called “mass per hectoliter” of cereals.

ZWS ISO 7996:2000
Ambient air – Determination of the mass concentration of nitrogen oxides – chemiluminescence method
Price Code: Gr 4
9 pages
Identical to ISO 7996:1995

Specifies a chemiluminescence method for the determination of the mass concentration of nitrogen oxides present in ambient air.

ZWS ISO 8009:2005
Mechanical contraceptives – Reusable natural and silicone rubber contraceptive diaphragms – Requirements and tests.
Price Code: Gr 6
26 pages
Identical to ISO 8009:2005

Specifies the minimum requirements and test method to be used for reusable diaphragms made from natural rubber and silicone rubber and . These are intended for contraceptive use.

ZWS ISO 8069:2006
Dried milk – Determination of content of lactic acid and lactates.
Price Code: Gr 5
13 pages
Identical to ISO 8069:2005

Specifies an enzymatic method for the determination of the lactic acid and lactates content of all types of dried milk.

ZWS ISO 8070:2007
Milk and milk products – Determination of calcium, sodium, potassium and magnesium contents – Atomic absorption spectrometric method
Price Code: Gr 6
14 pages
Identical to ISO 8070:2007

Specifies a flame atomic absorption spectrometric method for the determination of calcium, sodium, potassium and magnesium contents in milk and milk products.

ZWS ISO 8086:2005
Dairy plant – Hygiene conditions – General guidance on inspection and sampling procedures.
Price Code: Gr 5
9 pages
Identical to ISO 8088:2004

Gives general guidelines for inspection and sampling procedures to be used to check the effectiveness of cleaning and disinfection methods used in dairy plants and receiving stations, including milk collection tankers.

ZWS ISO 8113:2000**Glass containers – Resistance to vertical load**

Price Code: Gr 2

2 pages

Identical to ISO 8113:1985

Specifies a method of inspection and determination of the resistance of glass containers to external force in the direction of axis. The pass tests are intended especially for containers the resistance of which is specified.

ZWS ISO 8156:2006**Dried milk and dried milk products – determination of insolubility index.**

Price Code: Gr 4

10 pages

Identical to ISO 8156:2005

Specifies a method of determining the insolubility index, as a means of assessing the solubility of dried whole milk, dried partly skimmed milk and dried skimmed milk, whether non instant or instant.

ZWS ISO 8157:2015**Fertilizers and soil conditioners - Vocabulary**

Price Code: Gr 6

22 pages

Identical to ISO 8157:2015

Defines terms relating to fertilizers and soil conditioners.

ZWS ISO 8186:2000**Ambient air – Determination of the mass concentration of carbon monoxide – Gas chromatographic method**

Price Code: Gr 6

8 pages

Identical to ISO 8186:1989

Specifies a gas chromatographic for the determination of the mass concentration of carbon monoxide in ambient air from a variety of sources.

ZWS ISO 8196:2009**Milk – Definition of the overall accuracy of alternative methods of milk analysis****Part 1: Analytical attributes of alternative methods**

Price Code: Gr .5

13 pages

Identical to ISO 8196.1:2009

Specifies various performance characteristics that constitute and constitute and serve to characterize the overall accuracy of an analytical method. It furthermore establishes general principles for the design of experiments and gives guidelines for the procedures to be used to evaluate these characteristics quantitatively.

Part 2: Calibration and quality control in the dairy laboratory

Price Code: Gr. 6

25 pages

Gives guidelines for the calibration of instruments and quality control procedures for milk analysis in dairy laboratories.

Part 3: Protocol for the evaluation and validation of alternative quantitative methods of milk analysis

Price Code: Gr 7

45 pages

Identical to ISO 8196.3:2009

Specifies A protocol for the evaluation and validation of alternative quantitative methods of milk analysis. The protocol is applicable to all milk components including somatic cells.

ZWS ISO 8214:1985**Surface active agents — Washing powders — Determination of inorganic sulfates — Gravimetric method**

Price Code: Gr. 4

5 pages

Identical to ISO 8214:1985

This International Standard specifies a gravimetric method for the determination of inorganic sulfates content of all types of commercial washing powders, without interference from other compounds usually present.

ZWS ISO 8215:1985**Surface active agents — Washing powders — Determination of total silica content — Gravimetric method**

Price Code: Gr. 4

4 pages

Identical to ISO 8215:1985

This International Standard specifies a gravimetric method for the determination of total silica content of all types of commercial washing powders, except those which contain acid insoluble substances other than silica.

ZWS ISO 8260:2008**Milk and milk products – determination of organochlorine pesticides and polychlorobiphenyls – method using capillary gas – liquid chromatography with electron capture detection**

Price Code: Gr 5

14 pages

Identical to ISO 8260:2008

Specifies a method for the determination of the contents of individual organochlorine pesticides (OCPs) and polychlorinated biphenyls (PCBs) in milk, evaporated milk, sweetened condensed milk, powdered milk products, butter and butterfat, cheese and other milk products.

ZWS ISO 8212:1986**Soaps and detergents — Techniques of sampling during Manufacture**

Price Code: Gr 6

15 pages

Identical to ISO 8212:1986

This International Standard describes the general techniques of taking and preparing samples of soaps and detergents, for use in conjunction with a previously established sampling plan. This International Standard is only applicable during manufacture of soaps and detergents and only at the time of packaging (small and large packages) and it does not apply when a standard has been elaborated for a specific product. In the case of individual packages, this International Standard defines the techniques of preparing a bulk sample and a final sample.

ZWS ISO 8317:2003**Child-Resistant packaging – Requirement and testing procedures for reclosable packages**

Price Code: Gr.6

13 pages

Identical to ISO 8317:2003

Specifies the requirements and test methods for reclosable packages designated as resistant to opening by children.

ZWS ISO/TR 8357:1998

Road vehicles – Instructions for the implementation of the assignment of world manufacturer identifier (WMI) codes for vehicle identification number (VIN) systems and for world parts manufacturer identifier (WPMI) codes.

Price Code: Gr 2

3 pages

Identical to ISO/TR 8357:1996

Gives instructions relating to the requesting and assignment of the WMI codes and WPMI codes according to ISO 3780 and ISO 4100 and for the maintenance of the master assignment list and files.

ZWS ISO 8381:2009

Milk – Based infant foods – Determination of fat content – Gravimetric method (Reference method)

Price Code: Gr 5

15 pages

Identical to ISO 8381:2008

Specifies the reference method for the determination of the fat content of milk based infant foods.

ZWS ISO 8518:200

Workplace air – Determination of particulate lead and lead compounds – Flame atomic absorption spectrometric method.

Price Code: Gr 4

10 pages

Identification to ISO 8518:1990

Specifies a flame atomic absorption spectrometric method for the determination of the time weighted average mass concentration of particular lead and lead compounds in workplace air.

ZWS ISO 8537:2016

Sterile single use syringes , with or without needle for insulin.

Price Code: Gr 7

19 pages

Identical to ISO 8537:2016

ZWS ISO 8583:2003

Financial transaction card originated messages – interchange message specification

Part 1: Messages, data elements and code values

Price Code: Gr 10

194 pages

Identical to ISO 8583.1:2003

Specifies a common interface by which financial transactions card-originated messages can be interchanged between acquirers and card issuers.

Part 3: Maintenance procedures for messages, data elements and code values

Price Code: Gr 3

194 pages

Identical to ISO 8583.3:2003

Establishes the role of the maintenance agency (MA) and specifies the procedure for adding messages and data elements to ISO 8583-1 and to codes listed in annex A of ISO 8583-1

ZWS ISO 8601: Part 1: 2019

Data elements and interchange formats – Information interchange – Representation of dates and times: Basic rules

Price Code:

Gr.7

35 pages

Identical to ISO 8601: Part 1: 2019

This document specifies representations of dates of the Gregorian calendar and times based on the 24-hour clock, as well as composite elements of them, as character strings for use in information interchange. It is also applicable for representing times and time shifts based on Coordinated Universal Time (UTC). This document excludes the representation of date elements from non-Gregorian calendars or times not from the 24-hour clock. This document does not address character encoding of representations specified in this document.

ZWS ISO 8611:2000

General – purpose flat pallet for through transit of goods – Test methods.

Price Code: Gr 6

17 pages

Identical to ISO 8611:1991

Specifies test methods for general – purpose flat pallets.

ZWS ISO 8672:2000

Air quality – Determination of the number concentration of airborne inorganic fibres by phase contrast optical microscopy – Membrane filter method

Price Code: Gr 7

25 pages

Identical to ISO 8672:1993

Specifies the determination of the number of airborne inorganic fibres by phase contrast optical microscopy using the membrane filter method.

ZWS ISO 8756:2000

Air quality – Handling of temperature, pressure and humidity data

Price Code: Gr 2

4 pages

Identical to ISO 8756:1994

Describes procedures for adjusting air quality measurements for changes in temperature, pressure and humidity during the sampling.

ZWS ISO 8760:2000

Workplace air – Determination of mass concentration of carbon monoxide – Method using detector tubes for short term sampling with direct indication.

Price Code: Gr 4

Identical to ISO 8756:1990

Specifies a method for the determination of the mass concentration of carbon monoxide present in the air at work places.

6 pages

ZWS ISO 8761:2000

Workplace air – Determination of mass concentration of nitrogen dioxide – Method using detector tubes for short-term sampling with direct indication.

Price Code: Gr 4

Identical to ISO 8761:1989

Specifies a method for the determination of the mass concentration of nitrogen dioxide present in the air at work places.

8 pages

ZWS ISO 8762:2000

Workplace air – Determination of vinyl chloride – Charcoal tube.

Price Code: Gr 4

9 pages

Identical to ISO 8762:1988

Specifies a charcoal tube/gas chromatographic method for the determination of the vinyl chloride monomer concentration in workplace air.

ZWS ISO 8791
Paper and board – Determination of roughness/smoothness (air leak methods)
Part2:1999:Bendtsen method
 Price Code: Gr 4
 8 pages
 Identical to ISO 8791: Part 2 1990

Specifies a method for the determination of the toughness of paper and board using the Bendtsen apparatus.

Part 3:1999: Sheffield method
 Price Code: Gr 4
 9 pages
 Identical to ISO 8791:Part 3:1990

Specifies a method for the determination of the roughness of paper and board using the Sheffield apparatus.

Part 4:1999:Print-surf method
 Price Code: Gr 4
 12 pages

Specifies a method of determining the roughness of paper and board using the print- surf apparatus.

ZWS ISO 8870:2009
Milk and milk based products – Detection of thermonuclease produced by coagulase – Positive staphylococci
 Price Code: Gr 3
 7 pages
 Identical to ISO 8870:2006

Specifies a method for the detection of heat-stable DNase (thermo-nuclease) produced by coagulase-positive staphylococci in milk and milk-based products.

ZWS ISO 8967:2006
Dried milk and dried milk products – determination of bulk density
 Price Code: Gr 4
 6 pages
 Identical to ISO 8967:2005

Specifies a method for the determination of the bulk density of whole milk, dried partly skimmed milk and dried skimmed milk as defined in FAO/WHO standard A - 5¹⁾, whether non instant or instant.

ZWS ISO 8968.4:2016
Milk and milk products – Determination of nitrogen content. Part 4: Determination of protein and non-protein nitrogen content and true protein content calculation (Reference method)
 Price Code: Gr. 4
 11 pages
 Identical to ISO 8968.4/IDF20-4:2016
 This standard specifies a method for the direct and indirect determination of the protein nitrogen content of liquid, whole or skimmed milk

ZWS ISO 9000:2015
Quality management systems - Fundamentals and vocabulary
 Price Code: Gr.10
 58 pages
 Identical to ISO 9000:2015
 Replaces ZWS ISO 9000:2006

Describes fundamental concepts and principles of quality management which are universally applicable to organizations seeking sustained success.

ZWS ISO 9001:2015
Quality management systems - Requirements
 Price Code: Gr.10
 35 pages
 Replaces ZWS ISO 9001:2008
 Identical to ISO 9001:2015

Specifies requirements for quality management systems.

ZWS ISO 9002:2016
Quality management systems – Guidelines for the Application of ISO 9001:2015
 Price Code: Gr. 10
 50 pages
 Identical to ISO 9002:2016
 This standard provides guidance on the intent of the requirements in ISO 9001:2015, with examples of possible steps an organization can take to meet the requirements.

ZWS ISO 9004:2018
Quality management - Quality of an organization – Guidance to achieve sustained success
 Price Code: Gr.10
 60 pages
 Replaces ZWS ISO 9004-1
 Identical to ISO 9004:2018

Provides guidelines for enhancing an organization's ability to achieve sustained success. This guidance is consistent with the quality management principles given in ISO 9001:2015. This document provides a self- assessment tool to review the extent to which the organization has adopted the concepts in this document.

ZWS ISO 9096:2000
Stationary source emissions – Determination of concentration and mass flow rate of particulate material in gas carrying ducts – Manual gravimetric method.
 Price Code: Gr. 7
 30 pages
 Identical to ISO 9096:1992

Specifies a manual gravimetric method for the measurement of the concentration and mass flow rate of particulate matter in a moving gas stream in confined spaces as ducts, chimneys and flues.

ZWS ISO 9227:2017
Corrosion Tests In Artificial Atmospheres –Salt Sprays
 Price Code: Gr. 6
 18 pages
 Identical to ISO 9227:2017

Specifies the apparatus ,the reagents and the procedure to be used in conducting the neutral salt sprays (NSS),acetic acid salt spray (AASS) and copper-accelerated acetic acid salt spray (CASS) tests for assessment of the corrosion resistance of metallic materials, with or without permanent or temporary corrosion protection.

ZWS ISO 9231:2008
Milk and milk products determination of benzoic and sorbic acid contents
 Price Code: Gr. 5
 9 pages
 Identical to ISO 9231:2008

Specifies a method for the determination of the benzoic and sorbic acid contents in milk and milk. The method is applicable to milk,dried milk,yogurt and other fermented milks and cheese and

processed cheese and is suitable for measuring the contents of both compounds at levels of more than 5 mg/kg

ZWS ISO 9233

Cheese, cheese rind and processed cheese – Determination of natamycin content

Part 1:2007 Molecular absorption spectrometric method for cheese rind

PriceCode:Gr.5

12 pages

Identical to ISO 9233.1:2007

Specifies a method for the determination in cheese rind of natamycin mass fraction of above 0,5 mg/kg and surface = area related natamycin mass of above 0.03 mg/dm², cheese rind and processed cheese of above 0,5 mg/kg and of the surface-area –related natamycin mass in cheese rind of above 0,03mg/dm

Part 2: High –performance liquid chromatographic method for cheese , cheese rind and processed cheese

Price Code: Gr. 5

12 pages

Identical to ISO 9233.2:2007

Specifies a method for the determination of natamycin mass fraction in cheese,cheese rind and processed cheese of above 0,5 mg/kg and of the surface-area –related natamycin mass in cheese rind of above 0,03mg/dm

ZWS ISO/TR 9310:1999

Road vehicles – Smoke measurement of compression – Ignition (diesel) engines – Survey of short in-service tests.

Price Code: Gr. 6

18 pages

Identical to ISO/TR 9310:1987

Describes and assesses the different simplified short tests for the determination of the exhaust smoke emission of diesel engines of vehicles in service.

ZWS ISO 9359:2000

Air quality – Stratified sampling method for assessment of ambient air quality

Price Code: Gr 4

12 pages

Identical to ISO 9359:1989

Specifies a method for the assessment of certain aspect of ambient air quality in terms of percentiles and means using the principles of stratified sampling.

ZWS ISO 9459:1999

Solar heating – Domestic water heating systems

Part 2: Outdoor test methods for system performance characterization and yearly performance prediction of solar systems

Price Code: Gr 8

61 pages

Identical to ISO 9459:Part 2:1995

Establishes test procedures for characterizing the performance of solar domestic water heating system with in-tank auxiliary boosting, and for predicting annual performance in any given climatic condition.

Part 3: Performance test for solar plus supplementary systems

Price Code: Gr 7

61 pages

Identical to ISO 9459:Part 3:1997

Establishes test procedures for characterizing the performance of solar domestic water heating system with in-tank auxiliary boosting,

and for predicting annual performance in any given climatic condition.

ZWS ISO 9486:2000

Workplace air – Determination of vaporous chlorinated hydrocarbons – Charcoal tube/solvent desorption/gas chromatographic method.

Price Code: Gr. 4

12 pages

Identical to ISO9486:1991

Specifies a charcoal tube or gas chromatographic method for the determination of the concentration of vaporous chlorinated hydrocarbons in workplace air.

ZWS ISO 9487:2000

Workplace air – Determination of vaporous aromatic hydrocarbons – Charcoal tube/solvent desorption/gas chromatographic method

Price Code: Gr. 4

12 pages

Identical to ISO 9487:1991

Specifies charcoal tube or gas chromatographic method for the determination of the concentration of vaporous aromatic hydrocarbons in workplace air.

ZWS ISO 9622:2013

Milk and liquid milk products – Guidelines for the application of mid-infrared spectrometry

Price Code: Gr. 6

16 pages

Identical to ISO 9622:2013

Gives guidelines for the quantitative compositional analysis of milk and liquid milk products such as raw milk, processed milk, cream and whey by measurement of the absorption of mid-infrared radiation.

ZWS ISO 9626:2016

Stainless steel needle tubing for manufacture of medical devices – Requirements and test methods

Price Code: Gr. 6

22 pages

Identical to ISO 9626:2016

Provides requirements and test methods for the tubes manufactured for the needles as component used in medical devices. Specifies the dimensions and mechanical properties of steel tubing of designated metric sizes 3.4 mm (10 Gauge) to 0,18mm (34 Gauge).

ZWS ISO 9712:2013

Non - destructive testing – Qualification and certification of NDT personnel

Price

Code:

Gr.7

37pages

Identical to ISO 9712:2012

Specifies requirements for principles for the qualification and certification of personnel who perform industrial non-destructive testing (NDT).

ZWS ISO 9768:2003

Tea – determination of water extract

Price Code: Gr. 2

3 pages

Specifies a method for the determination of water extract from tea.

ZWS ISO 9835:2000
Ambient air – Determination of a black smoke index.
Price Code: Gr. 4
9 pages
Identical to ISO 9835:1993

Specifies a method for measuring the black smoke index of an ambient air sample.

ZWS ISO 9852:2007
Unplasticized poly(vinyl chloride) (PVC-U) pipes — Dichloromethane resistance at specified temperature (DCMT) — Test method
Price Code: Gr. 5
6 pages
Identical to ISO 9852:2007

This International Standard specifies a method for determining the resistance of unplasticized poly (vinyl chloride) (PVC U) pipes to dichloromethane at a specified temperature (DCMT). It is applicable to all PVC U pipes, irrespective of their intended use. The method can be used as a rapid means of quality control during manufacture.

ZWS ISO 9855:2000
Ambient air – Determination of the particular lead content of aerosols collected on filters – Atomic absorption spectrometric method
Price Code: Gr. 4
7 pages
Identical to ISO 9855:1993

Specifies a method based on acid digestion and atomic absorption spectrometry for the chemical analysis of lead samples collected on filters from ambient air.

ZWS ISO 9874:2009
Milk determination of total phosphorus content – Method using molecular absorption spectrometry
Price Code: Gr. 3
7 pages
Identical to ISO 9874:2006

Specifies a molecular absorption spectrometric method for the determination of the total phosphorus content of milk.

ZWS ISO 9884:2003
Tea sacks
Part 1: Reference sack for palletized and containerized transport of tea
Price Code: Gr. 4
6 pages

Specifies the materials, construction and dimensions of a reference sacks suitable for the palletized and containerized transport of tea.

Part 2: Performance specification for sacks for palletized and containerized transport of tea.
Price Code: Gr. 4
12 pages
Identical to ISO 9884-1:1999
Specifies requirements and tests to determine the suitability of sack for the palletized and containerized transport of tea on standard pallets of standard unit load size in standard contain.

ZWS ISO 9934:2016
Non-destructive testing – magnetic particle testing
Part 1: General principles
Price Code: Gr. 5
14 pages
Identical to ISO 9934:2013

Specifies the surface preparation of the part to be tested, magnetization techniques requirements and application of the detection media and the recording and interpretation of results..

Part 2: Detection media
Price Code: Gr. 7
21 pages

Specifies the significant properties of magnetic particle testing products (including magnetic ink, powder, carrier liquid, contrast aid paints) and the methods for checking their properties.

Part 3: Equipment
Price Code: Gr. 5
12 pages

Specifies the properties to be provided by the equipment supplier, minimum requirements for application and the method of measuring certain parameters.

ZWS ISO 10001:2018
Quality management – Customer satisfaction – Guidelines for codes of conduct for organizations
Price Code: Gr.10
20 pages

Provides guidance for planning, designing, developing, implementing, maintaining and improving customer satisfaction codes of conduct. It is applicable to product related codes containing promises made to consumers by an organization concerning its behavior. Such promises and related provisions are aimed at enhanced customer satisfaction.

ZWS ISO 10002:2018
Quality management – Customer satisfaction – Guidelines for complaints handling in organizations.
Price Code: Gr. 10
29 pages
Identical to ISO 10002:2018
Supersedes ZWS ISO 10002:2004

Provides guidance on the process of complaints handling related to products within an organization, including planning, design, operation, maintenance and improvement.

ZWS ISO 10003:2018
Quality management – Customer satisfaction – Guidelines for dispute resolution external to organizations
Price Code: Gr. 10
35 pages
Identical to ISO 10003:2018
Supersedes ZWS ISO 10003:2009

Provides guidance for an organization to plan, design, develop, operate, maintain and improve an effective and efficient dispute-resolution process for complaints that have been resolved by the organization.

ZWS ISO 10004:2018
Quality management – Customer satisfaction – Guidelines for monitoring and measuring
Price Code: Gr. 10
35 pages
Identical to ISO 10004:2018
Replaces ZWS ISO 10004:2012

Provides guidance in defining and implementing processes to monitor and measure customer satisfaction. Intended for use by organizations regardless of type, size or product provided. The focus of this international standards is on customers external to the organization.

ZWS ISO 10005:2018
Quality management – Guidelines for quality plans

Price Code: Gr. 10
28 pages
Identical to ISO 10005:2018
Replaces ZWS ISO 10005:2005

Contains guidelines to assist suppliers in the preparation, review acceptance and revision of quality plans.

ZWS ISO 10006:2017
Quality Management
Guidelines for quality management in projects

Price Code: Gr. 10
34 pages
Supersedes ZWS ISO 10006:2003

This document gives guidelines for the application quality management in projects. It is applicable to organizations working on projects of varying complexity, small or large, of short or long duration, being an individual project to being part of a programme or portfolio of projects, in different environments, and irrespective of the kind of product/service or process involved, with the intention of satisfying project interested parties by introducing quality management in projects.

ZWS ISO 10007:2017
Quality management systems – Guidelines for configuration management

Price Code: Gr. 5
12 pages
Identical to ISO 10007:2017
Supersedes ZWS 10007:2003

Gives guidance on the use of configuration a management within an organization applicable to the support of products and services from concept to disposal.

ZWS ISO 10008:2022
Quality management – Customer satisfaction – Guidance for business-to-consumer electronic commerce transactions

Price Code: Gr. 8
34 pages
Identical to ISO 10008:2022
Supersedes ZWS 10008:2013

This document gives guidance on planning, designing, developing, implementing, maintaining and improving an effective and efficient business-to-consumer electronic commerce transaction (B2C ECT) system within an organization. It is applicable to any organization engaged in, or planning to be engaged in, a B2C ECT, regardless of size, type and activity. The focus of this document is on organizations that directly offer and provide products and services to consumers. This document aims to enable organizations to set up a fair, effective, efficient, transparent and secure B2C ECT system, in order to enhance consumers' confidence in B2C ECTs and increase the satisfaction of consumers. It is aimed at B2C ECTs concerning consumers as a sub-set of customers. The guidance given in this document can complement an organization's quality management system.

ZWS ISO 10010:2022
Quality management - Guidance to understand, evaluate and improve organizational quality culture

Price Code: Gr. 6
19 pages
Identical to ISO 10010:2022
This document gives guidance on the evaluation, development and improvement of organizational quality culture to help an organiza-

tion to achieve sustained success. This document takes into account the fundamental concepts and quality management principles, with specific focus on people engagement and leadership. The recommendations in this document are generic and are intended to be applicable to any organization, regardless of its size, industry, location, maturity or the products and services it provides.

ZWS ISO 10012:2003
Measurement management systems – Requirements for measurement processes and measuring equipment.

Price Code: Gr. 6
19 pages
Identical to ISO 10012:2003

Specifies generic requirements and provides guidance for the management of measurement processes and metrological confirmation of measuring equipment used in support and demonstrate compliance with metrological requirements.

ZWS ISO 10013:2021
Quality management systems – Guidance for documented information

Price Code: Gr. 6
14 pages
Identical to ISO 10013:2001
Supersedes ZWS ISO 10013:2012

Provides guidelines for the development and maintenance of the documented information necessary to support an effective quality management system, tailored to the specific needs of the organization. This document can also be used to support other management systems, eg environmental or occupational health and safety management systems.

ZWS ISO 10014:2009
Quality management – Guidelines for realizing financial and economic benefits

Price Code: Gr.7
25 pages
Identical to ISO 10014:1998

Provides guidelines for realizing financial and economic benefits from the application of the ISO 9000 quality management principles.

ZWS ISO/TR 10015:2019
Quality management – Guidance for competence management and people development

Price Code: Gr 5
8 pages
Identical to ISO 10015:2019
Supersedes ZWS ISO/TR 10015:2000

Gives guidelines for an organization to establish, implement, maintain and improve systems for competence management and people development to positively affect outcomes related to the conformity of products and services and the needs and expectations of relevant interested parties.

ZWS ISO/ TR 10017:2003
Guidance on statistical techniques for ISO 9001:2000

Price Code: Gr.7
26 pages
Identical to ISO/ TR 10017:2003

Provides guidance of the selection of appropriate statistical techniques that may be useful to an organization in developing, implementing or maintaining a quality system in compliance with ISO 9001.

ZWS ISO 10018:2020
Quality Management – Guidance on people engagements
Price Code: Gr. 6
12 pages
Identical to ISO 10018:2020
Supersedes ZWS ISO 10018:2012

Provides guidance on engaging people in an organization's quality management system and on enhancing their involvement and competence within it. This international standard is applicable to any organization, regardless of size, type or activity.

ZWS ISO/TR 10019:2005
Guidelines for the selection of quality management systems consultants and use of their services
Price Code: Gr. 5
13 pages
Identical to ISO 10019:2005

Provides guidance for the selection of quality management system consultants and the use of their services.

ZWS ISO TS 10020:2022
Quality management Systems - Organizational change management - Processes
Price Code: Gr. 6
41 pages
Identical to ISO TS 10020:2022

This document specifies processes that can be used to govern, manage and implement organizational change management (OCM) for organizations, projects or smaller activities. It comprises generic process descriptions that describe the OCM processes. Supporting diagrams describing the processes are also provided. This document is applicable, but not limited, to change sponsors, change agents, change team members and project managers, particularly those responsible for governing, managing and implementing organizational change.

ZWS ISO 10272-1:2017
Microbiology of the food chain – Horizontal method for the detection and enumeration of Listeria monocytogenes and of campylobacter SPP
Part 1: Detection method
Price Code: Gr. 7
21 pages
Identical to ISO 10272-1:2017

Specifies a horizontal method for the detection by enrichment or direct plating of campylobacter spp.

ZWS ISO 10302:2011
Acoustics – Measurement of airborne noise emitted and structure-borne vibration induced by small air-moving devices.
Part 1: Airborne noise measurements
Price Code: Gr 7
37 pages
Identical to ISO 10302.1:2011
Specifies methods for measuring the airborne noise emitted by small air-moving devices (AMD), such as those for cooling electronic, electrical, and mechanical equipment where the sound power level of the AMD is of interest.

Part 2: Structure-borne vibration measurement
Price Code: Gr 6
25 pages
Identical to ISO 10302.2:2011

Covers vibration levels from small air-moving devices with mounting footprints of less than 0.48m x 0,90 m for the full size test ple-

num defined in part 1 and less than 0.18m x 0.3m for the half-size plenum.

ZWS ISO 10313:2000
Ambient air – Determination of the mass concentration of ozone – chemiluminescence method.
Price Code: Gr 4
8 pages
Identical to ISO 10396:1993

Specifies a chemiluminescence method for the determination of the mass concentration of ozone in ambient air.

ZWS ISO 10396:2000
Stationary source emissions – Sampling for the automated determination of gas concentrations.
Price Code: Gr 6
15 pages
Identical to ISO 10396:1993

Specifies procedures and equipment that will permit, within certain limits, representative sampling for the automated determination of gas concentrations of effluent gas streams.

ZWS ISO 10397:2000
Stationary source emissions – Determination of asbestos plant emission method by fibre count measurement.
Price Code: Gr 6
19 pages
Identical to ISO 10397:2000

Specifies a method, using a fibre count technique, for the assessment of fibre concentrations in flowing gas streams in ducts, chimneys or flues from industrial process using asbestos.

ZWS ISO 10555:2005
Intravascular catheters – Sterile and single use catheters
Part 1: General requirements
Price Code: Gr 4
9 pages
Identical to ISO 10555-1:1995

Specifies general requirements for intravascular catheters, supplied in the sterile condition and intended for single use, for any application.

Part 2: Angiographic catheters
Price Code: Gr 3
5 pages
Identical to 10555-2:1996

Specifies requirements for angiographic catheters supplied in the sterile condition, and intended for single use.

Part 3: Central venous catheters
Price Code: Gr 3
5 pages
Identical to ISO 10555-3:1996

Specifies requirements for central venous catheters supplied in the sterile condition and intended for single use.

Part 4: Balloon dilatation catheters
Price Code: Gr. 4
6 pages
Identical to ISO 10555-5:1996

Specifies requirements for balloon dilatation catheters in the sterile condition and intended for single use.

Part 5: Over-needle peripheral catheters

Price Code: Gr 4
 Identical to ISO 10555.5:2013
 10 pages
 Replaces ISO 10555-5:1996

Specifies requirements for over the needle peripheral intravascular catheters, intended for accessing the peripheral vascular system, supplied in the sterile condition and intended for single use.

Part 6:2015 Subcutaneous implanted ports

Price Code: Gr 6
 Identical to ISO 10555.6:2015
 14 pages

Specifies requirements, performance, and user safety issues related to subcutaneous implanted ports and catheters for intravascular long term use supplied in sterile condition and intended for single use.

ZWS ISO 10667:2020**Assessment service delivery- Procedures and methods to assess people in work and organisational settings****Part 1: Requirements for the client**

Price Code: Gr 7
 24 pages
 Identical to ISO 10667-1:2020

Establishes requirements and guidance for clients working with one or more service provider(s) to carry out the assessment of an individual, a group or an organization for work related purposes. The document enables the client to base its decisions on sound assessment results.

ZWS ISO 10667:2020**Assessment service delivery- Procedures and methods to assess people in work and organisational settings****Part 2: Requirements for service providers**

Price Code: Gr 7
 24 pages
 Identical to ISO 10667-2:2020

Establishes requirements and guidance for clients working with one or more service provider(s) to carry out the assessment of an individual, a group or an organization for work related purposes. The document enables the client to base its decisions on sound assessment results.

ZWS ISO 10727:2003**Tea and instant tea in solid form – Determination of caffeine content – Method using high-performance liquid chromatography.**

Price Code: Gr 4
 8 pages
 Identical to ISO 10727:2002

Specifies a method for the determination by high-performance liquid chromatography (HPLC) of the caffeine content of teas and instant teas. Applicable to green tea, black tea and decaffeinated tea products.

ZWS ISO 10845**Construction Procurement****Part 1: 2010 Processes , Methods and Procedures**

Price Code: Gr.9
 111 pages
 Identical to ISO 10845.1:2010

Describes processes,methods and procedures for the establishment within an organization of a procurement system that is fair,equitable,transparent,competitive and cost-effective.

Part 2: 2011 Formatting and compilation of procurement documentation

Price Code: Gr. 7
 41 pages
 Identical to ISO 10845.2:2011

Establishes in respect of supply ,service and engineering and construction works contracts at both main and subcontract levels.

Part 3: 2011 Standard conditions of tender

Price Code:Gr. 7
 59 pages
 Identical to ISO 10845.3:2011

Sets out standard conditions of tender which bind the employer and tenderer to behave in a particular manner,establish what a tenderer is required to do in order to submit a compliant tender,make known the evaluation criteria to tenders and establish the manner in which the employer conducts the process of offer and acceptance and provide the necessary feedback to tenderers on the outcomes of the process.

Part 4: 2011 Standard conditions for the calling for expressions of interest

Price Code: Gr. 6
 20 pages
 Identical to ISO 10845.4:2011

Sets out standard conditions for the calling for expressions of interest which bindthe employer and respondent to behave in a particular manner,establish what is required for a respondent to submit a compliant submission,make known to respondents the evaluation criteria and establish the manner in which the employer conducts the process of calling for expressions of interest.

Part 5: 2011 Participation of targeted enterprises in contracts

Price Code: Gr.7
 48 pages
 Identical to ISO 10845:2011

Establishes a key performance indicator in the form of a contract participation goal (CPG),relating to the engagement of targeted enterprises on a contract for the provision of goods,services or engineering and construction works.A CPG may be used to measure the outcomes of a contract in relation to the engagement of targeted enterprises or to establish a target level of performance for the contractor to achieve or exceed in the performance of a contract.

Part 6: 2011 Participationof targeted partners in joint ventures in contractors

Price Code: Gr. 7
 42 pages
 Identical to ISO 10845.6:2011

Establishes a key performance indicator,in the form of a contract participation goal ,relating to the engagement of targeted partners in a joint venture on a contract for the provision of goods, services or engineering and construction works.

Part 7: 2011 Participation of local enterprises and labour in contracts

Price Code: Gr. 7
 39 pages
 Identical to ISO 10845.7:2011

Establishes a key performance indicator in the form of a contract participation goal (CPG) relating to the engagement of local enterprises and labour on a contractfor the provision of services or engineering and construction works.

Part 8: 2011 Participation of targeted labour in contracts

Price Code: Gr. 6
 27 pages
 Identical to ISO 10845.8:2011

Establishes a key performance indicator ,in the form of a contract participation goal(CPG),relating to the engagement of targeted labour on a contract for the provision of services or engineering and construction works.

ZWS ISO 11070:2014

Sterile single-use intravascular introducers, dilators and guidewires
 Price Code: Gr. 7
 25 pages
 Identical to ISO 11070:2014

Specifies requirements for introducer needles, introducer catheters, sheath introducers, guidewires and dilators supplied in the sterile condition, and intended for single use in conjunction with intravascular catheters specified in ISO 10555.1.

ZWS ISO 11093

Part 9:2000 Paper and board – Testing of cores part 9: Determination of flat crush resistance.
 Price Code: Gr 1
 2 pages

Specifies a method for determining the maximum flat crush resistance of wound paper and board cores.

ZWS ISO 11133:2014

Microbiology of food, animal feed and water – Preparation, Production, storage and performance testing of culture media
 Price Code: Gr 9
 91 pages
 Identical to ISO 11133:2014

Specifies the requirements for the preparation of culture media intended for the microbiological analysis of food, animal feed, and samples from the food or feed production environment as well as all kinds of water intended for consumption or used in food production.

ZWS ISO 11286:2003

Tea – Classification of grades by particle size analysis.
 Price Code: Gr 3
 4 pages
 Identical to ISO 10727:2002

Specifies a method for the classification of grades of tea according to an analysis of their particle size. May not be suitable for blends of tea.

ZWS ISO 11290:2017

Microbiology of the food chain – Horizontal method for the detection and enumeration of Listeria monocytogenes and Listeria SPP
Part 1: Detection method
 Price Code: Gr.7
 34 pages
 Identical to ISO 11290

Specifies a horizontal method for the detection of L. monocytogenes and the detection of Listeria spp. (including L. monocytogenes).

Part 2: Enumeration method

Price Code: Gr. 7
 29 pages
 Identical to ISO 11290

Specifies a horizontal method for the enumeration of L. monocytogenes and the enumeration of Listeria spp. (including L. monocytogenes).

ZWS ISO 11608:2014

Needle based injection systems for medical use – Requirements and test methods
Part 1: Needle based injection system
 Price Code: Gr 7
 40 pages
 Identical to ISO 11608.1:2014

Specifies requirements and test methods for needle based injection systems (NISs) intended to be used with needles and with replaceable or non-replaceable containers.Containers covered in this part of ISO 11608 include single and multi-dose syringe-based and cartridge-based systems filled either by the manufacturer or by the end user.

Part 2: Needles – requirements and test methods.

Price Code: Gr 4
 10 pages
 Identical to ISO 11608-2:2000

Specifies requirements and test methods for single-use, double ended, sterile needles for pen-injectors which fulfil the specification of ISO 11608-1.

Part 3:2012 Finished containers

Price Code: Gr 4
 10 pages
 Identical to ISO 11608.3:2012

Specifies the functional and design considerations for containers to be used with needle-based injection systems (NIS) that fulfill the specifications of ISO 11608.1.It is applicable to single and multi-dose containers (either filled by the manufacturer or by the end-user) which can be provided to the end-user intergrated in the NIS or assembled with the NIS at the time of use.

Part 5:2012 Automated functions

Price Code: Gr.5
 15pages
 Identical to ISO 11608.5:2012

Specifies requirements and test methods for the automated functions of needle-based injection systems with automated functions (NIS-AUTO) for the administration of medicinal products in humans.

Part 7:2016 Accessibility for persons with visual impairment

Price Code:Gr.6
 20 pages
 Identical to ISO 11608.7:2016

Specifies particular requirements to make needle based drug delivery systems or NIS (needle based injection systems) accessible for persons with visual impairments.It applies to devices intended for patient or caregiver administration of medicinal products to humans.

ZWS ISO 11697:1995

Bases for design of structures – Loads due to bulk materials
 Price Code: Gr 10
 20 pages
 Identical to ISO 11697:1995

This International Standard deals with pressure conditions in hoppers, bunkers, bins and Silos constructed using normal structural engineering materials. For the purposes of definition, the term Silo is used throughout this International Standard to repre-

sent all forms of storage. The methods given in clause 3 for the determination of loads are intended for use with the practical range of containment structures subject to the following limitations:

filling is a continuous process involving small inertia effects and inconsequential impact loads;

b) the maximum particle size of the ensiled bulk material is not greater than $0,1R$ (R = hydraulic radius);

c) where discharge devices are used (e.g. feeders, internal flow tubes, etc.), material flow is effectively continuous and centric within the eccentricity limitation given in e);

d) in bottom-discharging Silos, the bulk material is free-flowing and has a low cohesion [i.e. $d_a \leq 1,0R$ (see annex A)];

e) the eccentricity e of the filling or discharge process, relative to the Silo centreline, is less than $0,25d$ for cylindrical Silos, and less than $0,25a$ in the case of rectangular Silos;

f) the ratio of height to diameter is not greater than 10; the height is not greater than 100 m and the diameter is not greater than 50 m.

Loads determined using this International Standard Consider

- a defined range of bulk material properties;

- variations in the surface friction conditions;

- the geometry of the structure;

- attachment to or loading by other structures and/or equipment;

- the methods of filling, storage and discharge.

All the above Parameters shall be agreed with the client and written into all contract documents. Design of the Silo shall be checked if any of the above criteria are changed.

ZWS ISO 11699:2008

Non-Destructive testing – Industrial radiographic film

Part 1: Classification of film systems for industrial radiography

Price Code: Gr 5

9 pages

Identical to ISO 11699.1:2008

The purpose of the standard is to establish the performance of film systems. It is applicable for the classification of film systems in combination with specified lead screens for industrial radiography.

Part 2: Control of film processing by means of reference values

Price Code: Gr 5

9 pages

Identical to ISO 11699.2:1998

Describes a procedure for the control of film processing systems.

ZWS ISO 11815:2007

Milk – Determination of total milk – clotting activity of Bovine rennets.

Price Code: Gr 6

11 pages

Identical to ISO 11815:2007

Describes a method for the determination of the total milk clotting activity of bovine rennet containing only chymosin and bovine pepsin as the active coagulating enzymes on a standard milk substrate at pH 6,5.

ZWS ISO 11816:2013

Milk and milk products – Determination of alkaline phosphatase activity.

Part 1: Fluorimetric method for milk and milk based drinks.

Price Code: Gr 4

11 pages

Identical to ISO 11816.1:2013

Specifies a fluorimetric method for the determination of alkaline phosphatase activity in pasteurized whole milk, semi-skimmed milk and flavoured milks. The method is applicable for milk from cows, sheep and goats and milk based drinks.

Part 2:2016 Fluorimetric method for cheese.

Price Code: Gr 4

15 pages

Identical to ISO 11816.2:2016

Specifies a fluorimetric method for the determination of alkaline phosphatase activity in cheese. The method is applicable to soft cheeses, semi-hard and hard cheeses provided that the mould is only on the surface of the cheese and not also the inner part.

ZWS ISO 11866:2006

Milk and milk products – Enumeration of presumptive Escherichia coli.

Part 1: Most probable number technique using 4-methylumbelliferyl – B – D – glucuronide (MUG).

Price Code: Gr 4

11 pages

Identical to ISO 11866-1:2005

Specifies a combined method for the enumeration of presumptive Escherichia coli and of presumptive coliforms by means of a culture technique involving a liquid medium with MUG and calculation of the number of presumptive Escherichia coli and or coliforms per gram or per milli litre by the most probable number (MPN) technique after incubation at 30°C.

Part 2: Colony – Count technique at 44°C using membranes.

Price Code: Gr 5

9 pages

Identical to ISO 11866-2:2005

Specifies a method for the enumeration of presumptive Escherichia coli by means of a colony-count technique at 44°C.

ZWS ISO/TS 11869:2012

Fermented milks – Determination of titratable acidity – Potentiometric method

Price Code: Gr. 6

Specifies a potentiometric method for the determination of the titratable acidity of natural yoghurt, flavoured yoghurt, fruit yoghurt, drinking yoghurt, fresh cheese with or without fruit, buttermilk with or without fruit and other fermented milk products.

ZWS ISO 11929:2010

Determination of the Characteristic Limits (decision Threshold, Detection Limit, and Limits of The Confidence Interval) For Measurements Of Ionising Radiation –Fundamentals And Application

Price Code: Gr. 8

58 pages

Identical to ISO 11929:2010

Specifies a procedure in the field of ionizing metrology for the calculation of the decision threshold, the detection limit and the limits of the confidence interval for a non negative ionizing radiation measurement, when counting measurements with preselection of time or counts are carried out, and the measured results from a gross count rate and a background count rate as well as from further quantities on the basis of a model of the evaluation.

ZWS ISO 12078:2007

Anhydrous milk fat – Determination of sterol composition by gas liquid chromatography (reference method).

Price Code: Gr 5

16 pages

Identical to ISO 12078:2006

Specifies a gas liquid chromatographic reference method for the determination of the sterol composition of anhydrous milk fat extracted from dairy products.

ZWS ISO 12625:2009

Tissue paper and tissue products

Part 1: General guidance on terms

Price Code: Gr 7
23 pages
Identical to ISO 12625.1:2005

Establishes general principles for the use of terms in the entire working field of tissue paper and tissue products.

Part 3: Determination of thickness, bulking thickness and apparent bulk density

Price Code: Gr 5
10 pages
Identical to ISO 12625.3:2005

Specifies a test method for the determination of thickness and bulking thickness and the calculation of apparent bulk density of tissue paper and tissue products under a pressure of 2,0 kPa

ZWS ISO 12706:2009

Non destructive testing – penetrant testing - Vocabulary

Price Code: Gr. 4
5 pages
Identical to ISO 12706:2009

It defines technical terms relating to penetrant testing

ZWS ISO 12721:2000

Non-Destructive testing-Thermal neutron radiographic testing-Determination of beam L/D ratio

Price Code: Gr. 4
10 pages
Identical to ISO 12721:2000

Defines an empirical technique for the measurement of the effective collimation ratio and effective L/D of thermal neutron radiography beams for values between 20 and 1 000. The technique is based upon analysis of a neutron radiographic image and is independent of measurements and calculations based on physical dimensions of the collimator system.

ZWS ISO 12779:2011

Lactose – Determination of water content – Karl Fischer Method

Price Code: Gr. 4
9 pages
Identical to ISO 12779:2011

Specifies a method for the determination of the water content of lactose by Karl Fischer (KF) titration.

ZWS ISO 13082:2011

Milk and milk products – Determination of the lipase activity of pregastric lipase preparation

Price Code: Gr. 4
9 pages
Identical to ISO 13082:2011

Specifies a method for the determination of the lipase activity. It is intended for the preparation of pregastric lipase and rennet paste, both of animal origin.

ZWS ISO 13106:2014

Plastic – blow-moulded polypropylene containers for packaging of liquid foodstuffs

Price Code: Gr. 6
18 pages
Identical to ISO 13106:2014

This International Standard provides the requirements of polypropylene resins intended for use in blow-moulded, round containers with capacities up to, and including two litres intended for the packaging of liquids for human consumption. This International Standard also provides tolerances on mass, dimensions, methods of sampling, testing, and performance requirements. It is not to be implied that polypropylene resins are the only polymers suitable for these applications, as many other polymers, including PE-HD, PET, etc. are also suitable.

ZWS ISO 13366:2009

Milk – Enumeration of somatic cells

Part 1: Microscopic method (Reference method)

Price Code: Gr 5
17 pages

Specifies a microscopic method (reference method) for the counting of somatic cells in both raw and chemically preserved milk

ZWS ISO 13485:2004

Medical devices – Quality management systems- Requirements for regulatory purposes.

Price Code: Gr 8

15 pages

Identical to ISO 13485:2004

Specifies requirements for a quality management system where an organization needs to demonstrate its ability to provide medical devices and related services that consistently meet customer requirements and regulatory requirements applicable to medical devices and related services.

ZWS ISO 13492:2007

Financial services – Key management related data element – Application and Usage of ISO 8583 data elements 53 and 96

Price Code: Gr 6

10 pages

Identical to ISO 13492:2007

Describes key management related data element that can be transmitted either in transaction messages to convey information about cryptographic keys used to secure the current transaction or in cryptographic service messages to convey information about cryptographic keys to be used to secure future transactions.

ZWS ISO 13810:2015

Tourism services – Industrial tourism – Service provision

Price Code: Gr 6

17 pages

Identical to ISO 13810:2015

It establishes general requirements for industrial tourism offered by service providers intending to transmit knowledge of production, scientific and technical activities, both present and past, based on processes, know-how, products or services.

ZWS ISO 13875:2007

Liquid milk – Determination of acid-soluble b-Lactoglobulin content – reverse-phase HPLC method

Price Code: Gr.5

14 pages

Identical to ISO 13875:2005

Specifies a method for the quantitative determination of the b-Lactoglobulin content, soluble at pH 4,6 in liquid milk.

ZWS ISO 14001:2015

Environmental management systems – Requirements with guidance for use

Price Code: Gr 10

14 pages

Identical to ISO 14001:2015

Replaces ZWS ISO 14001:2004

Specifies requirements for an environmental management system that an organisation can use to enhance its environmental performance. It helps organization achieve the intended outcomes of its environmental management system, which provide value for the environment, the organization itself and interested parties

ZWS ISO 14002: Part 1: 2019

Environmental management systems – Guidelines for using ISO 14001 to address environmental aspects and conditions within an environmental topic area

Part 1: General

Price Code: Gr 10

12 pages

Identical to ISO 14002-1:2019

Gives general guidelines for organisations seeking to systematically manage environmental aspects or respond to the effects of changing environmental conditions within one or more environmental topic areas, based on ISO 14001. This document also constitutes a framework for common elements of subsequent parts of the ISO 14002 series.

ZWS ISO 14002: Part 2: 2023

Environmental management systems — guidelines for using iso 14001 to address environmental aspects and conditions within an environmental topic area

Part 2: Water

Price Code: Gr 7

36 pages

Identical to ISO 14002-2:2023

This document gives general guidelines for organizations seeking to address water-related environmental aspects, environmental impacts, environmental conditions, and the associated risks and opportunities within an environmental management system in accordance with ISO 14001. The document addresses issues for environmental management related to water quantity and quality, such as water withdrawal, efficient use of water, and water discharge, as well as approaches to cope with water-related events such as flooding and droughts. The document considers the interconnections of water with other environmental media and takes a holistic approach to the management of water due to its impacts on ecosystems, ecosystem services, related biodiversity, as well as human life and well-being. This document is applicable to organizations irrespective of their size, type, financial resources, location and sector. It is applicable to all types of water and considers a life cycle perspective.

ZWS ISO 14004:2016

Environmental management systems – General guidelines on implementation

Price Code: Gr 10

74 pages

Identical to ISO 14004:2016

Provides guidance for an organization on the establishment, implementation, maintenance and improvement of a robust, credible and reliable environmental management system. The guidance provided is intended for an organization seeking to manage its environmental responsibilities in a systematic manner that contributes to the environmental pillar of sustainability.

ZWS ISO 14005:2010

Environmental management systems – Guidelines for the phased implementation of an environmental management system including the use of environmental performance evaluation

Price Code: Gr. 8

69 pages

Identical to ISO 14005:2010

Provides guidance for all organizations but particularly small and medium sized enterprises (SMEs) on the phased development, implementation, maintenance and improvement of an environmental management system. It also includes advice on the integration and use of environmental performance evaluation techniques.

ZWS ISO 14006:2011

Environmental management systems – Guidelines for incorporating ecodesign

Price Code: Gr.10

32 pages

Identical to ISO 14006:2011

Provides guidelines to assist organizations in establishing, documenting, implementing, maintaining and continually improving their management of ecodesign as part of an environmental management systems (EMS).

ZWS ISO 14007:2019

Environmental management systems- guidelines for determining environmental costs and benefits

Price Code: Gr 10

25 pages

Identical to ISO 14007:2019

It gives guidelines for organisations on determining the environmental costs and benefits associated with their environmental aspects. It addresses the dependencies of an organization on the environment eg natural resources and the context in which the organization operates or is located.

ZWS ISO 14008:2019

Monetary valuation Of Environmental Impacts And Related Environmental Aspects

Price Code: Gr.7

30 pages

Identical to ISO 14008:2019

This document specifies a methodological framework for the monetary valuation of environmental impacts and related environmental aspects. Environmental impacts include impacts on human health, and on the built and natural environment. Environmental aspects include releases and the use of natural resources.

ZWS ISO 14009:2020

Environmental management systems — Guidelines for incorporating material circulation in design and development

Price Code: Gr.7

46 pages

Identical to ISO 14009:2020

This document gives guidelines for assisting organizations in establishing, documenting, implementing, maintaining and continually improving material circulation in their design and development in a systematic manner, using an environmental management system (EMS) framework.

ZWS ISO 14015:2022**Environmental management — Guidelines for environmental due diligence assessment**

Price Code :

Gr. 7

29 pages

Identical to ISO 14015:2022

This document gives guidance on how to conduct an environmental due diligence (EDD) assessment through a systematic process of identifying environmental aspects, issues and conditions as well as determining, if appropriate, their business consequences. This document does not provide guidance on how to conduct other types of environmental assessment, such as:

- a) environmental audits;
- b) environmental impact assessments;
- c) environmental performance, efficiency, or reliability assessment;
- d) intrusive environmental investigations and remediation.

ZWS ISO 14020:1998**Environmental labels and declarations – General principles.**

Price Code: Gr 6

5 pages

Identical to ISO 14020:1998

Establishes guiding principles for the development and use of environmental labels and declarations.

ZWS ISO 14021:2016**Environmental labels and declarations – Self declared environmental claims (Type II environmental labeling).**

Price Code: Gr 7

33 pages

Identical to ISO 14021:2016

Specifies requirements for self declared environmental claims, including statements, symbols, graphics, regarding products. Describes selected terms commonly used in environmental claims and gives qualification for their use

ZWS ISO 14024:2018**Environmental Labels And Declarations – Type 1 Environmental Labelling****Principles and Procedures**

Price Code: Gr. 6

14 pages

Supersedes ZWS ISO 14024:1999

This document establishes the principles and procedures for developing Type 1 environmental labelling programmes, including the selection of product categories, products environmental criteria and product function characteristics, and for assessing and demonstrating compliance. This document also establishes the certification procedures for awarding the label.

ZWS ISO 14025:2006**Environmental labels and declarations – Type III environmental declarations - Principles and procedures**

Price Code: Gr 6

25 pages

Identical to ISO/TR 14025:2006

Establishes the principles and specifies the procedures for developing Type III environmental declaration programmes and Type III environmental declarations. It specifically establishes the use of the ISO 14040 series of standards in the development of Type III environmental declaration programme and Type III environmental declarations.

ZWS ISO 14026:2017**Environmental labels and declarations-principles, requirements and guidelines for communication of footprint information**

Price Code: Gr.6

18 pages

Identical to ISO 14026:2017

Provides principles ,requirements and guidelines for footprint communications for products addressing areas of concern relating to the environment.

ZWS ISO 14027:2017**Environmental labels and declarations – Development of product category rules**

Price Code: Gr 6

25 pages

Identical to ISO/TS 14027:2017

Standard provides principles, requirements and guidelines for developing, reviewing, registering and updating PCR within type III environmental declaration or footprint communication programme based on life cycle assessment.

ZWS ISO/TS 14029:2022**Environmental statements and programmes for products — mutual recognition of environmental product declarations (epds) and footprint communication programmes**

Price Code: Gr 6

19 pages

Identical to ISO TS 14029(2022).

This document specifies requirements for mutual recognition arrangements (MRAs) and gives guidance on how to initiate developments on MRAs between environmental product declaration (EPD) and footprint communication programme operators. It addresses administrative and operational duties, through evaluation of such programmes, and how to externally communicate the results of the cooperation as well as plans for future related activities.

This document is primarily applicable to MRAs but can also be a basis for bilateral agreements.

ZWS ISO 14031:2013**Environmental management - Environmental performance evaluation – Guidelines**

Price Code: Gr 7

41 pages

Identical to ISO 14031:2013

Gives guidance on the design and use of environmental performance evaluation (EPE) within an organization. It is applicable to all organizations regardless of type, size, location and complexity.

ZWS ISO/TR 14032:2000**Environmental management- Examples of environmental performance evaluation (EPE).**

Price Code: Gr 8

93 pages

Identical to ISO/TR 14012:1999

Provides examples of EPE that represent a range of applications from simple to elaborate. They also represent a range of organizations (e.g. manufacturing and service companies, non-governmental organizations, government agencies, small, medium and large enterprises) and geographic locations.

ZWS ISO/TR 14033:2012**Environmental management – Quantitative environmental information – Guidelines and examples**

Price Code: Gr. 7

36 pages

Identical to ISO 14033:2012

Supports the application of standard sand reports on environmental management. It provides guidelines on how to acquire quantitative environmental information and data implement methodology. It gives guidelines to organizations on general principles, policy, strategy and activities necessary to obtain quantitative environmental information for internal and/or external purposes.

ZWS ISO 14034:2016**Environmental management – Quantitative environmental information – Guidelines and examples**

Price Code: Gr. 7

22 pages

Identical to ISO 14034:2016

Specifies principles ,procedures and requirements for environmental technology verification (ETV)

ZWS ISO 14040:2006 /Amd 1:2020**Environmental management – Life cycle assessment – Principles and framework**

Price Code: Gr. 6

20 pages

Identical to ISO 14040:2006/Amd:2020

Cancels and replaces ISO 14040:1997, 14041:1998, 14042:2000 and 14043:2000, ZWS ISO 14040:2006

Describes the principles and framework for life cycle assessment (LCA). It also covers life assessment (LCA) studies and life cycle inventory (LCI) Studies but however does not describe the life cycle assessment (LCA) technique in detail nor does it specify methodologies for the individual phases for the life assessment (LCA).

ZWS ISO 14044:2006/ Amd 2:2020**Environmental management – Life cycle assessment – Requirements and guidelines**

Price Code: Gr 7

45 pages

Identical to ISO 14044:2006/Amd 2:2020

Superseeds ZWS ISO 14044:2006

Specifies requirements and provides guidelines for life cycle assessment (LCA). It covers life cycle assessment (LCA) studies and life cycle inventory (LCI) studies.

ZWS ISO 14045:2012**Environmental Management Eco-efficiency assessment of product systems – Principles ,requirements and guidelines**

Price Code: Gr. 7

38 pages

Identical to ISO 14045:2012

Describes the principles,requirements and guidelines for eco-efficiency assessment for product systems.

ZWS ISO 14046:2014**Environmental management – Water footprint – principles requirements and guidelines**

Price Code: Gr.7

37 pages

Identical to ISO 14046:2014

Specifies principles, requirements and guidelines related to water footprint assessment of products, proceses and organisations based on lifecycle assessment

ZWS ISO/TR 14047:2012**Environmental management – Life cycle impact assessment – Illustrative examples on how to apply ISO 14044 to impact assessment situations**

Price Code: Gr. 9

85 pages

Identical to ISO/TR 14047:2012

Replaces ZWS ISO/TR 14047:2004

Provides examples to illustrate current practice of life cycle impact assessment in according to ISO 14044.They offer a way or ways rather than the unique way of applying ISO 14044.They reflect the key elements of the life cycle impact assessment (LCIA) phase of the LCA.

ZWS ISO/TS 14048:2002**Environmental management – Life cycle assessment – Data documentation format**

Price Code: Gr. 7

41 pages

Identical to ISO/TS 14048:2002

Provides the requirements and a structure for a data documentation format, to be used for transparent and unambiguous documentation and exchange of Life Cycle Assessment (LCA) and Life Cycle Inventory (LCI) data,thus permitting consistent documentation of data,reporting of data collection,data calculation and data quality,by specifying and structuring relevant information.

ZWS ISO/TR 14049:2012**Environmental management – Life cycle assessment – Illustrative examples on how to apply ISO 14044 to goal and scope definition and inventory analysis**

Price Code: Gr. 7

48 pages

Identical to ISO/TR 14049:2012

Replaces ZWS ISO 14049:2004

Provides examples about practices in carrying out an life cycle inventory analysis (LCI) as a means of satisfying certain provisions of ISO 14044:2006.These examples are only a sample of the possible cases satisfying the provisions of ISO 14044.They offer a way rather than the unique way for the application of ISO 14044.They reflect only portions of a complete LCI study.

ZWS ISO 14050:2020**Environmental management – Vocabulary**

Price Code: Gr. 7

8 pages

Identical to ISO 14050:2020

Replaces ZWS ISO 14050:2020

Contains definitions of fundamental concepts related to environmental management, published in the ISO 14000 series of standards.

ZWS ISO 14051:2011**Environmental management – Material flow cost accounting – General framework**

Price Code: Gr. 7

38 pages

Identical to ZWS ISO 14051:2011

Provides a general framework for material flow cost accounting (MFCA).Under MFCA the flows and stocks of materials within an organization are traced and quantified in physical units (e.g. mass , volume) and the costs associated with those material flows are also evaluated.The resulting information can act as a motivator for organizations and managers to seek opportunities to simul-

taneously generate financial benefits and reduce adverse environmental impacts.

ZWS ISO 14052:2017

Environmental management – Material flow cost accounting – Guidance for practical implementation in a supply chain

Price Code: Gr. 6
12 pages
Identical to ZWS ISO 14052:2017

Provides guidance for the implementation of material flow cost accounting (MFCA) in supply chain. MFCA fundamentally traces the flow and stock of materials within an organization, quantifies these material flows in physical units and evaluates the cost associated with material flows and energy uses.

ZWS ISO 14053:2021

Environmental management – material flow cost accounting – guidance for phased implementation in organisations

Price Code: Gr. 6
17 pages
Identical to ZWS ISO 14053:2021

This document gives practical guidelines for the phased implementation of material flow cost accounting (MFCA) that organizations, including small and medium-sized enterprises (SMEs), can adopt to enhance their environmental performance and material efficiency. The phased approach provides flexibility that allows organizations to develop their MFCA activities at their own pace, according to their own circumstances. The resulting information can act as a motivator for organizations to seek opportunities to simultaneously generate financial and environmental benefits by reducing material losses and energy consumption.

This document is applicable to any organization, regardless of its level of development, the nature of its activities, or the location at which these activities occur.

ZWS ISO 14055: Part 1:2017

Environmental – Guidelines for establishment good practices for establishing good practices for combatting land degradation and desertification

Price Code: Gr 6
33 pages
Identical to ISO 14055-1:2017

ZWS ISO TR 14055: Part 2:2022

Environmental management — guidelines for establishing good practices for combatting land degradation and desertification Part 2: Regional case study examples

Price Code: Gr 8
78 pages
Identical to ISO TS 14055(2022).

This document provides regional case studies of good practices in land management to prevent or minimize land degradation and desertification in support of ISO 14055-1:2017.

The case studies are presented to facilitate the application of ISO 14055-1 across a wide range of geographical and local conditions.

ZWS ISO/TR 14061:1999

Information to assist forestry organizations in the use of environmental management system standards ISO 14001 and 14004.

Price Code: Gr 8
65 pages
Identical to ISO/TR 14061:1998

Designed to be used in conjunction with ISO 14001 and ISO 14004. Provides a link between the management system approach of ISO 14001 and the range of forest policy and forest management perfor-

mance objectives, including SFM principles and inter-governmental criteria and indicators, that a forestry organisation can consider.

ZWS ISO/TR 14062:2003

Environmental management – Integrating environmental aspects into product design and development.

Price Code: Gr 6
24 pages
Identical to ISO/TR 14062:2002

Describes concepts and current practices relating to the integration of environmental aspects into product design and development.

ZWS ISO 14063:2008

Environmental management – Environmental communication – Guidelines and examples

Price Code: Gr 7
27 pages
Identical to ISO 14063:2006

Gives guidance to an organization on general principles, policy, strategy and activities relating to both internal and external environmental communication. It utilizes proven and well established approaches for communication, adapted to the specific conditions that exist in environmental communication.

ZWS ISO 14064:2018

Greenhouse gases

Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.

Price Code: Gr 6
20 pages
Identical to ISO 14064-2:2006
Amended by MD 681

Specifies principles and requirements at the organization level for quantification and reporting of greenhouse gas (GHG) emissions and removals. It includes requirements for the design, development, management, reporting and verification of an organization's inventory.

Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements.

Price Code: Gr. 7
28 pages
Identical to ISO 14064-2:2006

Specifies principles and requirements and provides guidance at the project level for quantification, monitoring and reporting of activities intended to cause greenhouse gas (GHG) emission reductions or removal enhancements. It includes requirements for planning a GHG project, identifying and selecting GHG sources, sinks and reservoirs relevant to the project and baseline scenario, monitoring, quantifying, documenting and reporting GHG project performance and managing data quality.

Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions.

Price Code: Gr .7
34 pages
Identical to ISO 14972:1998
Amended by MD 681:2014

Specifies principles and requirements and provides guidance for those conducting or managing the validation and / or verification

of greenhouse gas (GHG) assertions. It can be applied to organizational or GHG project quantification, including GHG quantification, monitoring and reporting carried out in accordance with ISO 14064-1 or ISO 14064-2. It also specifies requirements for selecting GHG validations or verifiers, establishing the level of assurance, objective, criteria and scope, determining the validation or verification approach, assessing GHG data, information, information systems and controls, evaluating GHG assertions and preparing validation/verification statements.

ZWS ISO 14065:2020

Greenhouse gases — General principles and requirements for bodies validating and verifying environmental information

Price Code: Gr. 7

32 pages

Identical to ISO 14065:2020

Supersedes ZWS ISO 14065:2007

Follow ISO/IEC 17029:2019, Clause 1. This document specifies principles and requirements for bodies performing validation and verification of environmental information statements. Any programme requirements related to bodies are additional to the requirements of this document.

ZWS ISO 14066:2011

Greenhouse gases – Competence requirements for greenhouse gases validation teams and verification teams

Price Code: Gr. 5

25 pages

Identical to ISO 14066:2011

Specifies competence requirements for validation teams and verification teams. The standard complements the implementation of ISO 14065.

ZWS ISO/TS 14067:2013

Greenhouse gases – Carbon footprint of products – Requirements and guidelines for quantification and communication

Price Code: Gr. 8

59 pages

Identical to ISO/TS 14067:2013

Specifies principles, requirements and guidelines for the quantification and communication of the carbon footprint of a product (CFP) based on international standards on life cycle assessment (ISO 14040 and ISO 14044) for quantification and on environmental labels and declarations (ISO 14020, ISO 14024 and ISO 14025) for communication.

ZWS ISO/TS 14074:2022

Environmental management — life cycle assessment — principles, requirements and guidelines for normalization, weighting and interpretation

Price Code: Gr. 6

13 pages

Identical to ISO TS 14074:2022.

This document specifies principles, requirements and guidelines for normalization, weighting and life cycle interpretation, in addition to those given in ISO 14040 and ISO 14044.

The document is applicable to any life cycle assessment (LCA) and footprint quantification study.

In particular, this document addresses:

- the use of normalization and its limitations;
- the use of weighting and its limitations;
- the selection or development of weighting factors;
- the generation of single scores;
- requirements that relate to documentation and reporting.

For the interpretation phase, it provides, in addition to ISO 14044, procedures and guidance for:

—performing completeness, sensitivity and consistency checks;

—addressing uncertainties and limitations;

—documenting conclusions and recommendations.

This document does not specify the composition of panels for weighting nor does it specify multi-criteria decision analysis.

This document does not intend to recommend or require a specific weighting approach or method or any priority of one weighting approach or method over another as they are based on value choices. Organizations have the flexibility to implement LCA in accordance with the intended application and the requirements of the organization.

ZWS ISO 14096:2005

Non-Destructive testing – Qualification of radiographic film digitisation systems

Part 1: Definitions, quantitative measurements of image quality parameters, standard reference film and qualitative control

Price Code: Gr 6

11 pages

Identical to ISO 14096.1:2005

The standard specifies procedures for the evaluation of basic performance parameters of radiographic film digitisation process such as spatial linearity, density contrast sensitivity and characteristic transfer curve.

Part 2: Minimum requirements

Price Code: Gr 6

5 pages

Identical to ISO 14096.2:2005

The standard specifies three film-digitisation quality classes for the requirement of non-destructive testing. The selected class depends on the radiation energy, penetrated material thickness and the quality level of the original radiographic film.

ZWS ISO/TS 14071:2014

Life cycle assessment – Critical review processes and reviewer competencies – Additional requirements and guidelines to ISO 14044:2006

Price Code: Gr. 5

12 pages

Identical to ISO/TS 14071:2014

Provides additional specifications to ISO 14040:2006 and ISO 14044:2006. It provides requirements and guidelines for conducting a critical review of any type of LCA study and the competencies required for the review.

ZWS ISO/TS 14072:2014

Environmental management – Life cycle assessment – requirements and guidelines for organizational life cycle assessment

Price Code: Gr. 7

27 pages

Identical to ISO/TS 14072:2014

Provides additional requirements and guidelines for an effective application of ISO 14040 and ISO 14044 to organizations. Application of LCA principles and methodology to organizations benefits of LCA and specific considerations when dealing with LCI, LCIA and interpretation and the limitations regarding reporting, environmental declarations, and comparative assertions.

ZWS ISO/TR 14073:2017

Environmental management – Price Code: Gr. 8

27 pages

Identical to ISO/TS 14073:2017

Provides illustrative examples of how to apply ISO 14046, in order to assess the water footprint of products, processes and organizations based on life cycle assessment.

ZWS ISO 14785:2014
Adventure tourism – Information for participation

Price Code: Gr 5
12 pages
Identical to ISO 14785:2014

Establishes minimum quality requirements for services provided by tourist information offices (TIO) of any type and size, whether publicly or privately operated, in order to satisfy visitors' expectation.

ZWS ISO 14837:2005
Mechanical _ Vibration – Ground-borne noise and vibration arising from rail systems.

Part 1: General guidance
Price Code: Gr .7
45 pages
Identical to ISO 14837.1:2005

Provides general guidance on ground-borne vibration generated by the operation of rail systems and the resultant ground-borne noise in buildings

ZWS ISO 14972:2005
Sterile obturators for single-use with over-needle peripheral intravascular catheters.

Price Code: Gr .3
6 pages
Identical to ISO 14972:1998

Specifies requirements for obturators supplied in the sterile condition and intended for single use for plugging over – needle peripheral catheters.

ZWS ISO 15161:2002
Guidelines on the application of ISO 9001:2000 for the food and drink industry.

Price Code: Gr .8
33 pages
Identical to ISO 15161:2001
Gives guidance to organizations in applying requirements of ISO 9001 in the food and drink industry.

ZWS ISO 15163:2012
Milk and milk products – Calf rennet and adult bovine rennet – Determination by chromatography of chymosin and bovine pepsin contents

Price Code: Gr. 6
19 pages
Identical to ISO 15163:2012

Specifies a reference method for the determination of the amounts of chymosin and bovine pepsin present in a test sample of calf rennet and adult bovine rennet. In addition it can be used for mixtures of calf/bovine rennet with fermentation-produced bovine chymosin (FPC).

ZWS ISO 15174:2012
Milk and milk products – Microbial coagulants – Determination of total milk-clotting activity

Price Code: Gr. 6
9 pages
Identical to ISO 15174:2012

Specifies a method for comparison of the total milk-clotting activity of a microbial coagulant sample with the milk-clotting activity of an international microbial coagulant reference standard on a standard

milk substrate prepared with a calcium chloride solution of concentration 0,5 g/l (Ph – 6.5)

ZWS ISO 15189:2022
Medical laboratories – Requirements for quality and competence

Price Code: Gr.10
61 pages
Identical to ISO 15189:2022
Replaces ZWS ISO 15189:2012

This document specifies requirements for quality and competence in medical laboratories. This document is applicable to medical laboratories in developing their management systems and assessing their competence. It is also applicable for confirming or recognizing the competence of medical laboratories by laboratory users, regulatory authorities and accreditation bodies. This document is also applicable to point-of-care testing (POCT).

ZWS ISO 15190:2020
Medical laboratories – Requirements for safety

Price Code: Gr .7
39 pages
Identical to ISO 15195:2003

Specifies requirements for safe practices in the medical laboratory.

ZWS ISO 15193:2011
In vitro diagnostic medical devices – Measurement of quantities in samples of biological origin – Requirements for content and presentation of reference measurement procedures***

Price Code: Gr.6
19 pages
Identical to ISO 15193:2009

Specifies requirements for the content of a reference measurement procedures for in vitro diagnostic medical devices and medical laboratories.

ZWS ISO 15194:2011
In vitro diagnostic medical devices – Measurement of quantities in samples of biological origin – Requirements for certified reference materials and the content of supporting documentation

Price Code: Gr.5
16 pages
Identical to ISO 15194:2009

Specifies requirements for certified reference materials and the content of their supporting documentation, in order for them to be considered of higher metrological order in accordance with ISO 17511.

ZWS ISO 15195:2004
Laboratory medicine – Requirements for reference measurements measurement laboratories

Price Code: Gr 5
12 pages
Identical to ISO 15195:2003

Gives specific requirements for reference measurement laboratories in laboratory medicine. Examination of properties with results on a nominal or ordinal scale are not included.

ZWS ISO 15197:2013
In vitro diagnostic test systems – Requirements for blood-glucose monitoring systems for self-testing in managing diabetes mellitus

Price Code: Gr.7
51 pages
Identical to ISO 15197:2013

Specifies requirements for in vitro glucose monitoring systems that measure glucose concentrations in capillary blood samples for specific design verification procedures and for the validation of performance by the intended users. These systems are intended for self measurement by lay persons for management of diabetes.

ZWS ISO 15198:2004

Clinical laboratory medicine – In vitro diagnostic medical devices – Validation of user quality control procedures by the manufacturer.

Price Code: Gr. 5
10 pages
Identical to ISO 15198:2004

Describes a process for manufacturers of in vitro diagnostic medical devices to validate quality control procedures they recommend to their users.

ZWS ISO 15394:2017

Packaging - Bar code and two-dimensional symbols for shipping, transport and receiving labels

Price Code: Gr. 8
67 pages
Identical to ISO 15394:2017

This document specifies the minimum requirements for the design of labels containing linear bar code and two-dimensional symbols on transport units to convey data between trading partners; provides for traceability of transported units using a unique transport unit identifier (licence plate); provides guidance on the formatting on the label of data presented in linear bar code, two-dimensional symbol or human-readable form; provides specific recommendations regarding the choice of bar code symbologies, and specifies quality requirements; provides recommendations as to label placement, size and the inclusion of free text and any appropriate graphics; provides guidance on the selection of the label material. This document is not applicable to the direct printing on to kraft coloured corrugated surfaces. Guidance on the direct printing of bar code symbols on to kraft coloured corrugated surfaces are provided in references such as The Fibre Box Handbook[10].

ZWS ISO 15489: Part 1:2016 Information and documentation – Records management

Part 1: Concepts and principles

Price Code: Gr. 7
21 pages
Identical to ISO 15489-1:2016

This part of ISO 15489 defines the concepts and principles from which approaches to the creation, capture and management of records are developed. This part of ISO 15489 describes concepts and principles relating to the following:

- records, metadata for records and records systems;
- policies, assigned responsibilities, monitoring and training supporting the effective management of records;
- recurrent analysis of business context and the identification of records requirements;
- records controls;
- processes for creating, capturing and managing records.

This part of ISO 15489 applies to the creation, capture and management of records regardless of structure or form, in all types of business and technological environments, over time.

Part 2: Guidelines

Price Code: Gr. 7

9 pages
Identical to ISO/TR 15489-2:2001

Provides one methodology that will facilitate the implementation of ISO 15489-1 in all organizations that have a need to manage their records. Gives an overview of the processes and factors to consider in organizations wishing to comply with ISO 15489-1.

ZWS ISO 15598:2003

Tea – Determination of crude fibre content.

Price Code: Gr. 4
7 pages
Identical to ISO 15589:1999

Specifies a method for the determination of crude fibre content in tea.

ZWS ISO 15708:2011

Non-Destructive – Radiation methods – Computed tomography

Part 1: Principles

Price Code: Gr. 8
64 pages
Identical to ISO 15708.1:2002

It gives guidance for, and defines terms for addressing the general principles of X-ray CT as they apply to industrial imaging. It also gives guidelines for a consistent set of CT performance parameter definition, including how these performance parameters relate to CT system specification.

Part 2: Examination practices

Price Code: Gr. 6
19 pages
Identical to ISO 15708.2:2002

It gives guidance for procedures for performing CT examination. It is intended to address the general use of CT technology and thereby facilitate its use.

ZWS ISO 15883: Part 2:2023

Washer disinfectors

Part 2: Requirements and tests for washer-disinfectors employing thermal disinfection for critical and semi-critical medical devices

Price Code: Gr. 6
20 pages
Identical to ISO 15883-2:2023

This document specifies requirements for washer-disinfectors (WD) that are intended for use for the cleaning and thermal disinfection, in a single operating cycle, of reusable medical devices such as surgical instruments, anaesthetic equipment, bowls, dishes and receivers, utensils and glassware. The requirements specified in this document are applicable in conjunction with the general requirements specified in ISO/DIS 15883 1:2020. The specified performance requirements of this document might not ensure the inactivation or removal of the causative agent(s) (prion protein) of transmissible spongiform encephalopathies..

ZWS ISO 15883: Part 3:2006

Washer disinfectors

Part 3: Requirements and tests for washer-disinfectors employing thermal disinfection for human waste containers

Price Code: Gr. 5
20 pages
Identical to ISO 15883-3:2006

This part of ISO 15883 specifies particular requirements for washer-disinfectors (WD) that are intended to be used for emptying, flushing, cleaning and thermal disinfection of containers used to hold human waste for disposal by one operating cycle. This part of ISO 15883 is to be applied in conjunction with ISO 15883 1.

**ZWS ISO 15883: Part 4:2018
Washer disinfectors**

Part 4: Requirements and tests for washer-disinfectors employing chemical disinfection for thermolabile endoscopes

Price Code: Gr. 8
81 pages
Identical to ISO 15883-3:2006

This document specifies the particular requirements, including performance criteria for washer-disinfectors (WD) that are intended to be used for cleaning and chemical disinfection of thermolabile endoscopes. This document also specifies the performance requirements for the cleaning and disinfection of the washer-disinfectors and its components and accessories which can be required to achieve the necessary performance criteria.

**ZWS ISO 15883: Part 5:2021
Washer disinfectors**

Part 5: Performance requirements and test method criteria for demonstrating cleaning efficacy

Price Code: Gr. 8
62 pages
Identical to ISO 15883-5:2021

This document specifies procedures and test methods used to demonstrate the cleaning efficacy of washer-disinfectors (WD) and their accessories intended to be used for cleaning of reusable medical devices.

NOTE 1: The requirements can be used for washer-disinfectors intended for use with other articles used in the context of medical, dental, laboratory, pharmaceutical and veterinary practice.

NOTE 2: This document does not apply to the activities to be performed by the manufacturers of reusable medical devices.

ZWS ISO 16037:2003

Rubber condoms for clinical trials – Measurement of physical properties.

Price Code: Gr. 3
5 pages
Identical to ISO 16037:2002

Suggests a series of laboratory tests to be conducted on the products to be used in any clinical investigations so that it will be easier to relate the clinical results to the design and quality of the condoms used.

ZWS ISO 16038:2006

Rubber condoms – Guidance on the use of ISO 4074 in the quality management of natural rubber latex condoms.

Price Code: Gr. 4
11 pages
Identical to ISO 16038:2006

Provides guidance on using ISO 4074 and addresses quality issues to be considered during the development, manufacture, quality verification and procurement of condoms. It encompasses the aspects of quality management systems in design, manufacture and delivery of condoms with emphasis on performance, safety and reliability of condoms.

ZWS ISO 16256:2012

Clinical laboratory testing and in vitro diagnostic test systems – Reference method for testing the in-vitro activity of antimicrobial agents against yeast fungi involved in infectious diseases

Price Code: Gr. 6
18 pages
Identical to ISO 16256:2012

Describes a method for testing the susceptibility to antifungal agents of yeasts, including *Candida spp.* and *Cryptococcus neoformans*, that cause infections. The reference method described here has not been used in studies of the yeast forms of dimorphic fungi, such as *B. dermatitidis* and/or *H. capsulatum* variety *capsulatum*.

ZWS ISO 16297:2013

Milk – bacterial count – Protocol for the evaluation of alternative methods

Price Code: Gr. 6
13 pages
Identical to ISO 16297:2013

Gives guidelines for the evaluation of instrumental alternative methods for total bacterial count in raw milk from animals of different species.

ZWS ISO 16371-2:2017

Non-Destructive Testing –Industrial computed radiography with storage phosphor imaging plates

Part 2:General Principles for testing of Metallic materials using X-rays and Gamma Rays

Price Code: Gr. 7
32 pages
Identical to ISO 16371-2:2017

This document specifies fundamental techniques of computerized radiography with the aim of enabling satisfactory and repeatable results to be obtained economically. The techniques are based on the fundamental theory of the subject and tests measurements. This document specifies the general rules for industrial computerized X-rays and gamma radiography for flaw detection purposes, using storage phosphor imaging plates.

ZWS ISO 16526:2011

Non-destructive testing – Measurement and evaluation of the X-ray tube voltage.

Part 1: Voltage divider method

Price Code: Gr. 3
2 pages
Identical to ISO 16526.1:2011

Specifies a method for the direct and absolute measurement of the average high voltage of constant potential (DC) X-ray system on the secondary side of the high voltage generator. The intention is to check the correspondence with the indicated high voltage value on the control unit of the X-ray system.

Part 2:2011 Constancy check by the thick filter method

Price Code: Gr. 3
5 pages
Identical to ISO 16526.2:2011

Specifies a constancy check of a X-ray system where mainly the X-ray voltage is checked and also the tube current and the constitution of the target which can be changing due to ageing of the tube.

ZWS ISO/TS 16782:2016

Antimicrobial susceptibility testing – Criteria for Acceptable lots of dehydrated Mueller-Hinton agar and broth for antimicrobial susceptibility testing

Price Code: Gr. 6
20 pages
Identical to ISO 16782:2016

Provides a standard description of the physical properties of dehydrated Mueller-Hinton broth (dMHB) and Mueller-Hinton agar (dMHA) and performance criteria by which manufacturers can assess the performance characteristics of their production lots of dMHB and dMHA

ZWS ISO 16809:2017
Non destructive Testing – Ultrasonic Thickness Measurement

Price Code: Gr 7
35 pages
Identical to ISO 16809

This document specifies the principles for ultrasonic thickness measurement of metallic and non-metallic materials by direct contact, based on measurement of time of flight of ultrasonic only.

ZWS ISO 16923:2016
Natural gas fuelling stations — CNG stations for fuelling vehicles

Price Code: Gr .7
45 pages
Identical to ISO 16923:2016

This document covers the design, construction, operation, inspection and maintenance of stations for fuelling compressed natural gas (CNG) to vehicles, including equipment, safety and control devices. This document also applies to portions of a fuelling station where natural gas is in a gaseous state and dispensing CNG derived from liquefied natural gas (LCNG) according to ISO 16924. This document applies to fuelling stations supplied with natural gas as defined in local applicable gas composition regulations or ISO 13686. It also applies to other gases meeting these requirements including bio-methane, upgraded coal-bed methane (CBM) and gas supplies coming from LNG vaporization (on-site or off-site). This document includes all equipment for downstream gas supply connection (i.e. point of separation between the CNG fuelling station piping and the pipeline network). Fuelling station nozzles are not defined in this document. This document covers fuelling stations with the following characteristics: slow fill; fast fill; private access; public access (self-service or assisted); fuelling stations with fixed storage; fuelling stations with mobile storage (daughter station); multi-fuel stations. This document is not applicable to domestic CNG fuelling devices without buffer storage. This document is based on the condition that the gas entering the fuelling station is odorized. For unodorized gas fuelling stations, additional safety requirements are included in Clause 10.

ZWS ISO 16924:2016
LNG stations for fuelling vehicles

Price Code: Gr .8
81 pages
Identical to ISO 16924:2016

This document specifies the design, construction, operation, maintenance and inspection of stations for fuelling liquefied natural gas (LNG) to vehicles, including equipment, safety and control devices. This document also specifies the design, construction, operation, maintenance and inspection of fuelling stations for using LNG as an onsite source for fuelling CNG to vehicles (LCNG fuelling stations), including safety and control devices of the station and specific LCNG fuelling station equipment. This document is applicable to fuelling stations receiving LNG and other liquefied methane-rich gases that comply with local applicable gas composition regulation or with the gas quality requirements of ISO 13686. This document includes all equipment from the LNG storage tank filling connection up to the fuelling nozzle on the vehicle. The LNG storage tank filling connection itself and the vehicle fuelling nozzle are not covered in this document. This document includes fuelling stations having the following characteristics

ZWS ISO/TS 16949:2009
Quality management systems – Particular requirements for the application of ISO 9001:2008 for automotive production and relevant service part organizations.

Price Code: Gr .7
39 pages
Replaces ZWS ISO/TS 16949:2004
Identical to ISO/TS 16949:2009

Specifies requirements for a quality management system where an organization (i) needs to demonstrate its ability to consistently provide products that meet customer and applicable regulatory requirements and (ii) aims to enhance customer satisfaction through effective application of the system, including processes for continual improvement of the system and the assurance of conformity to customer and applicable regulatory requirements.

ZWS ISO/TS 16958:2015
Milk, Milk products, Infant formula and nutritionals – determination of fatty acids composition – capillary gas chromatographic method

Price Code: Gr .7
48 pages
Identical to ISO 16958:2015

Specifies a method for the quantification of individual and/or all fatty acids in the profile of milk, milk products, infant formula and adult nutritional formula, containing milk fat and/or vegetable oils supplemented or not supplemented with oils rich in long chain polyunsaturated fatty acids (LC-PUFA).

ZWS ISO 17000:2020
Conformity assessment – Vocabulary and general principles.

Price Code: Gr .5
22 pages
Identical to ISO/IEC 17000:2020

Specifies general terms and definitions relating to conformity assessment, including the accreditation of conformity assessment bodies and to the use of conformity assessment to facilitate trade.

ZWS ISO/PAS 17001:2007
Conformity Assessment – Impartiality – Principles and requirements.

Price Code: Gr .3
5 pages
Identical to ISO/PAS 17001:2005

Contains principles and requirements for the element of impartiality as it relates to standards for conformity assessment.

ZWS ISO/PAS 17002:2005
Conformity assessment – Confidentiality – Principles and requirements.

Price Code: Gr .3
3 pages
Identical to ISO/PAS 17002:2004

Contains principles and requirements for the element of confidentiality as it relates to conformity assessment.

ZWS ISO/PAS 17003:2005
Conformity assessment – Complaints and appeals – Principles and requirements.

Price Code: Gr 5
5 pages
Identical to ISO/PAS 17003:2004

Contains principles and requirements for the elements of complaints and appeals as they relate to conformity assessment.

ZWS ISO /PAS 17004:2007

Conformity assessment – Disclosure of information – Principles and requirements.

Price Code: Gr .3
4 pages
Identical to ISO/PAS 17004:2005

Contains principles and requirements for the element of disclosure of information as it relates to standards for conformity assessment.

ZWS ISO/IEC 17011:2017

Conformity assessment – General requirements for accreditation bodies accrediting conformity assessment bodies.

Price Code: Gr 7
21 pages
Identical to ISO/IEC 17011:2017

Specifies general requirements for accreditation bodies assessing and accrediting conformity assessment bodies (CABs).

ZWS ISO/IEC 17020:2012

Conformity assessment – Requirements for the operation of various types of bodies performing inspection

Price Code: Gr .6
18 pages
Replaces ZWS ISO/IEC 17020:2001
Identical to ISO/IEC 17020:2012

Contains requirements for the competence of bodies performing inspection and for the impartiality and consistency of their activities. It applies to inspection bodies of type A, B , or C as defined in the international standard and it applies to any stage of inspection

ZWS ISO/IEC TS 17021.1:2015

Conformity assessment – Requirements for bodies providing audit and certification of management systems.

Part 1:2015 Requirements

Price Code: Gr. 7
54 pages
Replaces ZWS ISO/IEC 17021:2007
Identical to ISO/IEC 17021.1:2015

Contains principles and requirements for the competence, consistency and impartiality of bodies providing audit and certification of all management systems. Certification bodies operating to this International Standard need not offer all types of management system certification.

Part 2:2016 Competence requirements for audit and certification of management systems

Price Code: Gr.6
12 pages
Identical to ISO/IEC 17021.2:2016

Specifies additional competence requirements for personnel involved in the audit and certification process for Environmental Management Systems (EMS) and complements the existing requirements of ISO/IEC 17021-1

Part 3:2017 Competence requirements for auditing and certification of quality management systems

Price Code: Gr. 4
6 pages
Identical to ISO/IEC TS 17021.3:2017

Complements the existing requirements of ISO/IEC 17021.It includes specific competence requirements for personnel involved in the certification process for quality management systems (QMS).

Part 5:2014 Competence requirements for audit and certification of asset management systems

PriceCode:Gr.4

6 pages
Identical to ISO/IEC TS 17021.5:2014

Complements the existing requirements of ISO/IEC 17021.It specifies additional competence requirements for personnel involved in the certification process for asset management systems (QMS).

Part 9:2016 Competence requirements for auditing and certification of anti-bribery management systems

Price Code: Gr.7
5 pages
Identical to ISO 17021.9:2016

Complements the existing requirements of ISO/IEC 17021.1 It includes specific competence requirements for personnel involved in the certification process for anti-bribery management systems (ABMS).

Part 10:2018 Competence requirements for auditing and certification of occupational health and safety management systems

Price Code: Gr.5
11 pages
Identical to ISO 17021.10:2018

This document specifies additional competence requirements for personnel involved in the audit and certification process for an occupational health and safety (OH&S) management system and complements the existing requirements of ISO/IEC 17021-1.

Three types of personnel and certification functions are defined: — auditors; — personnel reviewing audit reports and making certification decisions; — other personnel.

NOTE This document is applicable for auditing and certification of an OH&S management system based on ISO 45001. It can also be used for other OH&S applications.

ZWS ISO/IEC TS 17022:2012

Conformity assessment – Requirements and recommendations for content of a third-party audit report on management systems

Price Code:Gr. 3
5 pages
Identical to ISO/IEC TS 17022:2012

Specification contains requirements and recommendations to be addressed in a third-party management system certification audit report based on the relevant requirements in ISO/IEC 17021.

ZWS ISO/IEC TS 17023:2013

Conformity assessment – Guidelines for determining the duration of management system certification audits

Price Code: Gr. 5
8 pages
Identical to ISO/IEC TS 17023:2013

Provides guidelines for determining the duration of management system certification audits to the bodies providing audit and certification of management systems and to those that develop and maintain certification schemes.

ZWS ISO 17024:2012

Conformity assessment – General requirements for bodies operating certification of persons.

Price Code: Gr 4
21 pages
Identical to ISO/IEC 17024:2012
Replaces ISO/IEC 17024:2005

Contains principles and requirements for a body certifying persons against specific requirements and includes the development and maintenance of a certification scheme for persons.

ZWS ISO/IEC 17025:2017

The general requirements of the competence of testing and calibration laboratories

Price Code: Gr.10

28 pages

Technically identical to ISO/IEC 17025:2005

Replaces ZWS ISO/IEC 17025:2001

Specifies the general requirements for the competence to carry out tests and/or calibrations, including sampling. It covers testing and calibration performed using standard methods, non standard methods and laboratory-developed methods.

ZWS ISO/IEC TR 17026:2015

Conformity assessment – Example of a certification scheme for tangible products

Price Code: Gr. 7

23 pages

Identical to ISO/IEC 1703426:2015

It provides an example of a type 5 product certification scheme for tangible products as described in ISO/IEC 17067

ZWS ISO/IEC TS 17027:2014

Conformity assessment – Vocabulary related to competence of persons used for certification of persons

Price Code: Gr. 5

16 pages

Identical to ISO/IEC TS 17027:2014

Specifies terms and definitions related to the competence of persons used in the field of certification of persons in order to establish a common vocabulary. These terms and definitions can also be used as applicable in other documents specifying competence of persons such as regulations, standards, certification schemes, research, training, licensing and registration.

ZWS ISO/IEC TR 17028:2017

Conformity assessment – Guidelines And Examples Of A Certification Scheme For Services

Price Code: Gr. 7

43 pages

Identical to ISO/IEC 17028:2019

This contains general principles and requirements for the competence, consistent operation and impartiality of bodies performing validation/verification as conformity assessment activities.

ZWS ISO/IEC TR 17029:2019

Conformity assessment – General principles and requirements for validation and verification bodies

Price Code: Gr. 10

30 pages

Identical to ISO/IEC TR 17028:2017

Provides guidelines and principles of service certification schemes.

ZWS ISO/IEC 17030:2005

Conformity assessment – General requirements for third party marks of conformity.

Price Code: Gr .3

5 pages

Identical to ISO/IEC 17030:2003

Provides general requirements for third-party marks of conformity, including their issue and use.

ZWS ISO 17033:2019

Ethical claims and supporting information – principles and requirements

Price Code:

Gr. 6

16 pages

Identical to ISO 17033:2019

Contains principles and requirements for developing and declaring ethical claims for providing supporting information, where specific standards have not been developed, or to supplement existing standards.

ZWS ISO 17034:2016

General requirements for the competence of reference material producers

Price Code: Gr. 7

26 pages

Identical to ISO 17034:2016

Specifies general requirements for the competence and consistent operation of reference material producers.

ZWS ISO/IEC 17040:2005

Conformity assessment – General requirements for peer assessment of conformity assessment bodies and accreditation bodies.

Price Code: Gr .5

13 pages

Identical to ISO/IEC 17040:2005

Specifies the general requirements for the peer assessment of process to carried out by agreement groups of accreditation bodies or conformity assessment bodies. It addresses the structure and operation of the agreement group only in so far as they relate to the peer assessment process.

ZWS ISO/IEC 17043:2010

Conformity assessment – General requirements for proficiency testing

Price Code: Gr .7

39 pages

Identical to ISO/IEC 17043:2010

Specifies general requirements for the competence of providers of proficiency testing schemes and for the development and operation of proficiency testing schemes. These requirements are intended to be general for all types of proficiency testing schemes and they can be used as a basis for specific technical requirements for particular fields of application.

ZWS ISO/IEC 17050:2005

Conformity assessment – Suppliers declaration of conformity. Part 1: General requirements

Price Code: Gr 4

6 pages

Identical to ISO/IEC 17050-1:2004

Specifies general requirements for a supplier's declaration of conformity in cases where it is desirable, or necessary, that conformity of an object to the specified requirements be attested, irrespective of the sector involved.

Part 2: Supporting documentation.

Price Code: Gr 3

2 pages

Identical to ISO/IEC 17050-2:2004

Specifies general requirements for supporting documentation to substantiate a supplier's declaration of conformity as described in part 1.

ZWS ISO/IEC 17065:2012**Conformity assessment – Requirements for bodies certifying products , processes and services**

Price	Code:Gr.	6
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27 pages

Identical to ISO/IEC 17065:2012

Contains requirements for the competence ,consistent operation and impartiality of product , processes anad service certification bodies.Certification bodies operating to this international standard need not offer all types of products , processes and services certification. Certification of products ,processes anad services is a third-party conformity assessment activity.

ZWS ISO/IEC 17067:2013**Conformity Assessment – Fundamentals of Product Certification and Guidelines for Product Certification Schemes**

Price Code: Gr. 4

19 pages

Identical to ISO/IEC 17067: 2013

Describes the fundamentals of product certification and provides guidelines for understanding, developing, operating or maintaining certification schemes for products, processes and services..

ZWS ISO/TS 17193:2012**Milk – Determination of the lactoperoxidase activity – Photometric method (Reference Method)**

Price	Code:Gr.	5
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7 pages

Identical to ISO/TS 17193:2012

Specifies a photometric method for the determination of the lactoperoxidase activity in milk in amounts exceeding 50U/l.

ZWS ISO 17678:2011**Milk and milk products – Determination of milk fat purity by gas chromatographic analysis of triglycerides (Reference Method)**

Price	Code:	Gr.6
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22 pages

Identical to ISO 17678:2010

Specifies a reference method for the determination of milk fat purity using gas chromatographic analysis of triglycerides.Both vegetable fats and animal fats such as beef tallow and lard can be detected.By using defined triglyceride equations the integrity of milk fat is determined.

ZWS ISO 17758:2014**Instant dried milk – Determination of the dispersibility and wettability**

Price	Code:	Gr.6
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10 pages

Identical to ISO 17758:2014

Specifies method for the determination of the dispersibility in water of instant dried milk. The method is applicable to instant dried skimmed milk manufactured by either the “strait-through” or the “re-wet” process and also to instant dried whole milk.

ZWS ISO 17792:2006**Milk, milk products and mesophilic starter cultures- Enumeration of citrate-Fermenting lactic acid bacteria – Colony count technique at 25°C**

Price	Code:	Gr.6
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13 pages

Identical to ISO 17792:2006

Specifies methods for the enumeration of citrate-fermenting lactic acid bacteria using a colony-count technique at 25°C.

ZWS ISO 17822:2020**In vitro diagnostic test systems — Nucleic acid amplification-based examination procedures for detection and identification of microbial pathogens — Laboratory quality practice guide**

Price	Code:	Gr	7
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41 pages

Identical to ISO/TS 17822:2020

This document describes the particular clinical laboratory practice requirements to ensure the quality of detection, identification and quantification of microbial pathogens using nucleic acid amplification tests (NAAT). It is intended for use by laboratories that develop, and/or implement and use, or perform NAAT for medical, research or health-related purposes. This document does not apply to the development of in vitro diagnostic (IVD) medical devices by manufacturers. However, it does include verification and validation of such devices and/or the corresponding processes when implemented and used by the laboratories.

ZWS ISO/TS 17837:2009**Processed cheese products - Determination of nitrogen content and crude protein calculation – Kjeldahl method**

Price	Code:	Gr	5
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13 pages

Identical to ISO/TS 17837:2008

Specifies a method for the determination of the nitrogen content and crude protein content by calculation in processed cheese products by using the Kjeldahl principle both traditional and block digestion methods.

ZWS ISO 17997**Milk – Determination of casein – nitrogen content Part 1: 2014 Indirect method (Reference method)**

Price	Code:	Gr.5
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8 pages

Identical to ISO 17997.1:2014

Specifies a reference method for the indirect determination of the casein-nitrogen content of bovine milk it canbe modified for milk from other species or liquid dairy products.

Part 2:2004 Direct method

Price	Code:	Gr.5
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7 pages

Identical to ISO 17997:2004

Specifies a routine method for the direct determination of the casein-nitrogen content of bovine milk.

ZWS ISO 18065:2015**Adventure tourism – Information for participation**

Price Code: Gr 6

15 pages

Identical to ISO 18065:2015

Establishes the requirements for tourist services provided directly by NPAA in order to satisfy visitors while giving priority to the NPA conservation objectives, excluding the marine protected areas.

ZWS ISO 18091:2014**Quality management systems – Guidelines for the application of ISO 9001:2008 in local government**

Price	Code:	Gr.	10
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70 pages

Identical to ISO 18091:2014

Provides local governments with guidelines for achieving reliable results through the application of ISO 9001:2008 on an integral basis. These guidelines do not however add change or modify the requirements of ISO 9001:2008

ZWS ISO 18113: Part 1:2022

In vitro diagnostic medical devices – Information supplied by the manufacturer (Labelling)

Part 1: Terms , definitions and general requirements

Price Code: Gr.8
54 pages

Identical to ISO 18113-1:2022

Replaces ZWS ISO 18113-1:2011

This document defines concepts, establishes general principles, and specifies essential requirements for information supplied by the manufacturer of IVD medical devices. This document does not address language requirements since that is the domain of national laws and regulations.

This document does not apply to: a) IVD medical devices for performance evaluation (e.g. for investigational use only); b) shipping documents; c) material safety data sheets / Safety Data Sheets; d) marketing information (consistent with applicable legal requirements).

Part 2:2022

In vitro diagnostic reagents for professional use

Price Code: Gr. 6
11 pages

Identical to ISO 18113.2:2022

Replaces ZWS ISO 18113-2:2011

This document specifies requirements for information supplied by the manufacturer of in vitro diagnostic (IVD) reagents, calibrators and controls intended for professional use. This document can also be applicable to accessories. This document is applicable to the labels for outer and immediate containers and to the instructions for use. This document does not apply to: a) IVD instruments or equipment; b) IVD reagents for self-testing.

Part 3:2022

In vitro diagnostic instruments for professional use

Price Code: Gr.5
10 pages

Identical to ISO 18113.3:2022

Replaces ZWS ISO 18113-3:2011

This document specifies requirements for information supplied by the manufacturer of in vitro diagnostic (IVD) instruments intended for professional use. This document also applies to apparatus and equipment intended to be used with IVD instruments for professional use. This document can also be applicable to accessories. This document does not apply to:

- a) instructions for instrument servicing or repair;
- b) IVD reagents, including calibrators and control materials for use in control of the reagent;
- c) IVD instruments for self-testing.

Part 4:2022

In vitro diagnostic reagents for self testing

Price Code:Gr.5
10 pages

Identical to ISO 18113.4:2022

Replaces ZWS ISO 18113-4:2011

This document specifies requirements for information supplied by the manufacturer of in vitro diagnostic (IVD) reagents, calibrators, and controls intended for self-testing. This document can also be

applicable to accessories. This document is applicable to the labels for outer and immediate containers and to the instructions for use.

This document does not apply to:

- a) IVD instruments or equipment;
- b) IVD reagents for professional use.

Part 5:2022

In vitro diagnostic instruments for self testing

Price Code: Gr.5
9 pages

Identical to ISO 18113.5:2009

Replaces ZWS ISO 18113-5:2011

This document specifies requirements for information supplied by the manufacturer of in vitro diagnostic (IVD) instruments intended for self-testing. This document is also applicable to apparatus and equipment intended to be used with IVD instruments for self-testing. This document can also be applicable to accessories.

This document does not apply to:

- a) instructions for instrument servicing or repair;
- b) IVD reagents, including calibrators and control materials for use in control of the reagent;
- c) IVD instruments for professional use.

ZWS ISO 18153:2003

In vitro diagnostic medical devices — Measurement of quantities in biological samples — Metrological traceability of values for catalytic concentration of enzymes assigned to calibrators and control materials

Price Code: Gr. 6
11 pages

Identical to ISO 18153:2003

This European Standard specifies how to assure the metrological traceability of values assigned to calibrators and control materials intended to establish or verify trueness of measurement of the catalytic concentration of enzymes. The calibrators and control materials are those provided by the manufacturers as part of, or to be used together with, in vitro diagnostic medical devices.

ZWS ISO 18252:2009

Anhydrous milk fat – Determination of sterol composition by gas liquid chromatography (Routine method)

Price Code: Gr 5
13 pages

Identical to ISO 18252:2006

Specifies a routine gas liquid chromatographic method for the determination of the sterol composition in anhydrous milk fat extracted from dairy products directly on the unsaponifiable matter, without purification and derivatization.

ZWS ISO 18601:2013

Packaging and the environment — General requirements for the use of ISO standards in the field of packaging and the environment

Price Code: Gr 6
10 pages

Identical to ISO 18601:2013

This International Standard specifies requirements and procedures for the other International Standards in this series on packaging and the environment: ISO 18602, ISO 18603, ISO 18604, ISO 18605, and ISO 18606. This International Standard is applicable to a supplier responsible for placing packaging or packaged goods on the market.

ZWS ISO 18603:2013**Packaging and environment— reuse**

Price	Code:	Gr	6
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13 pages
Identical to ISO 18603:2013

This International Standard specifies the requirements for a packaging to be classified as reusable and sets out procedures for assessment of meeting the requirements, including the associated systems. The procedure for applying this International Standard is contained in ISO 18601.

ZWS ISO 18604:2013**Packaging and environment - material recycling**

Price	Code:	Gr	6
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20 pages
Identical to ISO 18604:2013

This International Standard specifies the requirements for packaging to be classified as recoverable in the form of material recycling while accommodating the continuing development of both packaging and recovery technologies and sets out procedures for assessment of meeting the requirements of this International Standard. This International Standard cannot by itself provide presumption of meeting the requirements. The procedure for applying this International Standard is contained in ISO 18601.

ZWS ISO 18605:2013**Packaging and the environment – energy recovery**

Price	Code:	Gr	6
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15 pages
Identical to ISO 18605:2013

This International Standard specifies the requirements for packaging to be classified as recoverable in the form of energy recovery and sets out assessment procedures for fulfilling the requirements of this International Standard. This International Standard is a part of a series of International Standards. The procedure for applying it is contained in ISO 18601.

ZWS ISO 18606:2013**Packaging and the environment – organic recovery**

Price	Code:	Gr	6
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21 pages
Identical to ISO 18606:2013

This International Standard specifies procedures and requirements for packaging that are suitable for organic recycling. Packaging is considered as recoverable by organic recycling only if all the individual components meet the requirements. Therefore, packaging is not considered recoverable by organic recycling if only some of the components meet the requirements laid down in this International Standard. However, if the components can be easily, physically separated before disposal, then the physically separated components can be individually considered for organic recycling. This International Standard is applicable to organic recycling of used packaging but does not address regulations that exist regarding the recoverability of any residual packaged goods.

ZWS ISO 18644:2016**Fertilizers and soil conditioners – Controlled release fertilizer – General requirements**

Price	Code:	Gr.	4
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6 pages
Identical to ISO 18644:2016

Specifies requirements for testing methods, sampling and preparation of test sample, marking and labelling, as well as package, transport and storage of controlled-release fertilizer.

ZWS ISO 18788:2015**Management system for private security operations - Requirements with guidance for use**

Price	Code:	Gr.	9
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119 pages
Identical to ISO 18788(2015).

This International Standard provides a framework for establishing, implementing, operating, monitoring, reviewing, maintaining and improving the management of security operations. It provides the principles and requirements for a security operations management system (SOMS). This International Standard provides a business and risk management framework for organizations conducting or contracting security operations and related activities and functions while demonstrating:

- conduct of professional security operations to meet the requirements of clients and other stakeholders;
- accountability to law and respect for human rights;
- consistency with voluntary commitments to which it subscribes.

ZWS ISO 19001:2013**Anhydrous milk fattt – Determination of sterol composition by gas liquid chromatography (Routine method)**

Price Code: Gr. 6
15 pages
Identical to ISO 19001:2013

Specifies requirements for information supplied by the manufacturer with reagents used in staining in biology. It applies to producers, suppliers and vendors of dyes, stains, chromogenic reagents and other reagents used for staining in histology and cytology including bacteriology haematology, histochemistry as performed in medical laboratories both routine and research bacteriology.

ZWS ISO 19011:2018**Guidelines for auditing management systems**

Price Code: Gr.10
49 pages
Identical to ISO 19011:2018
Replaces ZWS ISO 10011, 14010, 14011 and 14012,19011:2002

Provides guidance on auditing management systems, including the principles of auditing, managing an audit programme and conducting management system audits as well as guidance on the evaluation of competence of individuals involved in the audit process including the person managing the audit programme, auditors and audit teams.

ZWS ISO 19046:2017**Cheese – Determination of propionic acid level by chromatography****Part 1: Method by gas chromatography**

Price Code: Gr.5
9 pages
Identical to ISO 19046.1:2017

Specifies a method for the determination of propionic acid level in cheese, using gas chromatography

Part 2: Method by ion exchange chromatography

Price code: Gr 5
7 pages
Identical to ISO 19046.2:2017

Specifies a method for the determination of propionic acid level in cheese, using ion exchange chromatography

ZWS ISO 19244:2014**Guidance on transition periods for standards developed by ISO TC 84- Devices for administration of medicinal products and intravascular**

Price Code: Gr.4

3 pages

Identical to ISO 11608:2014

It outlines the recommended transition plans for all the TC 84 standards: needle based injection systems, sharp injury protection, sharp containers, aerosol drug delivery devices, needle-free injection system, syringes, needles intravascular catheters and ports.

ZWS ISO 19344 |IDF 232:2015**Milk and milk products – Starter cultures, probiotics and fermented products – Quantification of lactic acid bacteria by flow cytometry**

Price Code: Gr.7

26 pages

Identical to ISO 19344|IDF 232:2015

Specifies a standardized method for the quantification of active/or total lactic acid bacteria and probiotic strains in starter cultures used in dairy products by means of flow cytometry. Method also applicable to probiotics used in dairy products and to fermented milk products such as yogurts containing primarily lactic acid bacteria.

ZWS ISO/TS 19657:2017**Definition and technical criteria for food ingredients to be considered as natural**

Price Code:

Gr.7

37 pages

Identical to ISO/TS 16957:2017

Specifies definitions and technical criteria (acceptable sources, materials and processes) to be fulfilled for food ingredients to be considered as natural.

ZWS ISO/IEC 20000:2011**Information Technology – Service Management****Part 1: Service management system requirements**

Price

Code:

Gr.

6

26 pages

Identical to ISO/IEC 20000:2011

A service management system (SMS) standard. It specifies requirements for the service provider to plan, establish, implement, operate, monitor, review, maintain and improve an SMS. The requirements include the design, transition, delivery and improvement of service to fulfil service requirements.

Part 2:2012 Guidance on the application of service management systems

Price

Code:

Gr.

8

85 pages

Identical to ISO/IEC 20000.2:2012

Provides guidance on the application of an SMS based on ISO/IEC 20000.1. This part ISO/IEC 20000 provides examples and suggestions to enable organizations to interpret and apply ISO/IEC 20000.1 including references to other parts of ISO/IEC 20000 and other relevant standards. This part of ISO/IEC 20000 is independent of specific best practice frameworks and the service provider can apply a combination of generally accepted guidance and their own techniques.

Part 5:2013 Exemplar implementation plan for ISO/IEC 20000-1

Price

Code:

Gr.

7

46 pages

Identical to ISO/IEC 20000.5:2013

Provides guidance for an approach to implement an SMS that can fulfil the requirements specified in ISO/IEC 20000-1:2011. Illustrates a generic three-phased plan to manage implementation activities taking into consideration the design, transition, delivery, management and improvement of services.

Part 10:2013 Concepts and terminology

Price

Code:

Gr.

7

22 pages

Identical to ISO IEC/TR 20000.10:2013

Describes the core concepts of ISO/IEC 20000, identifying how the different parts support ISO/IEC 20000-1:2011 as well as the relationships between ISO/IEC 20000 and other International Standards and Technical reports. It explains terminology used in ISO/IEC 20000 so that organizations and individuals can interpret the concepts correctly.

ZWS ISO 20072:2011**Aerosole drug device design verification – Requirements and test methods**

Price

Code:

Gr.8

43 pages

Identical to ISO 20072:2009

Applies to the design labelling, instructions for use and testing requirement for hand-held single and multi-use aerosol drug delivery devices (ADDs) intended to deliver a metered or pre-metered aerosolized medication to or by means of the human respiratory tract (including nasal, oral, tracheal, bronchial and alveolar sites). Applies to both refillable and disposable devices intended for personal use.

ZWS ISO 20128:2006**Milk products – Enumeration of presumptive lactobacillus acidophilus in milk products on a selective medium – colony count technique at 37°C.**

Price Code: Gr.4

11 pages

Identical to ISO 20128:2006

Specifies a method for the enumeration of presumptive *Lactobacillus acidophilus* in milk products on a selective medium by using a colony-count technique at 37°C.

ZWS ISO 20166: Part 1:2018**Molecular in vitro diagnostic examinations — Specifications for pre-examination processes for formalin-fixed and paraffin-embedded (FFPE) tissue:****Part 1: Isolated RNA**

Price Code: Gr.7

26 pages

Identical to ISO 20166: Part 1:2018

This document gives guidelines on the handling, documentation, storage and processing of formalin-fixed and paraffin-embedded (FFPE) tissue specimens intended for RNA examination during the pre-examination phase before a molecular assay is performed. This document is applicable to molecular in vitro diagnostic examinations including laboratory developed tests performed by medical laboratories and molecular pathology laboratories. It is also intended to be used by laboratory customers, in vitro diagnostics developers and manufacturers, biobanks, institutions and commercial organizations performing biomedical research, and regulatory authorities. NOTE International, national or regional regulations or requirements can also apply to specific topics covered in this document.

ZWS ISO 20166: Part 2:2018

Molecular in vitro diagnostic examinations — Specifications for pre-examination processes for formalin-fixed and paraffin-embedded (FFPE) tissue:

Part 2: Isolated proteins

Price Code: Gr .6

20 pages

Identical to ISO 20166: Part 2:2018

This document gives guidelines on the handling, documentation, storage and processing of formalin-fixed and paraffin-embedded (FFPE) tissue specimens intended for the examination of isolated proteins during the pre-examination phase before a molecular assay is performed. This document is applicable to molecular in vitro diagnostic examinations including laboratory developed tests performed by medical laboratories and molecular pathology laboratories. It is also intended to be used by laboratory customers, in vitro diagnostics developers and manufacturers, biobanks, institutions and commercial organizations performing biomedical research, and regulatory authorities. This document is not applicable for protein examination by immunohistochemistry.

ZWS ISO 20166: Part 3:2018

Molecular in vitro diagnostic examinations — Specifications for pre-examination processes for formalin-fixed and paraffin-embedded (FFPE) tissue:

Part 3: Isolated DNA

Price Code: Gr .7

19 pages

Identical to ISO 20166: Part 3:2018

This document gives guidelines on the handling, documentation, storage and processing of formalin-fixed and paraffin-embedded (FFPE) tissue specimens intended for DNA examination during the pre-examination phase before a molecular assay is performed.

This document is applicable to molecular in vitro diagnostic examinations including laboratory developed tests performed by medical laboratories and molecular pathology laboratories. It is also intended to be used by laboratory customers, in vitro diagnostics developers and manufacturers, biobanks, institutions and commercial organizations performing biomedical research, and regulatory authorities. NOTE: International, national or regional regulations or requirements can also apply to specific topics covered in this document.

ZWS ISO 20184: Part 1:2018

Molecular in vitro diagnostic examinations — Specifications for pre-examination processes for frozen tissue:

Part 1: Isolated RNA

Price Code: Gr .6

20 pages

Identical to ISO 20184: Part 1:2018

This document gives guidelines on the handling, documentation, storage and processing of frozen tissue specimens intended for RNA examination during the pre-examination phase before a molecular assay is performed. This document is applicable to any molecular in vitro diagnostic examination performed by medical laboratories and molecular pathology laboratories that evaluate RNA extracted from frozen tissue. It is also intended to be used by laboratory customers, in vitro diagnostics developers and manufacturers, biobanks, institutions and commercial organizations performing biomedical research, and regulatory authorities. Tissues that have undergone chemical stabilization pre-treatment before freezing are not covered in this document. NOTE International, national or regional regulations or requirements can also apply to specific topics covered in this document.

ZWS ISO 20184: Part 2:2018

Molecular in vitro diagnostic examinations — Specifications for pre-examination processes for frozen tissue:

Part 2: Isolated proteins

Price Code: Gr .6

17 pages

Identical to ISO 20184: Part 2:2018

This document gives guidelines on the handling, documentation, storage and processing of frozen tissue specimens intended for the examination of isolated proteins during the pre-examination phase before a molecular assay is performed. This document is applicable to any molecular in vitro diagnostic examination performed by medical laboratories and molecular pathology laboratories that evaluate proteins isolated from frozen tissue. It is also intended to be used by laboratory customers, in vitro diagnostics developers and manufacturers, biobanks, institutions and commercial organizations performing biomedical research, and regulatory authorities. NOTE International, national or regional regulations or requirements can also apply to specific topics covered in this document.

ZWS ISO 20186: Part 1:2019

Molecular in vitro diagnostic examinations — Specifications for pre-examination processes for venous whole blood:

Part 1: Isolated cellular RNA

Price Code: Gr .6

20 pages

Identical to ISO 20186: Part 1:2019

This document gives guidelines on the handling, storage, processing and documentation of venous whole blood specimens intended for cellular RNA examination during the pre-examination phase before a molecular examination is performed. This document covers specimens collected in venous whole blood collection tubes. This document is applicable to any molecular in vitro diagnostic examination performed by medical laboratories. It is also intended to be used by laboratory customers, in vitro diagnostics developers and manufacturers, biobanks, institutions and commercial organizations performing biomedical research, and regulatory authorities. Different dedicated measures are taken for stabilizing blood cell free circulating RNA and RNA in exosomes circulating in blood. These are not described in this document. Different dedicated measures are taken for collecting, stabilizing, transporting and storing capillary blood as well as for collecting and storing blood by paper based technologies or other technologies generating dried blood. These are not described in this document. This document does not cover the isolation of specific blood cells and subsequent isolation of cellular RNA therefrom. RNA in pathogens present in blood is not covered by this document.

ZWS ISO 20186: Part 2:2019

Molecular in vitro diagnostic examinations — Specifications for pre-examination processes for venous whole blood:

Part 2: Isolated genomic DNA

Price Code: Gr .6

19 pages

Identical to ISO 20186: Part 2:2019

This document gives guidelines on the handling, storage, processing and documentation of venous whole blood specimens intended for genomic DNA examination during the pre-examination phase before a molecular examination is performed. This document covers specimens collected in venous whole blood collection tubes. This document is applicable to any molecular in vitro diagnostic examination performed by medical laboratories. It is also intended to be used by laboratory customers, in vitro diagnostics developers and manufacturers, biobanks, institutions and commercial organizations performing biomedical research, and regulatory authorities. Different dedicated measures are taken for stabilizing blood cell free circulating DNA, which are not described in this document. NOTE Circulating cell free DNA in blood is covered in ISO 20186-3. Different dedicated

measures are taken for collecting, stabilizing, transporting and storing capillary blood as well as for collecting and storing blood by paper based technologies or other technologies generating dried blood. These are not described in this document. This document does not cover the isolation of specific blood cells and subsequent isolation of genomic DNA therefrom. DNA in pathogens present in blood is not covered by this document.

ZWS ISO 20186: Part 3:2019

Molecular in vitro diagnostic examinations — Specifications for pre-examination processes for venous whole blood:

Part 2: Isolated circulating cell free DNA

Price Code: Gr .5

18 pages

Identical to ISO 20186: Part 3:2019

This document provides recommendations and requirements on the handling, storage, processing and documentation of venous whole blood specimens intended for circulating cell free DNA (ccfDNA) examination during the pre-examination phase before an analytical test is performed. This document covers specimens collected in venous whole blood collection tubes. This document is applicable to any molecular in vitro diagnostic examination performed by medical laboratories. It is also intended to be used by laboratory customers, in vitro diagnostics developers and manufacturers, biobanks, institutions and commercial organizations performing biomedical research, and regulatory authorities.

Different dedicated measures are taken for stabilizing blood genomic DNA, which are not described in this document. Blood genomic DNA is covered in ISO 20186-2. Different dedicated measures are taken for preserving DNA in circulating exosomes, which are not described in this document.

ZWS ISO 20252:2019

Market, opinion and social research, including insights and data analytics — Vocabulary and service requirements

Price Code: Gr. 8

68 pages

Identical to ISO 20252:2019

Supersedes ZWS ISO 20252:2007

This document establishes terms, definitions and service requirements for service providers conducting market, opinion and social research, including insights and data analytics (hereinafter referred to as “service providers”). Non-market research activities, such as direct marketing, are outside the scope of this document.

ZWS ISO 20344:2021

Personal protective equipment — Test methods for footwear

Price Code: Gr.7

89 pages

Identical to ISO 20344:2021

This document specifies methods for testing footwear designed as personal protective equipment.

ZWS ISO 20345:2011

Personal Protective Equipment –Safety Footwear

Price Code: Gr.7

30 pages

Identical to ISO 20345:2011

Specifies basic and additional requirements for safety footwear used for general purpose. It includes, for example, mechanical risks, slip resistance, thermal risks, ergonomic behavior.

ZWS ISO 20471:2013/Amd 1:2016

High visibility clothing — Test methods and requirements

Price Code: Gr.7

23 pages

Identical to ISO 20471:2013

This International Standard specifies requirements for high visibility clothing which is capable of visually signalling the user's presence. The high visibility clothing is intended to provide conspicuity of the wearer in any light condition when viewed by operators of vehicles or other mechanized equipment during daylight conditions and under illumination of headlights in the dark. For further information concerning risk situations, see Annex A. This International Standard is not applicable to medium-risk and low-risk situations. Performance requirements are included for colour and retroreflection as well as for the minimum areas and for the placement of the materials in protective clothing.

ZWS ISO 20541:2011

Milk and milk products – Determination of nitrate content – Method by enzymatic reduction and molecular absorption spectrometry after griess reaction

Price Code: Gr.7

15 pages

Identical to ISO 20541:2008

Specifies a method for the determination of the nitrate content of milk and milk products by molecular-absorption spectrometry after Griess reaction (preceded by enzymatic reduction).

ZWS ISO 20776: 2009

Clinically laboratory testing and in vitro diagnostic test systems – Susceptibility testing of infectious agents and evaluation of performance of antimicrobial susceptibility test devices

Part 1: Reference method for testing the in vitro activity of antimicrobial agents against rapidly growing aerobic bacteria involved in infectious diseases

Price Code: Gr. 6

19 pages

Describes one reference method, broth microdilution for determination of MICs. The MIC reflects the activity of the drug under the described test conditions and can be interpreted for clinical management purposes by taking into account other factors such as pharmacology or bacterial resistance mechanism.

Part 2: Evaluation of performance of antimicrobial susceptibility test devices

Price Code: Gr. 4

Identical to ISO 20776.2: 2007

Establishes acceptable performance criteria for antimicrobial susceptibility test (AST) device that are used to determine minimum inhibitory concentrations (MIC) and/ or interpretive category determinations of susceptible, intermediate and resistant (SIR) strains of bacteria to antimicrobial agents in medical laboratories.

ZWS ISO 20766: Part 1:2018

Road vehicles - liquefied petroleum gas (LPG) fuel system components. Part 1: general requirements and definitions

Price Code: Gr. 5

8 pages

27 pages

Identical to ISO 20766-1:2018.

This document specifies general requirements and definitions of liquefied petroleum gas fuel system components, intended for use on the types of motor vehicles as defined in ISO 3833. It also provides general design principles, and specifies requirements for instructions and marking. This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using gaseous fuels in accordance with ISO 9162.

9 pages

ZWS ISO 20766: Part 2:2018

Road vehicles — liquefied petroleum gas (LPG) fuel system components — Part 2: performance and General test methods

Price Code: Gr. 5

12 pages

27 pages

Identical to ISO 20766-2:2018.

This document specifies performance and general test methods of liquefied petroleum gas fuel system components, intended for use on the types of motor vehicles as defined in ISO 3833.

This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using liquefied petroleum gas in accordance with ISO 9162.

ZWS ISO 20766: Part 3:2018

Road vehicles — liquefied Petroleum gas (LPG) fuel system components — part 3: 80% stop valve

Price Code: Gr. 4

6 pages

27 pages

Identical to ISO 20766-3:2018.

This document specifies general requirements and definitions of liquefied petroleum gas fuel components, intended for use on the types of motor vehicles as defined in ISO 3833. It also provides general design principles, and specifies requirements for instructions and marking.

This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using gaseous fuels in accordance with ISO 9162.

ZWS ISO 20766: Part 4:2018

Road vehicles — liquefied petroleum gas (LPG) fuel system components — Part 4: level indicator

Price Code: Gr. 4

5 pages

27 pages

Identical to ISO 20766-4:2018.

This document specifies general requirements and definitions of liquefied petroleum gas fuel components, intended for use on the types of motor vehicles as defined in ISO 3833. It also provides general design principles, and specifies requirements for instructions and marking. This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using gaseous fuels in accordance with ISO 9162.

ZWS ISO 20766: Part 5:2023

Road vehicles – liquefied petroleum gas (LPG) fuel system components. Part 5: fuel selection system and electrical installations

Price Code: Gr. 4

5 pages

Identical to ISO 20766-5:2023.

This document specifies general requirements and definitions of liquefied petroleum gas fuel components (fuel selection system and electrical installations, intended for use on the types of motor vehicles as defined in ISO 3833). It also provides general design principles, and specifies requirements for instructions and marking. This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using gaseous fuels in accordance with ISO 9162.

ZWS ISO 20766: Part 6:2019/Amd 1:2022

Road vehicles – liquefied petroleum gas (LPG) fuel system components. Part 6: pressure relief valves (prv)

Price Code: Gr. 7

5 pages

27 pages

Identical to Standard 20766-6:2019, (Amended 2022).

This document specifies general requirements and definitions of liquefied petroleum gas fuel components, intended for use on the types of motor vehicles as defined in ISO 3833. It also provides general design principles, and specifies requirements for instructions and marking.

This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using gaseous fuels in accordance with ISO 9162.

ZWS ISO 20766: Part 7:2023

Road vehicles – liquefied petroleum gas (LPG) fuel system components.

Part 7: remotely controlled service valve with excess flow valve

Price Code: Gr. 5

8 pages

Identical to ISO 20766-7:2023.

27 pages

This document specifies general requirements and definitions of the liquefied petroleum gas fuel component: remotely controlled service valve with excess flow valve. This component is intended for use on the types of motor vehicles as defined in ISO 3833. It also provides general design principles and specifies requirements for instructions and marking.

This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using gaseous fuels in accordance with ISO 9162. It is not applicable to the following:

- a) fuel containers;
- b) stationary gas engines;
- c) container mounting hardware;
- d) electronic fuel management;
- e) refuelling receptacles.

It is recognized that miscellaneous components not specifically addressed herein can be examined for compliance with the criteria of

any applicable part of the ISO 20766 series, including testing to the appropriate functional tests.

All references to pressure in this document are considered gauge pressures unless otherwise specified.

This document applies to device which have a service pressure in the range of 110 kPa (butane rich at 20 °C) and 840 kPa (propane rich at 20 °C), hereinafter referred to in this document. Other service pressures can be accommodated by adjusting the pressure by the appropriate factor (ratio).

ZWS ISO 20766: Part 8:2023

Road vehicles – liquefied petroleum gas (LPG) fuel system components. Part 8: fuel pump

Price Code: Gr. 4

4 pages

Identical to ISO 20766-8:2023.

27 pages

This document specifies general requirements for the fuel pump component of liquefied petroleum gas fuel, intended for use on the types of motor vehicles as defined in ISO 3833. It also provides general design principles and specifies requirements for instructions and marking.

This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using gaseous fuels in accordance with ISO 9162. It is not applicable to the following:

- a) fuel containers;
- b) stationary gas engines;
- c) container mounting hardware;
- d) electronic fuel management;
- e) refuelling receptacles.

It is recognized that miscellaneous components not specifically addressed herein can be examined for compliance with the criteria of any applicable part of the ISO 20766 series, including testing to the appropriate functional tests.

All references to pressure in this document are considered gauge pressures unless otherwise specified.

This document applies to device which have a service pressure in the range of 110 kPa (butane rich at 20 °C) and 840 kPa (propane rich at 20 °C), hereinafter referred to in this document. Other service pressures can be accommodated by adjusting the pressure by the appropriate factor (ratio).

ZWS ISO 20766: Part 9:2019

Road vehicles — liquefied petroleum gas (LPG) fuel system components —Part 9 : pressure relief

Devices (prd)

Gr. 5

8 pages

Identical to ISO 20766:2019.

This document specifies general requirements and definitions of liquefied petroleum gas fuel components, intended for use on the types of motor vehicles as defined in ISO 3833. It also provides general design principles, and specifies requirements for instructions and marking. This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using gaseous fuels in accordance with ISO 9162. It is not applicable to the following: a)fuel containers; b)stationary gas engines; c)container mounting hardware; d)electronic fuel management; e)refuelling receptacles.

ZWS ISO 20766: Part 10:2019

Road vehicles - liquefied Petroleum gas (LPG) fuel system

Components Part 10: gas-tight housing

Price Code: Gr. 4

4 pages

Identical to ZWS ISO 20766-10: 2019

This document specifies general requirements and definitions of the liquefied petroleum gas fuel component: remotely controlled service valve with excess flow valve. This component is intended for use on the types of motor vehicles as defined in ISO 3833. It also provides general design principles and specifies requirements for instructions and marking.

This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using gaseous fuels in accordance with ISO 9162. It is not applicable to the following:

- a)fuel containers;
- b)stationary gas engines;
- c)container mounting hardware;
- d)electronic fuel management;
- e)refuelling receptacles.

ZWS ISO 20766: Part 11:2020

Road vehicles — liquefied petroleum gas (LPG) fuel system components Part 11: manual shut-off valve

Price Code: Gr. 4

4 pages

27 pages

Identical to 20766-11:2020

This document specifies general information regarding the manual shut off valve component of liquefied petroleum gas fuel, intended for use on the types of motor vehicles as defined in ISO 3833. It provides general design principles and specifies requirements for instructions and marking. It also specifies test requirements for the manual shut off valve. This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using gaseous fuels in accordance with ISO 9162

ZWS ISO 20766: Part 12:2019

Road vehicles — liquefied petroleum gas (LPG) fuel system components

Part 12: non-return valve

Price Code: Gr. 4

4 pages

27 pages

Identical to ISO 20766-12 published(2019).

This document specifies general information regarding the non-return valve component of liquefied petroleum gas fuel, intended for use on the types of motor vehicles as defined in ISO 3833. It provides general design principles and specifies requirements for instructions and marking. It also specifies test requirements for the non-return valve. This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using gaseous fuels in accordance with ISO 9162.

ZWS ISO 20766: Part 13:2022

Road vehicles — liquefied petroleum gas (LPG) fuel system components .

Part 13: multivalve

Price Code: Gr. 4

4 pages

Identical to ISO 20766-13:2022.

This document specifies general requirements for the multivalve component of liquefied petroleum gas fuel, intended for use on the types of motor vehicles as defined in ISO 3833. It also provides general design principles and specifies requirements for instructions and marking. This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using gaseous fuels in accordance with ISO 9162. It is not applicable to the following:

- a)fuel containers;
- b)stationary gas engines;
- c)container mounting hardware;
- d)electronic fuel management;
- e)refuelling receptacles.

ZWS ISO 20766: Part 14:2023

Road vehicles — Liquefied petroleum gas (LPG) fuel system components

Part 14: Vaporizer/pressure regulator

Price Code: Gr. 4

6 pages

Identical to ISO 20766-14:2023

This document specifies general requirements for the vaporizer/pressure regulator, a component of liquefied petroleum gas fuel, intended for use on the types of motor vehicles as defined in ISO 3833. It also provides general design principles and specifies requirements for instructions and marking. This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using gaseous fuels in accordance with ISO 9162. It is not applicable to the following:

- a) fuel containers;
- b) stationary gas engines;
- c) container mounting hardware;
- d) electronic fuel management;
- e) refuelling receptacles.

It is recognized that miscellaneous components not specifically addressed herein can be examined for compliance with the criteria of any applicable part of the ISO 20766 series, including testing to the appropriate functional tests. All references to pressure in this document are considered gauge pressures unless otherwise specified. This document applies to devices which have a service pressure in the range of 110 kPa (butane rich at 20 °C) and 840 kPa (propane at 20 °C), hereinafter referred to in this document. Other service pressures can be accommodated by adjusting the pressure by the appropriate factor (ratio).

ZWS ISO 20766: Part 15:2023

Road vehicles — Liquefied petroleum gas (LPG) fuel system components

Part 15: Excess flow valve

Price Code: Gr. 4

4 pages

Identical to ISO 20766-15:2023

This document specifies general requirements of the liquefied petroleum gas fuel component, excess flow valve, intended for use on the types of motor vehicles as defined in ISO 3833. It also provides general design principles and specifies requirements for instructions and marking. This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using gaseous fuels in accordance with ISO 9162. It is not applicable to the following:

- a) fuel containers;
- b) stationary gas engines;
- c) container mounting hardware;
- d) refuelling receptacles.

It is recognized that miscellaneous components not specifically addressed herein can be examined for compliance with the criteria of any applicable part of the ISO 20766 series, including testing to the appropriate functional tests. All references to pressure in this document are considered gauge pressures unless otherwise specified. This document applies to devices which have a service pressure in the range of 110 kPa (butane rich at 20 °C) and 840 kPa (propane rich at 20 °C), hereinafter referred to in this document. Other service pressures can be accommodated by adjusting the pressure by the appropriate factor (ratio).

ZWS ISO 20766: Part 16:2023

Road vehicles — Liquefied petroleum gas (LPG) fuel system components:

Part 16: Injectors and gas mixing device/fuel rail

Price Code: Gr. 4

4 pages

Identical to ISO 20766-16:2023

This document specifies general requirements for the injectors and gas mixing device/fuel rail, components of liquefied petroleum gas fuel, intended for use on the types of motor vehicles as defined in ISO 3833. It also provides general design principles and specifies requirements for instructions and marking. This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using gaseous fuels in accordance with ISO 9162. It is not applicable to the following:

- a) fuel containers;
- b) stationary gas engines;
- c) container mounting hardware;
- d) electronic fuel management;
- e) refuelling receptacles.

It is recognized that miscellaneous components not specifically addressed herein can be examined for compliance with the criteria of any applicable part of the ISO 20766 series, including testing to the appropriate functional tests. All references to pressure in this document are considered gauge pressures unless otherwise specified. This document applies to devices which have a service pressure in the range of 110 kPa (butane rich at 20 °C) and 840 kPa (propane at 20 °C), hereinafter referred to in this document. Other service pressures can be accommodated by adjusting the pressure by the appropriate factor (ratio).

ZWS ISO 20766: Part 17:2022

Road vehicles — Liquefied petroleum gas (LPG) fuel system components:

Part 16: Injectors and gas mixing device/fuel rail

Price Code: Gr. 4

4 pages

Identical to ISO 20766-17:2022

This document specifies general requirements and definitions for the gas dosage unit when not combined with the gas injection device (a liquefied petroleum gas fuel component), intended for use on the types of motor vehicles defined in ISO 3833. It also provides general design principles and specifies requirements for instructions and marking. This document is applicable to vehicles (mono-fuel, bi-fuel or dual-fuel applications) using gaseous fuels in accordance with ISO 9162. It is not applicable to the following:

- a) fuel containers;
- b) stationary gas engines;
- c) container mounting hardware;
- d) electronic fuel management;
- e) refuelling receptacles.

It is recognized that miscellaneous components not specifically addressed herein can be examined for compliance with the criteria of any applicable part of the ISO 20766 series, including testing to the appropriate functional tests. All references to pressure in this document are considered gauge pressures unless otherwise specified.

This document applies to device which have a service pressure in the range of 110 kPa (butane rich at 20 °C) and 840 kPa (propane rich at 20 °C), hereafter referred to in this document. Other service pressures can be accommodated by adjusting the pressure by the appropriate factor (ratio).

ZWS ISO 20780:2018

Space systems — fibre optic components — Design and verification requirements

Price Code: Gr. 6

20 pages

Identical to ISO 20780:2018

This document specifies requirements for the design and verification of fibre optic components used in space fibre optic sub-systems. In this document, the requirements are established to assure the reliability and environmental adaptability of fibre optic components in space environmental conditions. These are in a range of applications such as ground systems, unmanned applications and manned systems. This document suggests a set of requirements to be applied to the selection of space fibre optic components.

ZWS ISO 20914:2019

Medical laboratories — practical guidance for the estimation of measurement uncertainty

Price Code: Gr. 7

75 pages

Identical to ISO 20780:2018

This document provides practical guidance for the estimation and expression of the measurement uncertainty (MU) of quantitative measurand values produced by medical laboratories. Quantitative measurand values produced near the medical decision threshold by point-of-care testing systems are also included in this scope. This document also applies to the estimation of MU for results produced by qualitative (nominal) methods which include a measurement step. It is not recommended that estimates of MU be routinely reported with patient test results, but should be available on request.

ZWS ISO 20916: 2019

In vitro diagnostic medical devices — clinical performance studies using specimens from human subjects — good study practice

Price Code: Gr. 8

60 pages

Identical to ISO 20916: 2019

This document defines good study practice for the planning, design, conduct, recording and reporting of clinical performance studies carried out to assess the clinical performance and safety of in vitro diagnostic (IVD) medical devices for regulatory purposes. NOTE 1: The purpose of these studies is to assess the ability of an IVD medical device in the hands of the intended user, to yield results pertaining to a particular medical condition or physiological/pathological state, in the intended population.

The document is not intended to describe whether the technical specifications of the IVD medical device in question are adequately addressed by the clinical performance study. This document identifies the principles that underpin clinical performance studies and specifies general requirements.

ZWS ISO 21001: 2018

Educational organisations – Management systems for educational organisations- Requirements with guidance for use

Price Code: Gr. 6

60 pages

Identical to ISO 21001: 2018

This standard provides a common management tool for organisations providing educational products and services capable of meeting learners and other beneficiaries requirements.

ZWS ISO 21067: Part1:2016

Packaging – Vocabulary

Part 1: General terms

Price Code: Gr 4

19 pages

Identical to ISO 21067-1:2016

Outlines the requirements of a safety management system for adventure tourism activity providers

ZWS ISO 21101:2014

Adventure tourism – safety management systems - Requirements

Price Code: Gr 6

24 pages

Identical to ISO 21101:2014

Outlines the requirements of a safety management system for adventure tourism activity providers.

ZWS ISO 21103:2014

Adventure tourism – Information for participation

Price Code: Gr 5

7 pages

Identical to ISO 21103:2014

Specifies minimum requirements for information to be provided to participation before, during and after adventure tourism activities.

ZWS ISO 21151:2020

In vitro diagnostic medical devices – measurement of quantities in samples of biological origin – Requirements for international harmonization protocols establishing metrological traceability of values assigned to calibrators and human samples

PriceCode: Gr. 7

22 pages

Identical to ISO 21151:2020

This document specifies requirements for a protocol implemented by an international body to achieve equivalent results among two or more IVD MDs for the same measurand for cases where there are no reference measurement procedures and no fit-for-purpose certified reference materials or international conventional calibrators. In this case, the harmonisation protocol defines the highest level of metrological traceability for the stated measurand. This document can be

applied in cases when certified reference materials or international conventional calibrators exist but are not fit-for-purpose because, for example, they are not commutable with human samples.

ZWS ISO 21187:2005

Milk – Quantitative determination of bacteriological quality – Guidance for establishing and verifying a conversion relationship between routine method results and anchor method results.

Price Code: Gr 6

13 pages

Identical to ISO 21187:2004

Gives guidelines for the establishment of a conversion relationship between the results of a routine method and an anchor method, and its verification for the quantitative determination of the bacteriological quality of milk.

ZWS ISO 21439:2009

Clinical Dosimetry-Beta Radiation Sources For Brachytherapy

Price Code: Gr.8

91 pages

Identical to ISO 21439:2009

Specifies methods for the determination of absorbed-dose distributors in water or tissue that are required prior to initiating procedures for the application of beta radiation in ophthalmic tumor and intravascular brachytherapy

ZWS ISO 21474: Part 1:2020

In vitro diagnostic medical devices – multiplex molecular testing for nucleic acids Part 1: Terminology and general requirements for nucleic acid quality evaluation

Price Code: Gr. 6

22 pages

Identical to ISO 201474-1:2020

This document provides the terms and general requirements for the evaluation of the quality of nucleic acids as the analytes for multiplex molecular tests, which simultaneously identify two or more nucleic acid target sequences of interest. This document is applicable to all multiplex molecular methods used for examination using in vitro diagnostic (IVD) medical devices and laboratory developed tests (LDTs). It provides information for both qualitative and quantitative detection of nucleic acid target sequences. This document is intended as guidance for multiplex molecular assays that detect and/or quantify human nucleic acid target sequences or microbial pathogen nucleic acid target sequences from human clinical specimens. This document is applicable to any molecular in vitro diagnostic examination performed by medical laboratories. It is also intended to be used by laboratory customers, in vitro diagnostics developers and manufacturers, biobanks, institutions and commercial organizations performing biomedical research, and regulatory authorities. This document is not applicable to metagenomics.

ZWS ISO 21482:2007

Ironizing – Radiation warning - Supplementary

Price Code: Gr 7

28 pages

Identical to ISO 21898:2004

Specifies materials, construction and design requirements, type test, certification and making requirements for flexible intermediate bulk containers (FIBCs) intended to contain non-dangerous solid materials in powder, granular or paste form, and designed to be lifted from above by integral or detachable devices.

ZWS ISO 21528: Part 2:2017
Microbiology of the food chain- Horizontal method for the detection and enumeration of enterobacteriaceae
Part 2: Colony-count technique

Price Code: Gr. 6
14 pages
Identical to ISO 21528-2:2017

This document specifies a method for the enumeration of Enterobacteriaceae. It is applicable to products intended for human consumption and the feeding of animals, and environmental samples in the area of primary production, food production and food handling. This technique is intended to be used when the number of colonies sought is expected to be more than 100 per millilitre or per gram of the test sample. The most probable number (MPN) technique, as included in ISO 21528 1, is generally used when the number sought is expected to be below 100 per millilitre or per gram of test sample.

ZWS ISO 21649: 2009
Needle – Free injectors for medical use – Requirements and test methods

Price Code: Gr. 7
32 pages
Identical to ISO 21649: 2006

Applies to safety and performance and testing requirements for single-use and multiple-use needle-free injection systems intended for human use in clinics and other medical settings and for personal use by patients.

ZWS ISO 21703: 2019
Surface active agents — Microbiology — Microbiological test methods for liquid hand dishwashing

Price Code: Gr. 6
19 pages
Identical to ISO 21703: 2019

This document provides microbiological test methods for enumeration and detection of aerobic mesophilic bacteria, detection of Escherichia coli and Pseudomonas aeruginosa in liquid hand dishwashing.

ZWS ISO 21795: Part 1:2021
Mine closure and reclamation planning.
Part 1: requirements

Price Code: Gr. 10
16 pages
Identical to ISO ISO 21795-1:2021.

This document specifies a framework and the processes involved in mine closure and reclamation planning for new and operating mines.

ZWS ISO 21795: Part 2:2021
Mine closure and reclamation planning.
Part 2: guidance

Price Code: Gr. 8
76 pages
Identical to ISO 21795-2:2021.

This document provides guidance related to the necessary mine closure and reclamation planning activities for new and operating mines

ZWS ISO 21898:2004
Packaging – Flexible intermediate bulk containers (FIBCs) for non-dangerous goods

Price Code: Gr 7
28 pages
Identical to ISO 21898:2004

Specifies materials, construction and design requirements, type test, certification and making requirements for flexible intermediate bulk containers (FIBCs) intended to contain non-dangerous solid materials in powder, granular or paste form, and designed to be lifted from above by integral or detachable devices

ZWS ISO 22000:2018
Food safety management systems - Requirements for any organisation in the food chain

Price Code: Gr. 10
40 pages
Supercedes ZWS ISO 22000:2018
This document specifies requirements for a food safety management system (FSMS) to enable an organization that is directly or indirectly involved in their food chain.

ZWS ISO/TS 22002:2009
Technical Specification – Prerequisite programmes on food safety

Part 1: Food Manufacturing
Price Code: Gr. 6
18 pages
Identical to ISO /TS 22002.1:2009

Specifies requirements for establishing, implementing and maintaining prerequisite programmes (PRP) to assist in controlling food safety hazards.

Part 2:2013 Catering
Price Code: Gr.6
18 pages
Identical to ISO/TS 22002.2:2013

Applicable to all organizations which are involved in the processing, preparation, distribution, transport and serving of food and meals and wish to implement PRPs in accordance with the requirements specified in ISO 22000:2005

Part 3:2011 Farming
Price Code: Gr. 7
24 pages
Identical to ISO/TS 22002.3:2013

Specifies requirements and guidelines for the design, implementation and documentation of prerequisite programmes (PRPs) that maintain a hygienic environment and assist in controlling food safety hazards in the food chain.

Part 4:2013 Food packaging manufacturing
Price Code: Gr. 7
24 pages
Identical to ISO/TS 22002.4:2013

Specifies requirements for establishing, implementing and maintaining prerequisite programmes (PRPs) to assist in controlling food safety hazards in manufacture of packaging.

Part 6:2016 Feed and animal food production
Price Code: Gr. 5
15 pages
Identical to ISO/TS 22002.4:2013

Specifies requirements for establishing, implementing and maintaining prerequisite programmes (PRPs) to assist in controlling food safety hazards in feed and animal food and in materials intended for use in the production of feed and animal food. Feed safety in this context relate to attributes that have a potential to affect adversely animal and/or human health

ZWS ISO/TS 22003: Part 1:2022**Food safety****Part 1 – Requirements for bodies providing audit and certification of food safety management systems**

Price Code: Gr 7

26 pages

Identical to ISO/TS 22003: Part 1:2022

This document specifies the requirements for the audit and certification of a food safety management system (FSMS) complying with the requirements given in ISO 22000 (or other specified FSMS requirements). It also provides the necessary information and confidence to customers about the way certification of their suppliers has been granted. Certification of FSMS is a third-party conformity assessment activity (as described in ISO/IEC 17000:2020, 4.3), and bodies performing this activity are third-party conformity assessment bodies.

ZWS ISO/TS 22003: Part 2:2022**Food safety****Part 2 – Requirements for bodies providing evaluation and certification of products, processes and services, including an audit of the food safety system**

Price Code: Gr 7

26 pages

Identical to ISO/TS 22003: Part 2:2022

This document is supplemental to ISO/IEC 17065. It specifies the rules applicable for the audit of a food safety system (FSS) and certification of products, processes and services complying with requirements of a certification scheme that is based on the internationally accepted principles of food safety (e.g. CODEX General Principles of Food Hygiene[8]) and includes management system elements.

ZWS ISO 22004:2014**Food safety management systems – Guidance on the application of ISO 22000**

Price Code: Gr 7

13 pages

Identical to ISO/TS 22004:2005

Provides generic guidance that can be applied in the use of ISO 22000.

ZWS ISO 22005:2008**Traceability in the feed and food chain – General principles and basic requirements for system design and implementation**

Price Code: Gr 4

8 pages

Identical to ISO 22005:2007

Gives the principles and specifies basic requirements for the design and implementation of a feed and food traceability systems. It can be applied by an organization operating at any step in the feed and food chain.

ZWS ISO 22006:2009**Quality management systems – Guidelines for the application of ISO 9001:2008 to crop production**

Price Code: Gr .8

60pages

Identical to ISO 22006:2009

Gives guidance to assist crop producers in the adoption of ISO 9001:2008 for crop production processes. The term crop production includes seasonal crops (such as grains, pulses, oilseeds, spices, fruit and vegetables) row planted crops that are cultivated, perennial crops that are managed over a period of time and wild crops that are not formally planted or managed. Horticultural crops provide an

even broader range of types from annual to perennial fruits, vegetables and ornamental flowering plants to perennial shrubs and trees and root crops.

ZWS ISO 22160:2007**Milk and milk based drinks – Determination of alkaline phosphatase activity – Enzymatic Photo – activated system (EPAS) method.**

Price Code: Gr 6

16 pages

Identical to ISO 22160:2007

Specifies a method for the determination of the alkaline phosphatase activity in pasteurized whole milk, semi skimmed milk, cream and flavoured milks using chemiluminescent (EPAS) method.

ZWS ISO/IEC 22237: Part 1:2021**Information technology — Data centre facilities and infrastructures****Part 1: General concepts**

Price Code: Gr. 7

31 pages

Identical to ISO/IEC 22237-1:2021

This document:

- describes the general principles for data centres upon which the requirements of the ISO/IEC 22237 series are based;
- defines the common aspects of data centres including terminology, parameters and reference models (functional elements and their accommodation) addressing both the size and complexity of their intended purpose;
- describes general aspects of the facilities and infrastructures required to support data centres;
- specifies a classification system, based upon the key criteria of “availability”, “security” and “energy-efficiency” over the planned lifetime of the data centre, for the provision of effective facilities and infrastructure;
- details the issues to be addressed in a business risk and operating cost analysis enabling application of the classification of the data centre;
- provides a reference to the operation and management of data centres.

The following topics are outside of the scope of the ISO/IEC 22237 series:

- the selection of information technology and network telecommunications equipment, software and associated configuration issues are outside the scope of this International Standard;
- quantitative analysis of overall service availability resulting from multi-site data centres;
- safety and electromagnetic compatibility (EMC) requirements (covered by other standards and regulations. However, information given in this document can be of assistance in meeting these standards and regulations).

ZWS ISO/IEC 22237: Part 2:2018**Information technology — data centre facilities and infrastructures****Part 2: Building construction**

Price Code: Gr. 6

25 pages

Identical to ISO/IEC 22237-2:2018

This document addresses the construction of buildings and other structures which provide accommodation for data centres based upon the criteria and classification for “physical security” within ISO/IEC TS 22237 1 in support of availability.

This document specifies requirements and recommendations for the following:

- location and site selection;

- b) building construction;
- c) building configuration;
- d) fire protection;
- e) quality construction measures.

Safety and electromagnetic compatibility (EMC) requirements are outside the scope of this document and are covered by other standards and regulations. However, information given in this document may be of assistance in meeting these standards and regulations.

ZWS ISO/IEC 22237: Part 3:2021
Information technology – Data centre facilities and infrastructures

Part 3: Power distribution
 Price Code: Gr. 7
 35 pages
 Identical to ISO/IEC 22237-3:2021

This document addresses power supplies to, and power distribution within, data centres based upon the criteria and classifications for “availability”, “physical security” and “energy efficiency enablement” within ISO/IEC 22237 1.

This document specifies requirements and recommendations for the following:

- a) power supplies to data centres;
- b) power distribution systems to all equipment within data centres;
- c) telecommunications infrastructure bonding;
- d) lightning protection;
- e) devices for the measurement of the power consumption and power quality characteristics at points along the power distribution system and their integration within management tools. Safety and electromagnetic compatibility (EMC) requirements are outside the scope of this document and are covered by other standards and regulations. However, information given in this document can be of assistance in meeting these standards and regulations. Conformance of data centres to the present document is covered in Clause 4. The use of the data centre stored energy or alternate sources to be used by the grid is not in the scope of this document and is for consideration in future specifications.

ZWS ISO 22300:2021
Security and resilience — vocabulary
 Price Code: Gr. 7
 63 pages
 Identical to ISO 22300(2021).

This document defines terms used in security and resilience standards.

ZWS ISO 22301:2019
Security and resilience – Business continuity management systems – Requirements
 Price Code: Gr. 7
 23 pages
 Identical to ISO 22301:2019

This document specifies requirements to implement, maintain and improve a management system to protect against, reduce the likelihood of the occurrence of, prepare for, respond to and recover from disruptions when they arise. The requirements specified in this document are generic and intended to be applicable to all organizations, or parts thereof, regardless of type, size and nature of the organization. The extent of application of these requirements depends on the organization’s operating environment and complexity. This document is applicable to all types and sizes of organizations that:

- a) implement, maintain and improve a BCMS;
- b) seek to ensure conformity with stated business continuity policy;
- c) need to be able to continue to deliver products and services at an acceptable predefined capacity during a disruption;
- d) seek to enhance their resilience through the effective application of the BCMS.

This document can be used to assess an organization’s ability to meet its own business continuity needs and obligations.

ZWS ISO 22316 :2017
Security and resilience — organizational resilience — principles and attributes

Price Code: Gr. 6
 11 pages
 Identical to ISO 22316:2017.

This document provides guidance to enhance organizational resilience for any size or type of organization. It is not specific to any industry or sector. This document can be applied throughout the life of an organization.

This document does not promote uniformity in approach across all organizations, as specific objectives and initiatives are tailored to suit an individual organization’s needs.

ZWS ISO/TS 22317 :2021
Security and resilience - business continuity management systems - guidelines for business impact analysis

Price Code: Gr. 7
 37 pages
 Identical to ISO TS 22317:2021.

This document gives guidelines for an organization to implement and maintain a formal and documented business impact analysis (BIA) process appropriate to its needs. It does not prescribe a uniform process for performing a BIA.

This document is applicable to all organizations regardless of type, size and nature, whether in the private, public or not-for-profit sectors. The guidance can be adapted to the needs, objectives, resources and constraints of the organization.

ZWS ISO/TS 22318:2021
Security and resilience — business continuity management systems -guidelines for supply chain continuity management

Price Code: Gr. 6
 21 pages
 Identical to ISO TS 22318:2021.

This document gives guidance on methods for understanding and extending the principles of business continuity embodied in ISO 22301 and ISO 22313 to the management of supplier relationships. It enables an organization to develop and document the strategy to be better prepared to manage supply chain continuity. This document is generic and applicable to all organizations. It is applicable to suppliers of products, services and resources, both upstream and downstream. Supply chain continuity management (SCCM) specifically considers the issues faced by an organization which relies on the continuity of supply of resources as well as the ability to continue delivery of its products and services. The objective of SCCM is to protect the organization’s business activities from supply chain disruption.

ZWS ISO/TS 22319:2017
Security and resilience - Community resilience — Guidelines for planning the involvement of spontaneous volunteers

Price Code: Gr. 7
 16 pages
 Identical to ISO TS 22319:2017

This document provides guidelines for planning the involvement of spontaneous volunteers (SVs) in incident response and recovery. It is intended to help organizations to establish a plan to consider whether, how and when SVs can provide relief to a coordinated response and recovery for all identified hazards. It helps identify issues to ensure the plan is risk-based and can be shown to prioritize the safety of SVs, the public they seek to assist and incident response staff. This document is intended for use by organizations with responsibility for, or involvement in,

part or all of the planning for working with SVs. It is applicable to all types and sizes of organizations that are involved in the planning for, and management of, SVs (e.g. local, regional, and national governments, statutory bodies, international and non-governmental organizations, businesses and public and community groups). The range of tasks performed by SVs can require only basic planning (e.g. for people who are first on the scene), or a plan that is more complex (e.g. for people who travel to the affected area to volunteer). Coordinating the participation of volunteers who are affiliated to voluntary or professional organizations to provide relief is not within the scope of this document.

ZWS ISO/TS 22320:2018
Security and resilience – Emergency management – Guidelines for incident management

Price Code: Gr. 7
 20 pages
 Identical to ISO TS 22320:2018

This document gives guidelines for incident management, including principles that communicate the value and explain the purpose of incident management, basic components of incident management including process and structure, which focus on roles and responsibilities, tasks and management of resources, and working together through joint direction and cooperation. This document is applicable to any organization involved in responding to incidents of any type and scale. This document is applicable to any organization with one organizational structure as well as for two or more organizations that choose to work together while continuing to use their own organizational structure or to use a combined organizational structure.

ZWS ISO/TS 22330:2018
Security and resilience – Business continuity management systems – Guidelines for people aspects of business continuity

Price Code: Gr. 7
 39 pages
 Identical to ISO/TS 22330:2018

This document gives guidelines for the planning and development of policies, strategies and procedures for the preparation and management of people affected by an incident.

This includes:

- preparation through awareness, analysis of needs, and learning and development;
- coping with the immediate effects of the incident (respond);
- managing people during the period of disruption (recover);
- continuing to support the workforce after returning to business as usual (restore). The management of people relating to civil emergencies or other societal disruption is out of the scope of this document.

ZWS ISO/TS 22331:2018
Business continuity management systems – Guidelines for business continuity strategy

Price Code: Gr. 7
 25 pages
 Identical to ISO 22331:2022.

This document gives guidance for business continuity strategy determination and selection. It is applicable to all organizations regardless of type, size and nature, whether in the private, public or not-for-profit sectors. It is intended for use by those responsible for, or participating in, strategy determination and selection.

ZWS ISO/TS 22367:2009
Medical laboratories – Reduction of error through risk management and continual improvement

Price Code: Gr. 4
 10 pages
 Technical Corrigendum No 1 ;2011

Identical to ISO/TS 22367:2008

Characterizes the application of ISO 15189 as a system for reducing laboratory error and improving patient safety by applying the principles of risk management, with reference to examination aspects, especially to pre-and post-examination aspects of the cycle of laboratory medical care. This technical specification proposes a methodology for finding and characterizing medical laboratory error that would be avoided with the application of ISO 15189.

ZWS ISO/TS 22398:2013
Societal security – Guidelines for exercises

Price Code: Gr. 7
 38 pages
 Identical to ISO/TS 22398:2013

This International Standard recommends good practice and guidelines for an organization to plan, conduct, and improve its exercise projects which may be organized within an exercise programme.

It is applicable to all organizations regardless of type, size or nature, whether private or public. The guidance can be adapted to the needs, objectives, resources, and constraints of the organization. It is intended for use by anyone with responsibility for ensuring the competence of the organization's personnel, particularly the leadership of the organization, and those responsible for managing exercise programmes and exercise projects..

ZWS ISO 22662:2009
Milk and milk products – Determination of lactose content by high-performance liquid chromatograph (Reference method)

Price Code: Gr. 4
 10 pages
 Identical to ISO 22662:2007

Specifies the reference method for the determination of lactose content of raw milk, heat-treated milks , dried milk and raw and pasteurized cream.

ZWS ISO 22716:2007
Cosmetics – Good manufacturing practices (GMP) – Guidelines on good manufacturing practices

Price Code: Gr. 6
 21 pages
 Identical to ISO 22716:2007

Gives guidelines for the production, control, storage and shipment of cosmetic products.

ZWS ISO 22870:2006
Point-of-care testing (POCT) – Requirements for quality and competence

Price Code: Gr. 8
 11 pages
 Identical to ISO 22870:2006

Gives specific requirements applicable to point-of-care testing and is intended to be used in conjunction with ISO 15189. The requirements of this international standard apply when POCT is carried out in hospital , clinic and by a healthcare organization providing ambulatory care. It can be applied to transcutaneous measurements the analysis of expired air and in vivo monitoring of physiological parameters.

ZWS ISO 22935:2009
Milk and milk products – Sensory analysis Part 1: General guidance for the recruitment, selection, training and monitoring of assessors

Price Code: Gr. 6
 19 pages

Identical to ISO 22935.1:2009

Gives general guidance for the recruitment, selection, training and monitoring of assessors for sensory analysis of milk and milk products. It supplements the information given in ISO 8586.1 and parts of ISO 8586.2 that deal with expert assessors.

Part 2: Recommendations methods for sensory evaluation

Price Code: Gr 6
23 pages

Specifies recommended methods for the sensory evaluation of specific milk and milk products. It specifies criteria for the sampling and preparation of samples and the assessment of the samples.

Part 3: Guidance on a method for evaluation of compliance with product specifications for sensory properties by scoring

Price Code: Gr 3
7 pages

Identical to ISO 22925.3:2009

Gives guidance on a general method for evaluation of compliance with product specifications for sensory properties based on sensory scoring and the use of a common nomenclature of terms.

ZWS ISO 23409:2011

Male condoms – Requirements and test methods for condoms made from synthetic materials

Price Code: Gr. 7
44 pages

Identical to ISO 23409:2011

Specifies the minimum requirements and the test methods applicable to male condoms produced from synthetic materials or blends of synthetic materials and natural rubber latex which are used for contraceptive purposes and to aid in the prevention of sexually transmitted infections.

ZWS ISO 23058:2006

Milk and milk products – Ovine and caprine rennets – determination of total milk – Clotting activity

Price Code: Gr 5

13 pages

Identical to ISO 23058:2006

Specifies a method for the determination of the total milk clotting activity of an ovine or caprine rennet, including rennet paste, containing only chymosin and pepsin as the active coagulating enzymes on a standard milk substrate prepared using a calcium chloride solution of 0,5 per litre (pH 6,5).

ZWS ISO 23640:2012

In vitro diagnostic medical devices – Evaluation of stability of In vitro diagnostic reagents

Price Code: Gr. 4
7 pages

Identical to ISO 23640:2011

Applicable to the stability evaluation of in vitro diagnostic medical devices, including reagents, calibrators, control materials, diluents, buffers and reagent kits hereinafter called IVD reagents. This international standard can also be applied to specimen collection devices that contain substances used to preserve samples or to initiate reactions for further processing of the sample in the collection device.

ZWS ISO 23907:2012

Sharps injury protection – Requirements and test methods – Sharps containers

Price Code: Gr. 4
10 pages

Identical to ISO 23907:2012

Specifies requirements for single-use sharps containers intended to hold potentially hazardous sharps medical waste with or without sharps protection features e.g. scalpel blades, trocars, hypodermic needles and syringes.

ZWS ISO 23908:2011

Sharps injury protection – Requirements and test methods – Sharps protection features for single-use hypodermic needles, introducers for catheters and needles used for blood sampling

Price Code: Gr. 4
11 pages

Identical to ISO 23908:2011

Gives requirements and test methods for evaluating the performance parameters of sharps injury protection features, whether active or passive in design for medical devices containing (sharp) hypodermic needles for single use introducers for catheters and lancets and other needles used in blood sampling.

ZWS ISO TS 24178:2021

Human Resources Management – Organisational culture metrics cluster

Price Code: Gr
5

17 pages

Identical to ISO 24178:2021

This document describes the elements of organizational culture and provides the formula for comparable measures for internal and external reporting. This document also highlights issues that need to be considered when interpreting the organizational culture data, especially when deciding on appropriate interventions internally and when reporting these to external stakeholders (e.g. regulators, investors).

ZWS ISO TS 24179:2020

Human Resources Management – Occupational health and safety metrics

Price Code: Gr 5

10 pages

Identical to ISO 24179:2020

This document describes the elements of organizational health, safety and well-being. This document provides the formula for comparable measures for internal and external reporting. This document also highlights issues that need to be considered when interpreting the compliance data, especially when deciding on the appropriate intervention internally and when reporting these to external stakeholders (e.g. regulators, investors).

ZWS ISO 24510:2008

Activities relating to drinking water and waste water services – Guidelines for the assessment and for the improvement of the service to users

Price Code: Gr 7
62 pages

Identical to ISO 24510:2007

Specifies the elements of drinking water and waste water services of relevance and interest to users. It also provides guidance on how to identify users' needs and expectations and how to assess whether they are being met.

ZWS ISO 24511:2008**Activities relating to drinking water and waste water services – Guidelines for the management of waste water utilities and for the assessment of waste water services**

Price Code: Gr. 7

59 pages

Identical to ISO 24511:2007

Provides guidelines for the management of waste water utilities and for the assessment of waste water services.

ZWS ISO 24512:2008**Activities relating to drinking water and waste water services – Guidelines for the management of drinking water utilities and for the assessment of drinking water services**

Price Code: Gr. 7

54 pages

Identical to ISO 24512:2007

Provides guidelines for the management of drinking water utilities and for the assessment of drinking water services. It is applicable to publicly and privately owned and operated water utilities. It does not favour any particular ownership or operating model.

ZWS ISO 24516:2016**Guidelines for the management of assets of water supply and waste water systems****Part 1: Drinking water distribution networks**

Price Code: Gr. 7

47 pages

Identical to ISO 24516.1:2016

The standard specifies guidelines for technical aspects, tools and good practices for the management of assets of drinking water networks to maintain value from existing assets.

ZWS ISO 24518:2016**Activities relating to drinking water and wastewater services – Crisis management of utilities**

Price Code: Gr. 6

23 pages

Identical to ISO 24518:2015

Provides general guidance to water utilities to develop and implement a crisis management system.

ZWS ISO 24521:2016**Activities relating to drinking water and wastewater services – guidelines for the management of basic on-site domestic wastewater services**

Price Code: Gr. 8

58 pages

Identical to ISO 24521:2016

Provides guidance for the management of basic on-site domestic wastewater services, using appropriate technologies in their entirety at any level of development.

ZWS ISO/TR 25108:2006**Non-Destructive testing – Guidelines for NDT personnel training organizations**

Price Code: Gr. 4

9 pages

Identical to ISO /TR 25108:2006

Gives guidelines for non-destructive testing (NDT) training organizations with the intention of harmonizing and maintaining the general standard of training of NDT personnel for industrial needs.

ZWS ISO 25841:2011**Female condoms – Requirements and test methods**

Price Code: Gr. 7

40 pages

Identical to ISO 25841:2011

Specifies the minimum requirements and test methods for female condoms which are supplied to consumers for contraceptive purposes assisting in the prevention of sexually transmitted infections.

ZWS ISO 26000:2010**Guidance on Social Responsibility**

Price Code: Gr.10

106 pages

Identical to ISO 26000:2010

Provides guidance to all types of organizations, regardless of their size or location.

ZWS ISO 26462:2011**Milk – Determination of lactose content – enzymatic method using difference in pH**

Price Code: Gr. 5

11 pages

Identical to ISO 26462:2010

Specifies an enzymatic method for the determination of the lactose content of milk and reconstituted milk by measurement of the difference in pH (differential pH measurement).

ZWS ISO/IEC 27000:2016**Information technology – Security techniques – Information security management systems – Overview and vocabulary**

Price Code: Gr. 7

35 pages

Identical to ISO/IEC 27000:2016

Provides the overview of information security management systems and terms and definitions commonly used in the ISMS family of standards. This standard is applicable to all types and sizes of organizations.

ZWS ISO/IEC 27001:2022**Information Security, cybersecurity and privacy protection – Information security management system – Requirements**

Price Code: Gr. 10

18 pages

Identical to ISO/IEC 27001:2022

Replaces ZWS ISO/IEC 27001:2013

Specifies the requirements for establishing, implementing, maintaining and continually improving an information security management system within the context of the organization. This document also includes requirements for the assessment and treatment of information security risks tailored to the needs of the organization. The requirements set out in this document are generic and are intended to be applicable to all organisations, regardless of type, size or nature. Excluding any of the requirements specified in Clauses 4 to 10 is not acceptable when an organization claims conformity to this document.

ZWS ISO/IEC 27002:2022**Information security, cybersecurity and privacy protection – Information security controls**

Price Code: Gr. 10

154 pages

Identical to ISO/IEC 27002:2022

This document provides a reference set of generic information security controls including implementation guidance. This document is designed to be used by organizations:

- a) within the context of an information security management system (ISMS) based on ISO/IEC 27001;
- b) for implementing information security controls based on internationally recognized best practices;
- c) for developing organization-specific information security management guidelines.

ZWS ISO/IEC 27003:2017

Information technology – Security techniques – Information security management systems – Guidance

Price Code: Gr. 10
46 pages
Identical to ISO/IEC 27003:2017

This document provides explanation and guidance on ISO/IEC 27001:2013.

ZWS ISO/IEC 27004:2016

Information technology - Security techniques - Information security management systems - Monitoring, measurement, analysis and evaluation

Price Code: Gr. 10
57 pages
Identical to ISO/IEC 27004:2016

This document provides guidelines intended to assist organizations in evaluating the information security performance and the effectiveness of an information security management system in order to fulfil the requirements of ISO/IEC 27001:2013, 9.1. It establishes:

- a) the monitoring and measurement of information security performance;
- b) the monitoring and measurement of the effectiveness of an information security management system (ISMS) including its processes and controls;
- c) the analysis and evaluation of the results of monitoring and measurement.

This document is applicable to all types and sizes of organizations.

ZWS ISO/IEC 27005:2022

Information security, cybersecurity and privacy protection – Guidance on managing information security risks

Price Code: Gr. 10
71 pages
Identical to ISO/IEC 27005:2022
Replaces ZWS ISO/IEC 27005:2011

This document provides guidance to assist organizations to: fulfil the requirements of ISO/IEC 27001 concerning actions to address information security risks; perform information security risk management activities, specifically information security risk assessment and treatment. This document is applicable to all organizations, regardless of type, size or sector.

ZWS ISO/IEC 27006:2011

Information technology – Security techniques – Requirements for bodies providing audit and certification of information security management systems

Price Code:Gr. 7
37 pages

Identical to ISO/IEC 27006:2011

Specifies requirements and provides guidance for bodies providing audit and certification of an information security management system (ISMS) in addition to the requirements contained within ISO/IEC 27001. It is primarily intended to support the accreditation of certification bodies providing ISMS certification.

ZWS ISO/IEC 27007:2020

Information security, cybersecurity and privacy protection – Guidelines for information security management systems auditing

Price Code:Gr. 7
53 pages
Identical to ISO/IEC 27007:2020

This document provides guidance on managing an information security management system (ISMS) audit programme, on conducting audits, and on the competence of ISMS auditors, in addition to the guidance contained in ISO 19011.

This document is applicable to those needing to understand or conduct internal or external audits of an ISMS or to manage an ISMS audit programme.

ZWS ISO/IEC 27013:2012

Information technology – Security techniques – Guidance on the integrated implementation of ISO/IEC 27001 and ISO/IEC 20000.1

Price Code:Gr. 7
42 pages
Identical to ISO/IEC 27013:2012

Provides guidance on the integrated implementation of ISO/IEC 27001 and ISO/IEC 20000.1 for those organizations.

ZWS ISO/IEC 27014:2020

Information security, cybersecurity and privacy protection - governance of information security

Price Code:Gr. 6
16 pages
Identical to ISO/IEC 27014:2020

This document provides guidance on concepts, objectives and processes for the governance of information security, by which organizations can evaluate, direct, monitor and communicate the information security-related processes within the organization.

The intended audience for this document is: governing body and top management; those who are responsible for evaluating, directing and monitoring an information security management system (ISMS) based on ISO/IEC 27001; those responsible for information security management that takes place outside the scope of an ISMS based on ISO/IEC 27001, but within the scope of governance. This document is applicable to all types and sizes of organizations. All references to an ISMS in this document apply to an ISMS based on ISO/IEC 27001. This document focuses on the three types of ISMS organizations given in Annex B. However, this document can also be used by other types of organizations.

ZWS ISO/IEC 27032:2023

Cybersecurity - Guidelines for internet security

Price Code:Gr. 7
29 pages
Identical to ISO/IEC 27032:2023

Provides guidance on concepts and principles for the governance of information security by which organizations can evaluate, direct, monitor and communicate the information security related activities within the organizations.

ZWS ISO/IEC 27033.6:2016

Information technology – Security techniques – Network security

Part 6: Securing wireless IP network access

Price code: Gr 7

29 pages
Identical to ISO/IEC 27033.6

Describes the threats, security requirements, security control and design techniques associated with wireless networks. It provides guidelines for the selection, implementation and monitoring of the technical controls necessary to provide secure communication using wireless networks.

ZWS ISO/IEC 27040:2022

Information technology – Security techniques – Storage security

Pricecode: Gr. 9

109 pages

Identical to 27040:2022

This document provides detailed technical requirements and guidance on how organizations can achieve an appropriate level of risk mitigation by employing a well-proven and consistent approach to the planning, design, documentation, and implementation of data storage security. Storage security applies to the protection of data both while stored in information and communications technology (ICT) systems and while in transit across the communication links associated with storage. Storage security includes the security of devices and media, management activities related to the devices and media, applications and services, and controlling or monitoring user activities during the lifetime of devices and media and after end of use or end of life. Storage security is relevant to anyone involved in owning, operating, or using data storage devices, media, and networks. This includes senior managers, acquirers of storage product and services, and other non-technical managers or users, in addition to managers and administrators who have specific responsibilities for information or storage security, storage operation, or who are responsible for an organization's overall security program and security policy development. It is also relevant to anyone involved in the planning, design, and implementation of the architectural aspects of storage network security. This document provides an overview of storage security concepts and related definitions. It includes requirements and guidance on the threats, design, and control aspects associated with typical storage scenarios and storage technology areas. In addition, it provides references to other International Standards and technical reports that address existing practices and techniques that can be applied to storage security.

ZWS ISO 27105:2016

Milk and cheese – Determination of hen's egg white lysozyme content by high performance liquid chromatography

Price Code: Gr.4

11 pages

Identical to ISO 27105/IDF216:2016,IDT

Specifies a method for the qualitative determination of hen's egg white lysozyme content in milk and cheese.

ZWS ISO 27205:2010

Fermented milk products – Bacterial starter cultures – Standard of identity

Price Code: Gr.4

11 pages

Identical to ISO 27205:2010

Specifies characteristics of industrial bacterial starter cultures, which are principally lactic acid bacteria (LAB) but which also include bifidobacteria and propionibacteria used for the manufacture of fermented milk products such as yoghurt, sour cream, cultured butter cheese.

ZWS ISO 27871:2011

Cheese and processed cheese – Determination of the nitrogenous fractions

Price Code: Gr. 4

10 pages

Identical to ISO 27871:2011

Specifies a method for determining the nitrogenous fractions in cheese and processed cheese from cow milk.

ZWS ISO TS 29001:2020

Petroleum, petrochemical and natural gas industries - Sector-specific quality management systems - Requirements for product and service supply organizations

Price Code: Gr. 8

53 pages

Identical to ISO TS 29001:2020

This International Standard specifies requirements for a quality management system when an organization: (a) needs to demonstrate its ability to consistently provide products and services that meet customer and applicable statutory and regulatory requirements, and (b) aims to enhance customer satisfaction through the effective application of the system, including processes for improvement of the system and the assurance of conformity to customer and applicable statutory and regulatory requirements. All the requirements of this International Standard are generic and are intended to be applicable to any organization, regardless of its type or size, or the products and services it provides.

ZWS ISO 29942:2011

Prophylactic dams – Requirements and test methods

Price Code:Gr. 7

29 pages

Identical to ISO 29942:2011

Specifies the minimum requirements and test methods for prophylactic dams used to assist in the prevention of sexually transmitted infections.

ZWS ISO 29991:2014

Language learning services outside formal education - requirements

Price Code: Gr. 6

13 pages

Identical to ISO 29991:2014

This document specifies requirements for language learning services outside formal education.

ZWS ISO 29992:2018

Assessment of outcomes of learning services -Guidelines

Price Code: Gr. 6

14 pages

Identical to ISO 29992:2018

This document provides guidance on the planning, development, implementation and review of assessments of the outcomes of learning services

ZWS ISO 29993:2017

Learning services outside formal education -requirements

Price Code: Gr. 6

13 pages

Identical to ISO 29993:2017

This document specifies requirements for language learning services outside formal education.

ZWS ISO 29994:2021

Education and learning services - requirements for distance learning

Price Code: Gr. 5

8 pages

Identical to ISO 29994:2021

This document specifies requirements for distance learning services not specified in ISO 29993. It is applicable to any distance

learning services that are addressed to learners themselves as well as to sponsors who are acquiring the services on behalf of learners.

ZWS ISO 30400:2016

Human Resource Management – Vocabulary

Price Code: Gr. 5
29 pages
Identical to ISO 30400:2016

This document defines terms used in human resource management standards.

ZWS ISO 30401:2018

Knowledge management systems – Requirements

Price Code: Gr. 10
23 pages
Identical to ISO 30401:2018

This document sets requirements and provides guidelines for establishing, implementing, maintaining, reviewing and improving an effective management system for knowledge management in organizations. All the requirements of this document are applicable to any organization, regardless of its type or size, or the products and services it provides.

ZWS ISO 30405:2016

Human Resources Management-Guidelines on Recruitment

Price Code: Gr. 5
23 pages
Identical to ISO 30405:2016

Provides guidance on how to attract, source, assess and recruit people. It focuses on key processes and practices, including recruitment policy development, the flow from the sourcing of potential applicants to the boarding of new recruits as well as evaluation and measurement.

ZWS ISO TR 30406:2017

Human Resources Management-Sustainable Employability Management for Organizations

Price Code: Gr. 6
12 pages
Identical to ISO 30406:2017

This document provides guiding principles for developing and implementing sustainable employability policies. Sustainable employability is relevant on different levels: government, organizational and individual. This document focuses exclusively on the organizational level.

ZWS ISO 30407:2017

Human Resources Management-Cost Per Hire

Price Code: Gr. 6
14 pages
Identical to ISO 30407:2017

The purpose of this standard is to measure the economic value of the effort taken to fill an open position in an organization. It describes actions to be taken when calculating CPH to maintain quality and transparency.

ZWS ISO 30408:2016

Human Resource Management – Guidelines On Human Governance

Price Code: Gr. 5
29 pages
Identical to ISO 30408:2016

ZWS ISO 30409:2016

Human Resource Management – Workforce Planning

Price Code: Gr. 7
29 pages
Identical to ISO 30409:2016

ZWS ISO TS 30410:2018

Human Resources Management – Impact of Hire Metric

Price Code: Gr. 5
8 pages
Identical to ISO 30410:2018

This document identifies principles for determining critical positions by using workforce segmentation approaches. It also identifies measures to determine the impact of critical positions, and the performance of people hired into these positions, on organizational value creation and performance.

ZWS ISO TS 30414:2018

Human Resources Management – Diversity and Inclusion

Price Code: Gr. 7
38 pages
Identical to ISO 30414:2018

This document provides guidelines for internal and external human capital reporting (HCR). The objective is to consider and to make transparent the human capital contribution to the organization in order to support sustainability of the workforce. This document is applicable to all organizations, regardless of the type, size, nature or complexity of the business, whether in the public, private or voluntary sector, or a not-for-profit organization.

ZWS ISO TS 30415:2021

Human Resources Management – Diversity and Inclusion

Price Code: Gr. 7
47 pages
Identical to ISO 30415:2021

This document provides guidance on D&I for organizations, including their governance body, leaders, workforce and recognized representatives, and other stakeholders. It is intended to be scalable to the needs of all types of organizations in different sectors, whether in public, private, government or non-governmental organizations (NGO), regardless of size, type, activity, industry or sector, growth phase, external influences and country-specific requirements.

ZWS ISO TS 30423:2021

Human Resources Management – Compliance and ethics metrics cluster

Price Code: Gr. 5
15 pages
Identical to ISO 30423:2021

This document describes the elements of compliance and ethics. This document provides the formula for comparable measures for internal and external reporting. This document also highlights issues that need to be considered when interpreting the compliance data, especially when deciding on the appropriate intervention internally and when reporting these to external stakeholders (e.g. regulators, investors).

ZWS ISO TS 30425:2021

Human Resource Management – Workforce availability metrics cluster

Price Code: Gr. 5
15 pages
Identical to ISO 30425:2021

This document describes the measurement elements of workforce availability for organizations. This document provides the formula

la for comparable measures for internal and external reporting. This document also highlights issues that need to be considered when interpreting compliance data, especially when deciding on appropriate interventions internally and when reporting these to external stakeholders (e.g. regulators, investors).

ZWS ISO TS 30427:2021

Human Resources Management – Costs metrics cluster

Price Code: Gr 5
11 pages

Identical to ISO 30427:2021

This document describes the elements of organizational workforce costs. This document provides the formula for comparable measures for internal and external reporting. This document also highlights issues for consideration when interpreting the cost data, especially when deciding on the appropriate intervention internally and when reporting these to external stakeholders (e.g. regulators, investors).

ZWS ISO TS 30428:2021

Human Resources Management – skills and capabilities metrics cluster

Price Code: Gr 6
22 pages

Identical to ISO 30428:2021

This document describes and defines the five metrics of skills and capabilities. This document also provides the formula for each metric and describes the common metrics which employ the five metrics. This document also highlights issues that need to be considered when interpreting the skills and capabilities data, especially when deciding on the appropriate intervention internally and when reporting these to external stakeholders (e.g. regulators, investors).

ZWS ISO TS 30430:2021

Human Resources Management – recruitment metrics cluster

Price Code: Gr 5
9 pages

Identical to ISO 30430:2021

This document describes the elements of recruitment in the recruitment, mobility and turnover cluster. This document provides the formulae for comparable measures for internal and external reporting. This document also highlights issues that need to be considered when interpreting the recruitment data, especially when deciding on the appropriate intervention internally and when reporting these to external stakeholders, such as regulators and investors.

ZWS ISO TS 30431:2021

Human Resources Management – leadership metrics cluster

Price Code: Gr 5
9 pages

Identical to ISO 30431:2021

This document describes the elements of the leadership metrics cluster. This document provides the formula for comparable measures for internal and external reporting. This document also highlights issues that need to be considered when interpreting the leadership data, especially when deciding on the appropriate intervention internally and when reporting these to external stakeholders (e.g. regulators, investors).

ZWS ISO TS 30432:2021

Human Resources Management – workforce productivity metrics cluster

Price Code: Gr 5
9 pages

Identical to ISO 30432:2021

This document describes the elements of workforce productivity metrics cluster. This document provides the formula for comparable

measures for internal and external reporting. This document also highlights issues that need to be considered when interpreting the productivity data, especially when deciding on the appropriate intervention internally and when reporting this to external stakeholders (e.g. regulators, investors).

ZWS ISO TS 30433:2021

Human Resources Management – Succession planning metrics cluster

Price Code: Gr 6
18 pages

Identical to ISO 30433:2021

This document specifies the elements of succession planning metrics and provides comparable measures for internal and external reporting. The document also highlights issues that need to be considered when interpreting the succession planning data, especially when deciding on the appropriate intervention internally and when reporting this to external stakeholders such as regulators or investors.

ZWS ISO 30500:2018

Non-sewered sanitation systems – Prefabricated integrated treatment units – General safety and performance requirements for design and testing

Price Code: Gr
90 pages

Identical to ISO 30500:2018

This document specifies general safety and performance requirements for design and testing as well as sustainability considerations for non-sewered sanitation systems (NSSS).

ZWS ISO 31000:2018

Risk Management - Guidelines

Price Code: Gr 10
16 pages

Supersedes ZWS ISO 31000:2010

This document provides guidelines on managing risk faced by organisations. The application of these guidelines can be customized to any organization and its context. It provides a common approach to managing any type of risk and is not industry or sector specific.

ZWS ISO/IEC 31010:2019

Risk management – Risk assessment techniques

Price Code: Gr 10
114 pages

Identical to ISO/IEC 31010:2019

This International Standard provides guidance on the selection and application of techniques for assessing risk in a wide range of situations. The techniques are used to assist in making decisions where there is uncertainty, to provide information about particular risks and as part of a process for managing risk. The document provides summaries of a range of techniques, with references to other documents where the techniques are described in more detail.

ZWS ISO 31022:2020

Risk management – Guidelines for the management of legal risk

Price Code: Gr 7
32 pages

Identical to ISO 31022:2020

This document gives guidelines for managing the specific challenges of legal risk faced by organizations, as a complementary document to ISO 31000. The application of these guidelines can

be customized to any organization and its context. This document provides a common approach to the management of legal risk and is not industry or sector specific.

ZWS ISO 31030:2021

Travel risk management – Guidance for organisations

Price	Code:	Gr.	8
52 pages			
Identical to ISO 31030:2021			

This document gives guidance to organizations on how to manage the risk(s), to the organization and its travellers, as a result of undertaking travel. This document provides a structured approach to the development, implementation, evaluation and review of: policy; programme development; threat and hazard identification; opportunities and strengths; risk assessment; prevention and mitigation strategies. This document is applicable to any type of organization, irrespective of sector or size, including but not limited to: commercial organizations; charitable and not-for-profit organizations; governmental organizations; non-governmental organizations; educational organizations. This document does not apply to tourism and leisure-related travel, except in relation to travellers travelling on behalf of the organization.

ZWS ISO 31073:2020

Risk management – Vocabulary

Price	Code:	Gr.	6
13 pages			
Identical to ISO 31073:2020			

This document defines generic terms related to the management of risks faced by organizations.

ZWS ISO TS 34700:2016

Animal welfare management – General requirements and guidelines for organizations in the food supply chain

Price	Code:	Gr.	6
16 pages			
Identical to ISO TS 34700:2016			

Provides requirements and guidance for the implementation of the animal welfare principles as described in the introduction to the recommendations for animal welfare of the OIE TAHC.

ZWS ISO 37000:2021

Governance of organisations — Guidance

Price	Code:	Gr.	7
41 pages			
Identical to ISO TS 37000:2021			

This document gives guidance on the governance of organizations. It provides principles and key aspects of practices to guide governing bodies and governing groups on how to meet their responsibilities so that the organizations they govern can fulfil their purpose. It is also intended for stakeholders involved in, or impacted by, the organization and its governance. It is applicable to all organizations regardless of type, size, location, structure or purpose.

ZWS ISO 37301:2021

Compliance management systems — Requirements with guidance for use

Price	Code:	Gr.	10
41 pages			
Identical to ISO TS 37301:2021			

This document specifies requirements and provides guidelines for establishing, developing, implementing, evaluating, maintaining and improving an effective compliance management system within an organization. This document is applicable to all types of organizations regardless of the type, size and nature of the activity, as well as

whether the organization is from the public, private or non-profit sector. All requirements specified in this document that refer to a governing body apply to top management in cases where an organization does not have a governing body as a separate function.

ZWS ISO 38500:2015

Information technology — Governance of IT for the organization

Price	Code:	Gr.	6
12 pages			
Identical to ISO 38500:2015			

This International Standard provides guiding principles for members of governing bodies of organizations (which can comprise owners, directors, partners, executive managers, or similar) on the effective, efficient, and acceptable use of information technology (IT) within their organizations. It also provides guidance to those advising, informing, or assisting governing bodies. They include the following:

- executive managers;
- members of groups monitoring the resources within the organization;
- external business or technical specialists, such as legal or accounting specialists, retail or industrial associations, or professional bodies;
- internal and external service providers (including consultants);
- auditors.

This International Standard applies to the governance of the organization's current and future use of IT including management processes and decisions related to the current and future use of IT. These processes can be controlled by IT specialists within the organization, external service providers, or business units within the organization. This International Standard defines the governance of IT as a subset or domain of organizational governance, or in the case of a corporation, corporate governance. This International Standard is applicable to all organizations, including public and private companies, government entities, and not-for-profit organizations. This International Standard is applicable to organizations of all sizes from the smallest to the largest, regardless of the extent of their use of IT. The purpose of this International Standard is to promote effective, efficient, and acceptable use of IT in all organizations by

- assuring stakeholders that, if the principles and practices proposed by the standard are followed, they can have confidence in the organization's governance of IT,
- informing and guiding governing bodies in governing the use of IT in their organization, and
- establishing a vocabulary for the governance of IT.

ZWS ISO IEC/TR 38502:2014

Information technology – Governance of IT – Framework and model

Price	Code:	Gr.	6
16 pages			
Identical to ISO/IEC 38502:2014			

This Technical Report provides guidance on the nature and mechanisms of governance and management together with the relationships between them, in the context of IT within an organization. The purpose of this Technical Report is to provide information on a framework and model that can be used to establish the boundaries and relationships between governance and management of an organization's current and future use of IT.

This Technical Report provides guidance for:

- governing bodies; managers who have to work within the authority and accountability established by governance;
- advisors or those assisting in the governance of organizations of all sizes and types; and

developers of standards in the areas of governance of IT and management of IT. Provides guidance on the nature and mechanisms of governance and management together with the relationships between them in the context of IT within an organization.

ZWS ISO 39001:2012

Road traffic safety (RTS) Management systems – Requirements with guidance for use

Price Code: Gr. 10
36 pages
Identical to ISO 39001:2012

Specifies requirements for a road traffic safety (RTS) management system to enable an organization that interacts with the road traffic system to reduce death and serious injuries related to road traffic crashes which it can influence.

ZWS ISO 45001:2018

Occupational health and safety management systems – requirements with guidance for use

Price Code: Gr. 10
39 pages
Identical to ISO 45001:2018

Specifies requirements for an occupational health and safety (OH&S) management system and gives guidance for its use to enable organisations to provide safe and healthy workplaces by preventing work-related injury and ill health as well as by proactively improving its OH&S performance. This document is applicable to any organization that wishes to establish, implement and maintain an OH&S management system to improve occupational health and safety.

ZWS ISO 45003:2021

Occupational health and safety management – Psychological health and safety at work – Guidelines for managing psychosocial risks

Price Code: Gr. 7
26 pages
Identical to ISO 45003:2021

This document gives guidelines for managing psychosocial risk within an occupational health and safety (OH&S) management system based on ISO 45001. It enables organizations to prevent work-related injury and ill health of their workers and other interested parties, and to promote well-being at work. It is applicable to organizations of all sizes and in all sectors, for the development, implementation, maintenance and continual improvement of healthy and safe workplaces.

ZWS ISO PAS 45005:2020

Occupational health and safety management – General guidelines for safe working during the COVID 19 pandemic

Price Code: Gr. 7
39 pages
Identical to ISO/PAS 45005

This document gives guidelines for organizations on how to manage the risks arising from COVID-19 to protect work-related health, safety and well-being. This document is applicable to organizations of all sizes and sectors, including those that:

a) have been operating throughout the pandemic; b) are resuming or planning to resume operations following full or partial closure; c) are re-occupying workplaces that have been fully or partially closed; d) are new and planning to operate for the first time. This document also provides guidance relating to the protection of workers of all types (e.g. workers employed by the organization, workers of external providers, contractors, self-employed individuals, agency workers, older workers, workers with a disability and first responders),

and other relevant interested parties (e.g. visitors to a workplace, including members of the public). This document is not intended to provide guidance on how to implement specific infection control protocols in clinical, healthcare and other settings. NOTE: Applicable legislation and guidance is provided by government, regulators and health authorities for workers in these settings or in related roles.

ZWS ISO 50001:2018

Energy Management Systems – Requirements with guidance for use

Price Code: Gr.10
34 pages
Identical to ISO 50001:2018

Specifies requirements for establishing, implementing, maintaining and improving an energy management system whose purpose is to enable an organization to follow a systematic approach in achieving continual improvement of energy performance including energy efficiency energy use and consumption.

ZWS ISO 50002:2014

Energy audits – Requirements with guidance for use

Price Code: Gr.10
26 pages
Identical to ISO 50002:2014

Specifies requirements for carrying out an energy audit in relation to energy performance. Applicable to all types of establishments and organizations and all forms of energy and energy use.

ZWS ISO 50003:2014

Energy management systems – Requirements for bodies providing audit and certification of energy management systems

Price Code: Gr.6
20 pages
Identical to ISO 50003:2014

Specifies requirements for competency, consistency and impartiality in the auditing and certification of EMS for bodies providing these services. It addresses the auditing process, competence requirements for personnel involved in the certification process for EMS the duration of audits and multi-site sampling

ZWS ISO 50004:2014

Energy management systems – Guidance for the implementation, maintenance and improvement

Price Code: Gr.7
44 pages
Identical to ISO 50004:2014

The standard provides practical guidance and examples for establishing, implementing, maintaining and improving EMS in accordance with the systematic approach of ISO 50001

ZWS ISO 50006:2014

Energy management systems – Measuring performance using energy baselines

Price Code: Gr.7
34 pages
Identical to ISO 50006:2014

The standard provides guidelines to organisations on how to establish, use and maintain energy performance indicators (EnPIs) and energy baselines (EnBs) as part of the process of measuring energy performance.

ZWS ISO 50007:2017**Energy Services– Guidelines For The Assessment And Improvement Of The Energy Service To Users**

Price Code: Gr.7

46 pages

Identical to ISO 50007:2017

The standard addresses the relevant elements of energy service provided by energy suppliers to users. It envisages energy service as including two broad categories. 1) Energy supply 2) Advice on and improvement to energy efficiency.

ZWS ISO/TS 50008:2018**Energy management and energy savings – Building energy data management for energy performance – Guidance for a systemic data exchange approach**

Price Code:

Gr.6

14 pages

Identical to ISO/TS 50008:2018

It gives guidelines for how the energy management team (EnMT) in an organization can define, request and regularly access the data needed to implement an energy management (EnMS) designed to continually improve energy performance in buildings.

ZWS ISO 50015:2014**Energy management systems – Measurement and verification of energy performance of organisations**

Price Code:

Gr.6

22 pages

Identical to ISO 50015:2014

The standard establishes general principles and guidelines for the process of measurement and verification (M&V) of energy performance of an organisation or its components.

ZWS ISO 50021:2014**Energy management and energy savings — General guidelines for selecting energy savings evaluators**

Price Code:

Gr.6

22 pages

Identical to ISO 50021:2019

This document gives guidelines for selecting energy savings evaluators to determine ex-post (realized) energy savings for projects, organizations and regions. It gives general principles and identifies the key factors to consider. It also defines roles and responsibilities, recommends the required competence and provides key elements for assessing the knowledge and skills of energy savings evaluators.

ZWS ISO 50044:2019**Energy saving projects (EnSPs) – Guidelines for economic and financial evaluation**

Price Code:

Gr.7

43 pages

Identical to ISO 50044:2019

The standard gives guidelines for how to compare and prioritize energy saving projects (EnSPs) before implementation, using economic and financial evaluation. It includes a common set of principles.

ZWS ISO TS 50045:2019**Technical guidelines for the evaluation of energy savings of thermal power plants**

Price Code:

Gr.7

23 pages

Identical to ISO 50045:2019

This document gives general technical guidelines for evaluating energy savings of thermal power plants before and/or after implementing energy performance improvement action(s) (EPIAs). It includes evaluation, unit component efficiency, indexes calculation, analyses and reporting.

ZWS ISO 50046:2019**General methods for predicting energy savings**

Price Code: Gr.

8

56 pages

Identical to ISO 50046:2019

This document specifies general methods for the calculation of predicted energy savings (PrES). It provides a process that should result in PrES satisfactory for the relevant stakeholders.

ZWS ISO 50049:2020**Calculation methods for energy efficiency and energy consumption variations at country, region and city levels: Relation to energy savings and other factors**

Price Code:

Gr.8

56 pages

Identical to ISO 50049:2020

Concerned with the evaluation of energy consumption and energy intensity changes through explanatory factors, as well as the calculation of energy efficiency index at national and regional levels.

ZWS ISO 55000:2014**Asset management – Overview, principles and terminology**

Price Code:

Gr.10

23 pages

Identical to ISO 55000:2014

This International Standard provides an overview of asset management, its principles and terminology, and the expected benefits from adopting asset management. This International Standard can be applied to all types of assets and by all types and sizes of organizations. This International Standard is intended to be used for managing physical assets in particular, but it can also be applied to other asset types. This International Standard does not provide financial, accounting or technical guidance for managing specific asset types. For the purposes of ISO 55001, ISO 55002 and this International Standard, the term “asset management system” is used to refer to a management system for asset management.

ZWS ISO 55001:2014**Asset management – Management systems – Requirements**

Price Code:

Gr.10

16 pages

Identical to ISO 55001:2014

This International Standard specifies the requirements for the establishment, implementation, maintenance and improvement of a management system for asset management, referred to as an “asset management system”. This International Standard can be used by any organization. The organization determines to which of its assets this International Standard applies.

ZWS ISO 55002:2018**Asset management – Management systems – Guidelines for the application of ISO 55001**

Price Code:

Gr.10

75 pages

Identical to ISO 55002:2018

This document gives guidelines for the application of an asset management system, in accordance with the requirements of ISO 55001. This document can be applied to all types of assets and by all types and sizes of organizations.

ZWS ISO/TS 55010:2019

Asset management – Guidance on the alignment of financial and non-financial functions in asset management

Price Code: Gr.10

43 pages

Identical to ISO/TS 55010:2019

It gives guidelines for the alignment between financial and non-financial asset management functions, in order to improve internal control as part of an organisation's management systems.



ARSO ADOPTIONS

ARSO ZW HS 72:2016

Fertilizers – Sampling from a conveyor by stopping the belt

Price Code: Gr. 3
2 pages
Identical to ARS 72:1986

Specifies a reference method for sampling all solid fertilizers transported on a conveyor belt from the place of manufacture or storage to some other location.

ARSO ZW HS 73:2016

Fertilizers – Determination of nitrate nitrogen content

Price Code: Gr. 3
4 pages
Identical to ARS 73:1986

Specifies the nitron gravimetric method for the determination of nitrate nitrogen content of fertilizer. It is suitable for use as a reference method and is applicable to all fertilizers.

ARSO ZW HS 74:2016

Fertilizers – Determination of bulk density (Loose)

Price Code: Gr. 3
3 pages
Identical to ARS 74:1986

Specifies a method for the determination of the bulk density (loose) of solid fertilizers, except powder fertilizers. The method is applicable to dry fertilizers only.

ARSO ZW HS 212:2016

Fertilizers – Marking – Presentation and Declaration

Price Code: Gr. 3
2 pages
Identical to ARS 212:1988

Specifies the procedure for marking containers or labels for fertilizers, where national legislation permits.

ARSO ZW HS 213:2016

Fertilizers and solid conditioners – Final samples – Practical arrangements

Price Code: Gr. 3
2 pages
Identical to ARS 213:1990

Establishes practical arrangements relating to final samples of solid fertilizers and soil conditioners.

ARSO ZW HS 461:2022

Maize Grains (corn)

Price Code: Gr. 5
8 pages
Identical to ARS 461:2022

This African Standard specifies the requirements and methods of sampling and test for maize grains (corn) of varieties grown from common maize grains, *Zea mays indentata* L., and/or *Zea mays indurata* L., or their hybrids intended for human consumption. It does not apply to processed maize (corn).

ARSO ZW HS 462:2023

Sorghum Grains

Price Code: Gr. 5
10 pages
Replacing ARS 462:2022.

This African Standard specifies requirements, methods of sampling and test for sorghum grains (whole or decorticated) of varieties (cultivars) grown from *Sorghum bicolor* (L.) Moench intended for human food. This standard does not apply to processed sorghum.

ARS ZW HS 463:2023

Pearl Millet Grains

Price Code: Gr. 5
10 pages
Replacing ARS 463:2022.

This African Standard specifies the requirements, methods of sampling and test for whole and decorticated pearl millet of the species *Pennisetum glaucum* (L.) R.Br. intended for food consumption. This standard also specifies grading requirements for pearl millet grains. It does not apply to processed pearl millet.

ARSO ZW HS 464:2023

Milled rice

Price Code: Gr. 5
10 pages
Replacing ARSO ZW HS 464:2022

This African Standard specifies the requirements and methods of sampling and test for milled rice of the varieties grown from *Oryza* spp. intended for human consumption.

HS 465:2018

Wheat - Specification

Price Code: Gr. 5
14 pages
Adoption of African Standard ARS 465:2016

This standard specifies the requirements, methods of sampling and test for wheat grains of varieties (cultivars) grown from common wheat (*Triticum aestivum* L.), club wheat (*T.compactum* Host), intended for human consumption

ARSO ZW HS 466:2023

Milled maize (corn) products

Price Code: Gr. 5
7 pages
Replacing ARSO ZW HS 466:2022

This African Standard specifies requirements, sampling and test methods for whole maize meal, granulated maize meal, sifted maize meal, maize grits and maize flour from the grains of common maize (*Zea mays* L.) intended for human consumption. This standard does not apply to fortified milled maize (corn) products and maize grits intended for brewing, manufacturing of starch and any other industrial use.

ZWS ARS HS 467:2018

Degermed maize and maize grits -Specification

Price Code: Gr. 5
5 pages
Adoption of African Standard ARS 467:2016

This standard specifies the requirements, methods of sampling and test for degermed maize (corn) meal and degermed maize (corn) grits for human consumption milled from kernels of common maize, *Zea mays* L.

ARSO ZW HS 468:2020

Sorghum Grains

Price Code: Gr. 5
6 pages
Identical to ARS 468:2014
Supersedes Comesa ZW HS 716

Specifies the requirements, methods of sampling and test for sorghum flour obtained from or decorticated sorghum grain of varieties Sorghum bicolor (L) Moench. For human consumption.

ARSO ZW HS 469:2019

Millet flour

Price Code: Gr. 5
6 pages
Identical to ARS 469:2016

This African Standard specifies requirements, methods of sampling and test for millet flour obtained from whole or decorticated pearl millet from varieties *Penicum maliaceum*) and finger millet grown from *Eleusine coracana* (L.) Gaertner. for human consumption.

ARSO ZW HS 500:2016

Solid fertilizers – Sampling

Price Code: Gr. 4
7 pages
Identical to ARS 500:1991

Describes a method for sampling solid fertilizers which are packed for delivery to customers.

ARSO ZW HS 501:2016

Compound fertilizers – Methods of test

Price Code: Gr. 4
5 pages
Identical to ARS 501:1991

Specifies methods for the determination of moisture content, pH and magnesium for compound fertilizers.

ARSO ZW HS 504:2016

Fertilizers – Ammonium sulphate – Methods of test

Price Code: Gr. 4
2 pages
Identical to ARS 504:1991

Specifies the methods of test for ammonium sulphate fertilizer for the following characteristics: free acidity, moisture content and arsenic.

ARSO ZW HS 505:2016

Fertilizers – Ammonium sulphate

Price Code: Gr. 4
2 pages
Identical to ARS 505:1991

Specifies requirements for ammonium sulphate fertilizer.

ZWS ARS HS 825:2018

Yams

Price Code: Gr. 7
5 pages
Adoption of African Standard ARS 825:2016

This standard applies to yarms of varieties grown from *Dioscorea* spp. To be marketed or supplied fresh to the consumer, yarms for industrial processing being excluded. The purpose of this standard is to specify the minimum grade requirements of the tubers at the dispatching stage.

ARSO ZW HS 827:2020

Sweet Potato Flour

Price Code: Gr. 5
11 pages
Identical to ARS HS 827:2017

Specifies the requirements and methods of sampling and test for dried sweet potato chips intended for human consumption

ARSO ZW HS 828:2020

Dried Sweet Potato Chips

Price Code: Gr. 5
11 pages
Identical to ARS HS 828:2017

Specifies the requirements and methods of sampling and test for dried sweet potato chips intended for human consumption.

ARSO ZW HS 829:2020

Sweet Potato Crisps

Price Code: Gr. 5
11 pages
Identical to ARS HS 829:2017

Specifies the requirements and methods of sampling and test for crisps made from storage of sweet potato

ARSO ZW HS 831:2020

Fresh Bananas -Specification

Price Code: Gr. 5
11 pages
Identical to ARS HS 831:2017

Applies to commercial varieties of bananas grown from *Musa* spp. Of the *Musaceae* family, in the green state to be supplied fresh to the consumer, after preparation and packaging.

ARSO ZW HS 833:2020

Fried Banana Chips

Price Code: Gr. 5
11 pages
Identical to ARS HS 833:2017

Specifies the requirements and methods of sampling and test for fried banana chips

ARSO ZW HS 834:2020

Dried Bananas

Price Code: Gr. 5
11 pages
Identical to ARS HS 834:2017

Prescribes requirements and methods of sampling and tests for dried banana from *Musa* spp of the family *Musaceae* intended for direct human consumption or for other use in the food industry

ARSO ZW HS 852:2020

Fried Potato Chips

Price Code: Gr. 5
11 pages
Identical to ARS HS 852:2017

Specifies the requirements and methods of sampling and test for deep fried potato chips ready for consumption.

ARSO ZW HS 855:2020

Fresh Tannia

Price Code: Gr. 4
11 pages
Identical to ARS HS 855:2017

Applies to the tubercles of commercial varieties of lilac grown from *Xanthosoma violaceum* Schott and white tannia grown *Xanthosoma sagittifolium*.

ARSO ZW HS 857:2018**Finger Millet Grains**

Price	Code:	Gr.	6
11 pages			
Identical to ARS HS 857:2016			

Specifies the requirements and methods of sampling and test for milled rice of varieties grown from *Oryza* spp. intended for human consumption.

ARSO ZW HS 858:2017**Rough (Paddy) rice - specification**

Price	Code:	Gr.	6
9 pages			
Identical to ARS 858:2013			

Specifies the requirements and methods of sampling and test for rough (paddy) rice of the varieties grown from *Oryza* spp intended for further processing.

ARSO ZW HS 859:2015**Brown rice - specification**

Price	Code:	Gr.	6
22 pages			
Identical to ARS 859:2013			

Specifies the requirements and methods of sampling and test for brown rice of the varieties grown from *Oryza* spp intended for human consumption or for further processing.

ARSO ZW HS 864:2015**Dry beans - specification**

Price	Code:	Gr.	5
8 pages			
Identical to ARS 864:2013			

This African Standard specifies requirements and methods of sampling and test for dry common beans (*Phaseolus* spp.) intended for human consumption.

ARSO ZW HS 865:2015**Dry green grams**

Price	Code:	Gr.	5
7 pages			
Identical to ARSO 865:2014			

Specifies the requirements and methods of sampling and test for dry chickpeas of varieties (cultivars) grown from *Cicer arietinum* (L) intended for human consumption.

ARSO ZW HS 866:2015**Dry chickpeas**

Price	Code:	Gr.	5
7 pages			
Identical to ARSO 866:2014			

Specifies the requirements and methods of sampling and test for dry chickpeas of varieties (cultivars) grown from *Cicer arietinum* (L) intended for human consumption.

ARSO ZW HS 867:2015**Dry cowpeas**

Price	Code:	Gr.	5
7 pages			
Identical to ARS 867:2014			

Specifies the requirements and methods of sampling and test for dry cowpeas of varieties (cultivars) grown from *Vigna unguiculata* (L) Sync. *Vigna sinensis* (L) intended for human consumption.

ARSO ZW HS 868:2015**Dry Pigeon Peas**

Price	Code:	Gr.	5
7 pages			
Identical to ARSO 868:2014			

Specifies the requirements and methods of sampling and test for dry pigeon peas of varieties (cultivars) grown from *Cajanus cajan* (L) intended for human consumption.

ARSO ZW HS 869:2015**Dry whole Peas**

Price	Code:	Gr.	5
7 pages			
Identical to ARSO 869:2014			

Specifies the requirements and methods of sampling and test for dry whole peas of varieties (cultivars) grown from *Pisum sativum* (L) and *Pisum sativum* var. *arvense* (L) intended for human consumption.

ARSO ZW HS 870:2015**Lentils**

Price	Code:	Gr.	5
7 pages			
Identical to ARSO 870:2014			

Specifies the requirements and methods of sampling and test for shelled whole lentils of varieties (cultivars) grown from *Lens culinaris* Medic. Syn. *Lens esculenta* Moench. intended for human consumption.

ARSO ZW HS 873:2015**Faba beans - specification**

Price	Code:	Gr.	5
6 pages			
Identical to ARSO 873:2014			

Specifies the requirements and methods of sampling and test for faba beans of cultivated varieties (cultivars) grown from *Vicia faba* l. intended for human consumption.

ARSO ZW HS 874:2015**Dry lima beans - specification**

Price	Code:	Gr.	5
7 pages			
Identical to ARSO 874:2014			

Specifies the requirements and methods of sampling and test for lima beans of cultivated varieties (cultivars) grown from *Phaseolus lunatus* L. intended for human consumption.

ARSO ZW HS 935:2015**Edible full fat soya flour**

Price	Code:	Gr.	5
7 pages			
Identical to ARSO 935:2014			

Specifies the requirements and methods of sampling and test for edible full fat soya flour intended for human consumption.

ARSO ZW HS 936:2015**Soy milk**

Price	Code:	Gr.	4
6 pages			
Identical to ARSO 936:2014			

Specifies the requirements and methods of sampling and test for soy milk intended for human consumption.

ARSO ZW HS 937:2015
Soy protein products
 Price Code: Gr. 5
 8 pages
 Identical to ARSO 937:2014

Specifies the requirements and methods of sampling and for test for soy protein products intended for human consumption.

ARSO ZW HS 938:2015
Textured soy protein products
 Price Code: Gr. 5
 8 pages
 Identical to ARSO 938:2014

Specifies the requirements and methods of sampling and test for textured soy protein products for human consumption.

ARSO ZW HS 950:2017
African Traditional Medicine – Terms and Terminology
 Price Code: Gr. 6
 17 pages

Standard provides the various terms and terminology used in the field of African Traditional Medicine

ARSO ZW HS 951:2017
African Traditional Medicine – Good Manufacturing Practises (GMP)For Herbal Medicines
 Price Code: Gr. 7
 30 pages

Standard provides guidelines on good manufacturing practices aimed at ensuring the safety, efficacy and quality of herbal medicinal products for human consumption.

ARSO ZW HS 952:2017
African Traditional Medicine – Guidelines on Good Agricultural And Collection Practices (GACP)For Medicinal Plants
 Price Code: Gr. 7
 38 pages

Standard provides aimed at advising plant procedures and collectors on how to improve the safety, efficacy and quality standards of raw materials used in the production and preparation of herbal medicines.

ARSO ZW HS 953:2017
African Traditional Medicine – Certification Scheme For Medicinal Plant Produce
 Price Code: Gr. 7
 40 pages

Standard covers certification of medicinal plants produce both from cultivated and wild collected sources

ARSO ZW HS 954:2017
Minimum requirements for registration of plant based traditional medicinal products
 Price Code: Gr. 6
 22 pages

Specifies minimum criteria for plant based traditional medicinal products on safety of use, quality and therapeutic efficacy to facilitate theregistration, marketing and distribution of standardized traditional medicines.

ARSO ZW HS 955:2017
African Traditional Medicine – Technical Guidelines For Safety, Efficacy and quality of raw materials and herbal medicines
 Price Code: Gr. 7
 33 pages

The standard provides technical guidelines to assure the safety, efficacy and quality of herbal raw materials and herbal medicines

ARSO ZW HS 956 Part 1:2017
African Traditional Medicine – Medicinal plant Standards-Aloe Vera
 Price Code: Gr. 7
 43 pages

Standard provides requirements and related methods for Aloe Vera raw material to be used in customer products including health, cosmetics, health food, medical, veterinary and industrial products.

ARSO ZW HS 956 Part 2:2017
African Traditional Medicine – Medicinal plant Standards-Ambrosia Maritima
 Price Code: Gr. 7
 30 pages

Standard provides requirements and related test methods for Ambrosia maritima raw material to be used in customer, medicinal and industrial products.

ARSO ZW HS 956 Part 3:2017
African Traditional Medicine – Medicinal plant Standards-Urtica Dioica And Urtica Urens
 Price Code: Gr. 7
 50 pages

Standard provides requirements and related test methods for Urtica dioicaL. Urticae and Urtica urens L. Urticasase raw material to be used in consumer products including health, cosmetics, health food, medical, veterinary and industrial products.

ARSO ZW HS 956 Part 4:2017
African Traditional Medicine – Medicinal plant Standards-Calotropis Procera
 Price Code: Gr. 7
 42 pages

Standard specifies requirements and related test methods for Calotrophis procera raw material to be used in consumer products including health, medicinal, veterinary and industrial products.

ARSO ZW HS 988:2023
Plastic crates
 Price Code: Gr. 4
 5 pages

This African Standard specifies the requirements and test methods for rigid plastic crates for holding and transportation of beverages, fruits, vegetables, bread and milk among others.

ARSO ZW HS 1000: Part 1:2021
Sustainable cocoa
Part 1: Requirements for cocoa farmer as an entity/farmer group/ farmer cooperative — management Systems and performance
 Price Code: Gr. 7
 37 pages

This African Standard specifies the requirements for Cocoa Farmer as an Entity/Farmer Group/ Farmer Cooperative also called Recognized Entity to comply with Management Systems and for performance relating to structuring their management to enhance performance and meet the economic, social and environmental pillars for sustainable cocoa bean (*Theobroma cacao* Linnaeus) production

Part 2: Requirements for cocoa quality and traceability
Price Code: Gr. 7
25 pages

This African Standard specifies the requirements for quality including classification, sampling, test methods, packaging and marking of cocoa beans (*Theobroma cacao* Linnaeus). It also specifies the basic requirements for the design and implementation of one or more traceability systems within the cocoa supply chain for sustainably produced cocoa beans from farm to the point of export (Free On Board), as well as to the factory gate at the local level for grinders

Part 3: Requirements for cocoa certification schemes
Price Code: Gr. 6
24 pages

This draft African Standard specifies requirements for the Cocoa Certification Scheme for sustainable cocoa, in relation to cocoa supply chain actors and for the certification of Farmer as an Entity/Farmer Group/Cooperative. It is to be used jointly with ARS 1000-1 and ARS 1000-2. Only Certification Bodies that fulfil the requirements in this Standard shall audit Farmer as an Entity/Farmer Group/Cooperative, which produce sustainable cocoa beans. Only Farmer as an Entity/Farmer Group/Cooperative that fulfil the requirements in this Standard can make claims of sustainably produced cocoa beans

ARSO ZW HS 1109:2020
Good Agricultural Practices For Food Crops
Price Code: Gr. 7
37 pages
Identical to ARS HS 1109:2018

Specifies the requirements for compliance, the responsible procurement of inputs, safe production, handling and marketing of fresh fruits and vegetables excluding herbs and spices.

ARSO ZW HS 1199:2023
Edible hen eggs-in-shell
Price Code: Gr. 5
19 pages
Identical to ARS HS 1199:2023
Replaces ZWS 885:2003

This African Standard specifies safety and quality requirements, method of sampling and test methods for edible hen eggs in shell intended for human consumption. This standard applies to hen eggs-in-shell fit for direct human consumption and for use in the food and/or non-food industries. All eggs must originate from laying hens or laying hens of breeding stock kept on farms regularly operated under the applicable regulations pertaining to food safety and inspection.

ARSO ZW HS 1200:2023
Eggs-in-shell for processing – Specification
Price Code: Gr. 4
6 pages
Identical to ARS 1200:2023

This African Standard specifies safety and quality requirements and test methods for chicken hen eggs -in-shell for processing.

ARSO ZW HS 1203:2023
Hens egg products — Specification
Price Code: Gr. 4
31 pages
Identical to ARS 1203:2023

This African Standard specifies quality and safety requirements, sampling and test methods for products made from eggs obtained from hens of the species *Gallus gallus* intended for use in the manufacture of food for human consumption.

ARSO ZW HS 1205:2023
Egg powder
Price Code: Gr. 7
13 pages
Identical to ARS 1205:2023

This African Standard specifies the safety and quality requirements, sampling and test methods for egg powder.

ARSO ZW HS 1216:2023
Chicken essence
Price Code: Gr. 5
10 pages
Identical to ARS HS 1216:2023

This African Standard specifies the quality and safety requirements, referenced test methods and sampling for chicken essence.

ARSO ZW HS 1217:2023
Ante-mortem and post-mortem inspection of poultry
Price Code: Gr. 5
12 pages
Identical to ARS HS 1217:2023

This African Standard specifies the procedure for the ante-mortem and post-mortem inspection of poultry.

ARSO ZW HS 1218:2023
Handling, processing, quality evaluation, storage, and transportation of poultry and poultry products
Price Code: Gr. 5
6 pages
Identical to ARS HS 1218:2023

This code lays down guidelines for efficient handling, processing, quality evaluation, cold storage and transportation of poultry and poultry products.

ARSO ZW HS 1224:2023
Chicken meat – Carcasses and cuts
Price Code: Gr. 4
6 pages
Identical to ARS HS 1224:2023
Replaces CAS No. S39: 1972

This African standard specifies the quality and safety requirements, methods of sampling and test for raw chicken meat, carcasses and parts intended for human consumption. This excludes products with added ingredients or “chicken preparations”.

ARSO ZW HS 1226:2023
Duck meat – Carcasses and cuts
Price Code: Gr. 4
6 pages
Identical to ARS HS 1226:2023

This African standard specifies the quality and safety requirements, sampling and test methods for raw Duck meat carcass and

parts intended for human consumption. This excludes Products with added ingredients or “duck preparations”.

ARSO ZW HS 1242:2023

Goose meat – Carcasses and cuts

Price Code: Gr. 5
6 pages
Identical to ARS HS 1242:2023

This African standard specifies the quality and safety requirements, method of sampling and test methods for raw Goose meat carcasses and parts intended for human consumption. This excludes Products with added ingredients or “goose preparations”.

ARSO ZW HS 1245:2023

Bovine (beef) meat – Carcasses and cuts

Price Code: Gr. 5
10 pages
Identical to ARS HS 1245:2023

This African Standard specifies methods of grading and grades of beef, quality and safety requirements and methods of test of carcasses thereof, intended for human consumption. This standard also defines major portions of meat cuts from the carcasses for sale.

ARSO ZW HS 1246:2023

Bovine (veal) meat – Carcasses and cuts

Price Code: Gr. 6
9 pages
Identical to ARS HS 1246:2023

This African Standard specifies grading of Veal, quality and safety requirements, sampling and referenced test methods of carcasses thereof, intended for human consumption. This standard also defines major portions of meat cuts from the carcasses for sale.

ARSO ZW HS 1247:2023

Caprine (goat) meat – Carcasses and cuts

Price Code: Gr. 5
9 pages
Identical to ARS HS 1247:2023

This African Standard defines the requirements, methods of sampling and test for goat carcasses and meat cuts intended for human consumption.

ARSO ZW HS 1250:2023

Rabbit meat – Carcasses and cuts

Price Code: Gr. 4
5 pages
Identical to ARS HS 1250:2023

This African Standard specifies the quality and safety requirements, sampling and test methods for raw rabbit meat (carcasses and cuts) intended for human consumption.

ARSO ZW HS 1357:2022

Vehicle testing station evaluation

Price Code: Gr. 7
14 pages
Adoption of ARS 1357:2021

This African Standard covers general provisions for the evaluation of the technical competence of a vehicle testing station. It also serves as a basis for determining the grading and registration of the vehicle testing station on the grounds of its adherence to the provisions of this standard, the suitability of the equipment and the competence of registered examiners of vehicles employed.

ARSO ZW HS 1362:2022

Automotive fuels – unleaded petrol – requirements and test methods

Price Code: Gr. 6
13 pages
Adoption of ARS 1362:2021
Supersedes ZWS 753:2012

This African Standard specifies requirements and test methods for marketed and delivered unleaded petrol. It is applicable to unleaded petrol for use in petrol engine vehicles designed to run on unleaded petrol.

ARSO ZW HS 1363:2022

Automotive fuels – diesel – requirements and test methods

Price Code: Gr. 5
10 pages
Adoption of ARS 1363:2021
Supersedes ZWS 751:2012

This African Standard specifies requirements and test methods for marketed and delivered automotive diesel fuel. It is applicable to automotive diesel fuel for use in diesel engine vehicles designed to run on automotive diesel fuel containing up to 7.0 % (v/v) Fatty Acid Methyl Ester.

ARSO ZW HS 1379:2022

Definitions and classifications of power-driven vehicles and trailers

Price Code: Gr. 6
12 pages
Adoption of ARS 1379:2021

This African Standard provides the general definitions and the classifications which apply to all wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles.

ARS ZW HS 1465 :2023

Liquid detergents – hand dishwashing and light duty

Price Code: Gr. 5
11 pages
Identical to ARS 1465:2020

This African Standard specifies the requirements for hand dishwashing and light duty liquid detergents used for cleaning of dishes, hard surfaces such as painted surfaces, floors, ceilings, ceramic and plastics tiles, and the surfaces of equipment. This standard does not cover products with speckles

ARS ZW HS 1470 :2020

Hand sanitizers (Alcohol based)

Price Code: Gr. 5
10 pages
Adoption of FDARS HS 1470:2019

This standard prescribes the requirements and methods of test for alcohol based instant hand sanitizers. The standard does not cover non- alcohol- based sanitizers.

ARS ZW HS 1551 :2019

Textiles and Textile Merchandise – Terms And definitions

Price Code: Gr. 9
6 pages
Identical to ARS 1551:2017

Standard provides a comprehensive list of general terms ,each followed by an applicable definition ,for use in the textile industry

ARS ZW HS 1553 :2019**Leather- Men's and women's belts-specification**

Price	Code:	Gr.	5
6 pages			
Identical to ARS 1553:2017			

Standard covers the requirements for the materials, basic design, size and construction of lined ,unlimited and reversible men's and women leather belts

ARS ZW HS 1554 :2019**Leather- ladies fashion handbags-specification**

Price	Code:	Gr.	5
16 pages			
Identical to ARS 1554:2017			

Standard specifies the requirements for the materials and construction of three basic types of handbag with a leather or coated outer fabric.

ARS ZW HS 1555:2023**Leather - gloves**

Price	Code:	Gr.	6
18 pages			
Identical to ARS 1555:2022			
Replaces CAS Z19			

This African Standard covers requirements for the materials, construction for five types of men's and ladies' lined or unlined gloves made from leather.

NOTE: The standard excludes industrial and safety gloves.

ARS ZW HS 1556:2023**Leather – Chrome tanned bend outer sole**

Price	Code:	Gr.	4
3 pages			
Identical to ARS 1556:2022			

This African Standard specifies requirements for chrome-tanned, wax impregnated, bend outer sole leather.

ARS ZW HS 1557:2023**Leather – Vegetable tanned bend outer sole**

Price	Code:	Gr.	4
4 pages			
Identical to ARS 1557:2022			
Replaces ZWS Z19			

This African Standard specifies requirements for vegetable-tanned bend outer sole leather.

ARS ZW HS 1558:2023**Footwear – Children's school shoes with direct injection**

Price	Code:	Gr.	6
23 pages			
Identical to ARS 1558:2022			
Replaces ZWS Z10			

ARS ZW HS 1559:2023**Footwear – Men's open shoes**

Price	Code:	Gr.	6
17 pages			
Identical to ARS 1559:2022			

This African Standard specifies the requirements for men's open shoes made of all types of materials.

ARS ZW HS 1561:2019**Footwear –women open shoes specification**

Price	Code:	Gr.	5
42 pages			

This African Standard specifies the requirements for ladies' open shoes made of all types of materials

ARS ZW HS 1562:2019**Footwear –women closed shoes specification**

Price	Code:	Gr.	5
42 pages			

Standard specifies requirements and related test methods for Calotrophis procera raw material to be used in consumer products including health,medicinal,veterinary and industrial products.

ARS ZW HS 1563:2023**Footwear – Children's shoes (2 years and below)**

Price	Code:	Gr.	6
17 pages			
Identical to ARS 1563:2022			

This African Standard specifies the requirements for children's shoes (2 years and below). This standard applies to children's shoes of all constructions and all types of materials and designs.

ARS ZW HS 1564:2023**Footwear – Children's shoes (Above 2 years to 6 years)**

Price	Code:	Gr.	6
15 pages			
Identical to ARS 1564:2022			

This African Standard specifies the requirements for children's shoes (above 2 to 6 years). This standard applies to children's shoes (above 2 to 6 years) of all constructions and all types of materials and designs.

ARS ZW HS 1565:2019**Footwear –sports shoes specification**

Price	Code:	Gr.	5
42 pages			

Standard specifies requirements and related test methods for Calotrophis procera raw material to be used in consumer products including health, medicinal, veterinary and industrial products

ARS ZW HS 1567 :2019**Part 1****School Wear Fabrics- basic requirements**

Price	Code:	Gr.	5
42 pages			

This part of ARS 1567 covers the definitions, basic requirements, requirements for packing, labelling, marking, and the inspection and testing of fabrics that are suitable for use in the manufacture of school clothing. Specific requirements are covered by the relevant individual parts of ARS 1567.

ARS ZW HS 1567 :2019**Part 2****School Wear Fabrics-blazer fabrics**

Price	Code:	Gr.	5
42 pages			

This part of ARS 1567 covers the specific requirements for six types of plain dyed fabric and one type of striped fabric suitable for use in the manufacture of school-wear blazers.

ARS ZW HS 1567 :2019**Part 3****Polester and Wool Blend Fabrics**

Price	Code:	Gr.	5
42 pages			

Standard specifies requirements and related test methods for Calotrophis procera raw material to be used in consumer products including health, medicinal, veterinary and industrial products

ARS ZW HS 1567 :2019

Part 4

Polyester and Viscose Fabrics

Price	Code:	Gr.	5
42 pages			

Standard specifies requirements and related test methods for Calotrophis procera raw material to be used in consumer products including health, medicinal, veterinary and industrial products

ARS ZW HS 1567 :2019

Part 6

School wear fabrics-shirting and blouse fabrics

Price	Code:	Gr.	3
7 pages			
Identical to ARS 1567:2017			

Standard covers the requirements for suitable for use in the manufacture of school wear shirts and blouses.

ARS ZW HS 1567 :2019

Part 7

School wear fabrics-shirting and blouse fabrics

Price	Code:	Gr.	3
7 pages			
Identical to ARS 1567-7:2017			

Standard covers the requirements for fabrics of two weave structures, containing textured yarns and suitable for use in the manufacture of school clothing.

ARS ZW HS 1568 :2019

Part 1

School clothing-general requirements

Price	Code:	Gr.	4
9 pages			

Standard specifies requirements for the materials, workmanship, packing, care labelling, marking and inspection of school clothing.

ARS ZW HS 1568 :2019

Part 2

School clothing-blazers

Price	Code:	Gr.	4
4 pages			
Standard specifies requirements for the materials for and the sizes, make, packaging, sampling care and labelling for school blazers for boys and girls			

ARS ZW HS 1568 :2019

Part 3

School clothing-Trousers and shorts

Price	Code:	Gr.	4
4 pages			

Standard covers the requirements for the materials for and the sizes, make, packing, packaging, sampling care and labelling for boys trousers and shorts

ARS ZW HS 1568 :2019

Part 4

School clothing-Shirts

Price	Code:	Gr.	3
5 pages			

Standard covers the requirements for materials for and sizes, make, packaging, sampling, care and labelling for school shirts for boys and girls.

ARS ZW HS 1568 :2019

Part 6

School clothing-Dresses, Tunics and GYMS

Price	Code:	Gr.	5
9 pages			

Standard covers the requirements for the materials for, and the sizes, make, packing, packaging, sampling, care and labeling for girls dresses, tunics and gyms.

ARS ZW HS 1568 :2019

Part 7

School clothing-slacks and skirts

Price	Code:	Gr.	4
5 pages			

Standard specifies the materials, cut, make, trim of girls slacks and skirts.

ARS ZW HS 1568 :2019

Part 8

School clothing-Wrap knitted fabrics

Price	Code:	Gr.	4
5 pages			

Standard covers the specific requirements for one type of wrap knitted fabric suitable for use in the manufacture of school clothing.

ARS ZW HS 1568 :2019

Part 9

School clothing-Knee highs

Price	Code:	Gr.	4
9 pages			

Standard specifies requirements for the materials, workmanship, packing, care labelling, marking and inspection of school clothing

ARS ZW HS 1568 :2019

Part 10

School clothing-Jersey and Cardigans

Price	Code:	Gr.	4
11 pages			

Standard covers the requirements for the materials, size and make of school jersey and cardigans.

ARS ZW HS 1568 :2019

Part 12

School clothing-Tracksuits

Price	Code:	Gr.	4
5 pages			
Identical to ARS 1568-12:2017			

Standard covers the requirements for the materials size and make of tracksuits

ARS ZW HS 1568 :2019

Part 13

School clothing-Athletic Wear

Price	Code:	Gr.	4
5 pages			
Identical to ARS 1568-13:2017			

Standard covers the requirements for the materials size and make of athletic wear made from woven or knitted fabrics .

ARS ZW HS 1595 :2022**Vehicle homologation**

Price	Code:	Gr.	7
42 pages			
Adoption of ARS 1595:2021			

This African Standard covers the homologation requirements for motor vehicles categories not previously registered or licensed in any country.

ARS ZW HS 1702:2023**Disinfectants – Glossary of terms**

Price	Code:	Gr.	3
3 pages			
Adoption of ARS 1702:2021			

This African Standard defines the terms used in disinfectants industry. This will help eliminate confusing terms in related specifications.

ARS ZW HS 1709:2023**Corrugated fibre boards**

Price	Code:	Gr.	6
15 pages			
Adoption of ARS 1709:2022			

This African Standard specifies requirements, sampling and test methods for corrugated fibreboard boxes for general packaging. This standard does not include special treatment measures of the boxes in case of expected contamination of the contents.

ARS ZW HS 1710:2023**Natural and extensible sack Kraft paper**

Price	Code:	Gr.	4
4 pages			
Adoption of ARS 1710:2022			

This African Standard specifies requirements, sampling and test methods for natural and extensible sack Kraft paper for packaging.

ARS ZW HS 1711:2023**Paper and board food contact packaging material**

Price	Code:	Gr.	5
6 pages			
Adoption of ARS 1711:2022			

This African Standard specifies requirements, sampling and test methods for paper and board food contact packaging material.

ARS ZW HS 1712:2023**Paper plates and cups for food packaging**

Price	Code:	Gr.	5
8 pages			
Adoption of ARS 1712:2022			

This African Standard specifies requirements, sampling and test methods for paper plates and cups, with or without lids, used for food packaging.

ARS ZW HS 1713:2023**Nutritional labelling – Requirements**

Price	Code:	Gr.	5
9 pages			
Adoption of ARS 1713:2022			

This African Standard specifies requirements, for the nutrition labelling of foods. The standard applies to the nutrition labelling of all foods except for foods for special dietary uses.

ARS ZW HS 1714:2023**Claims on food - General requirements**

Price	Code:	Gr.	4
3 pages			
Adoption of ARS 1714:2022			

This African standard prescribes the requirements for claims made on a food irrespective of whether or not the food is covered by an individual African Standard.

ARS ZW HS 1715:2023**Use of nutrition and health claims – Requirements**

Price	Code:	Gr.	5
8 pages			
Adoption of ARS 1715:2023			

This African Standard prescribes the requirements for the use of nutrition and health claims in food labelling and in advertising. This African Standard applies to all foods for which nutrition and health claims are made without prejudice to specific provisions under other standards or guidelines relating to foods for special dietary uses and foods for special medical purposes.

ARS ZW HS 1716:2023**Migration of constituents of plastic materials and articles intended to come into contact with foodstuffs**

Price	Code:	Gr.	6
13 pages			
Adoption of ARS 1716:2022			

This African standard specifies the basic rules for the determination of overall migration of plastic constituents intended to come into contact with foodstuff. It therefore specifies the list of simulants to be used, the standard test conditions likely to reproduce the phenomena being to result from the contact object-food. It also gives the overall migration limit to be respected for articles intended for food contact.

ARS ZW HS 1718:2023**Aluminium cans for beverages**

Price	Code:	Gr.	5
13 pages			
Adoption of ARS 1718:2022			

This African Standard specifies requirements and test methods for aluminium cans used as primary pack for packaging of beverages.

ARS ZW HS 1719:2023**Packaging – Code of practice – Glass containers**

Price	Code:	Gr.	5
12 pages			
Adoption of ARS 1719:2022			

This African Standard specifies requirements and test methods for aluminium cans used as primary pack for packaging of beverages.

ARS ZW HS 1748: Part 1:2023**Glass containers****Part 1: Bottles for carbonated and non-carbonated drinks**

Price	Code:	Gr.	4
4 pages			
Adoption of ARS 1748-1:2022			

This African Standard specifies the requirements, methods of sampling and test for glass bottles used for packaging of carbonated and non-carbonated drinks. This standard does not cover glass containers used in pharmaceutical industry.

ZWS ARS AES 01:2017

Agriculture – Sustainability And Eco-Labeling –Requirements

Price Code: Gr. 7

13 pages

Identical to ARS 01:2017

Provides requirements for the sustainable production, processing and trading of agricultural products including food, beverages and non-food products; and agricultural fibre products the standard applies to all production, processing and trading within the operator's sphere of influence.

ZWS ARS AES 02:2017

Fisheries – Sustainability and ecolabelling Requirements

Price Code: Gr. 6

13 pages

Identical to ARS 02:2014

Provides requirements for the sustainable harvesting of fish up to the point at which the fish are landed. It applies to marine and inland capture fisheries only

ZWS ARS AES 03:2018

Forestry – Sustainability and ecolabelling Requirements

Price Code: Gr. 7

13 pages

Identical to ARS 03:2018

Provides requirements for the sustainable production, harvesting and processing of forest products. The standard can be applied to any defined forest area irrespective of scale or type of ownership, or whether natural forests or plantation.

ZWS ARS AES 04:2018

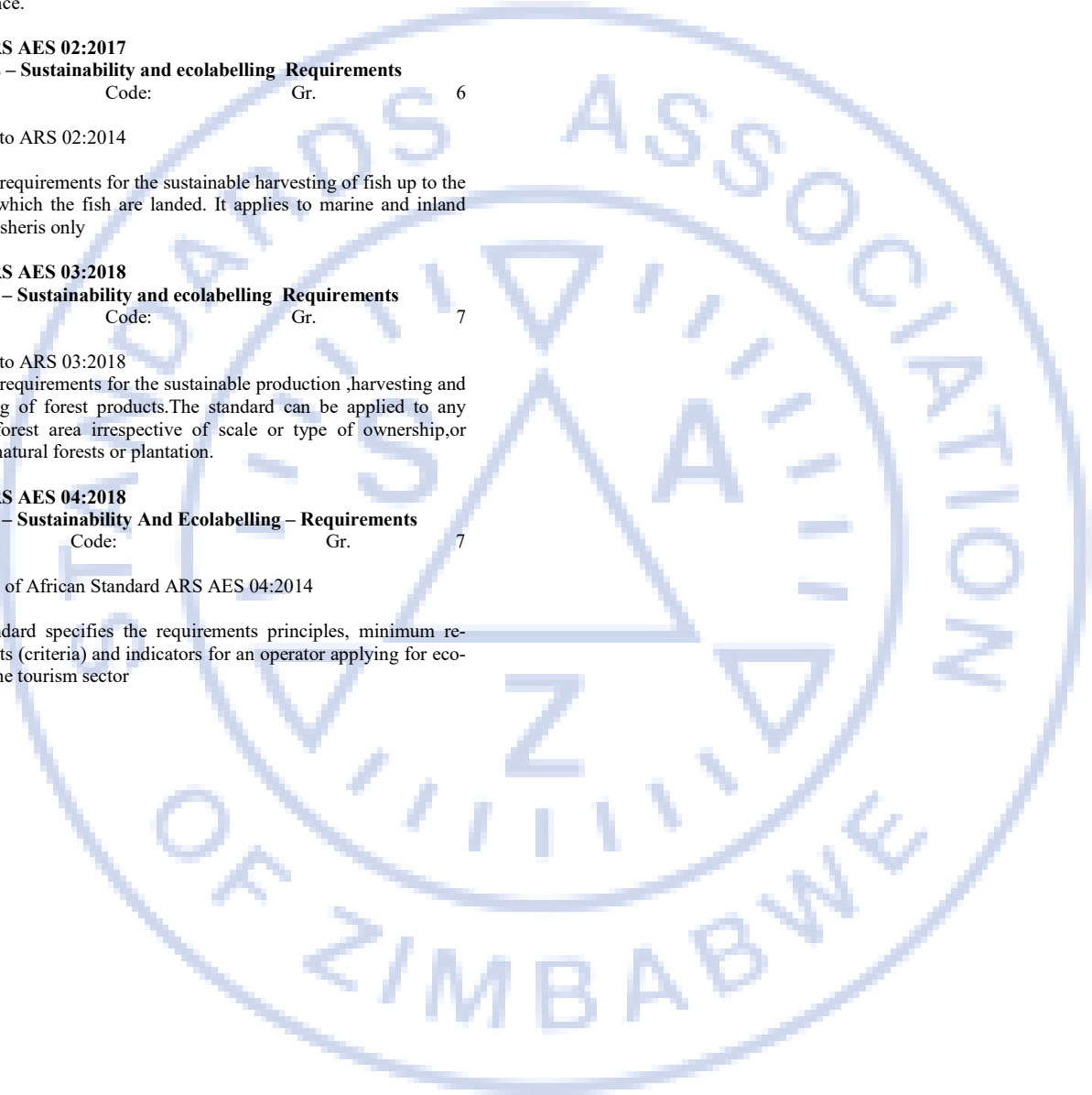
Tourism – Sustainability And Ecolabelling – Requirements

Price Code: Gr. 7

21 pages

Adoption of African Standard ARS AES 04:2014

This standard specifies the requirements principles, minimum requirements (criteria) and indicators for an operator applying for eco-label in the tourism sector



ZWS AFSEC

ZWS AFSEC 1041:1049

Guide for application of Standards for rural Electrification In Africa

Price Code: Gr. 5
18 pages

Standard provides an overview of standards for technologies suitable for application in electrification of rural areas in Africa. The guide takes into account the small to large scale systems

ZWS COMESA ADOPTIONS

NOTE: Some COMESA endorsed standards appear under the IEC and ISO sections.

COMESA ZWS HS 353:2004

Sweetened condensed milks

Price Code: Gr 3

4 pages

Identical to Codex – Stan A-4, CHS 003:2004

Replaces ZWS 799:2003

Applies to sweetened condensed milks, intended for direct consumption or further processing, in conformity with the description in section 2 of this standard.

COMESA ZWS HS 358:2004

Certain pulses

Price Code: Gr 3

4 pages

Identical to Codex – Stan 171-1989 (Rev 1-1995), CHS 005:2001

Applies to the whole, shelled or split pulses intended for direct human consumption. It does not apply to pulses intended for factory grading and packaging, industrial processing, or to those pulses intended for use in the feeding of animals. It does not apply to fragmented pulses when sold as such, or to other legumes for which separate standards may be elaborated.

COMESA ZWS HS 364:2004

Peanuts

Price Code: Gr 3

5 pages

Identical to Codex – Stan 200-1995, CHS 016:2004

Amended by MD583:1999

Replaces ZWS 389:1995

Applies to peanuts intended for processing for direct human consumption.

COMESA ZWS HS 402:2004

Sorghum grains

Price Code: Gr 3

5 pages

Identical to Codex – Stan 172-1989 (Rev1-1995), CHS013:2004

Applies to sorghum grains as defined in section 2, for human consumption ie. Ready for its intended use as human food, presented in packaged form or sold loose from the package directly to the consumer. It does not apply to other products derived from sorghum grains.

COMESA ZWS HS 403:2004

Whole and decorticated pearl millet grains

Price Code: Gr 3

4 pages

Identical to Codex – Stan 169-1989 (Rev 1-1995), CHS 012:2004

Applies to whole and decorticated pearl millet grains destined for human consumption which is obtained from *Pennisetum americanum L*, senegalese varieties “souna” and “sanio”.

COMESA ZWS HS 404:2004

Rice

Price Code: Gr 3

8 pages

Identical to Codex – Stan 153-1985 (Rev1-1995), CHS 011:2004

Replaces ZWS 393 1995

Applies to husked rice, milled rice and parboiled rice, all for direct human consumption i.e. Ready for its intended use as human food, presented in packaged form or sold loose from the package directly to the consumer. It does not apply to other products derived from rice or to glutinous rice.

COMESA ZWS HS 412:2004

Quick frozen fish fillets

Price Code: Gr 3

7 pages

Identical to Codex – Stan 190-1995, CHS 009:2004

Applies to quick frozen fillets of fish as defined below and offered for direct consumption without further processing. It does not apply to products indicated as intended for further processing or for other industrial purposes.

COMESA ZWS HS 413:2004

Quick frozen fish sticks (fish fingers) fish portions and fish fillets – Breaded or in batter.

Price Code: Gr 3

9 pages

Identical to Codex – Stan 166-1989 (Rev1-1995), CHS 008:2004

Applies to quick frozen fish sticks (fish fingers) and fish portions cut from quick frozen fish flesh blocks, or formed from fish flesh, and to natural fish fillets, breaded or batter coatings, singly or in combination, raw or partially cooked offered for direct human consumption without further industrial processing.

COMESA ZWS HS 415:2004

Quick frozen blocks of fish fillets, minced fish flesh and mixtures of fillets and minced fish flesh.

Price Code: Gr 4

9 pages

Identical to Codex – Stan 165-1989 (Rev 1-1995), CHS 007:2004

Applies quick frozen blocks of cohering fish flesh, prepared from fillets or minced fish flesh or mixture of fillets and minced fish which are intended for further processing.

COMESA ZWS HS 416:2004

Quick frozen shrimps and prawns

Price Code: Gr 3

8 pages

Identical to Codex – Stan 093-1981 (Rev 1-1995), CHS 004:2004

Applies to quick frozen raw or partially or fully cooked shrimps or prawns, peeled or unpeeled.

COMESA ZWS HS 419:2004

Canned tuna and bonito

Price Code: Gr 3

10 pages

Identical to Codex – Stan 70-1981 (Rev 1-1995), CHS 001:2004

Applies to canned tuna and bonito. It does not apply to specialty products where the fish content constitutes less than 50%^{w/w} of the contents.

COMESA ZWS HS 427:2005

Babycorn

Price Code: Gr 4

7 pages

Identical to Codex – Stan 188:1993, CHS 037:2004

Applies to the cobs of commercial varieties of baby corn to be supplied fresh to the consumer after preparation and packaging.

COMESA ZWS HS 450:2005

Milkfat products

Price Code: Gr 3

3 pages

Identical to Codex – Stan A-1971 (Rev 1-1999), CHS 084:2005

Applies to milkfat products which are intended for further processing or culinary use, in conformity with the description in Section 2 of this standard.

COMESA ISO HS 452:2005

Packaging and transportation of fresh fruit and vegetables

Price Code: Gr 3

13 pages

Identical to Codex – Stan CAC/RCP 44 1995, CHS 103:2005

Recommends proper packaging and transport of fresh fruit and vegetables in order to maintain produce quality during transportation and marketing.

COMESA ZWS HS 453:2005

Avocado

Price code: Gr 3

6 pages

Identical to Codex – Stan 197-1995 (Rev1-1995), CHS 068:2005

Applies to commercial varieties (cultivars) of avocados grown from *Persea Americana* Mill of the Lauraceae family, to be supplied fresh to the consumer, after preparation and packaging.

COMESA ZWS HS 454:2005

Fresh mangoes

Price Code: Gr 3

6 pages

Identical to Codex – Stan 184-1993, CHS 072:2005

Applies to commercial varieties of mangoes grown from *Mangifera indica L.*, of the *Anacardiaceae* family, to be supplied fresh to the consumer, after preparation and packaging.

COMESA ZWS HS 455:2005

Fresh papaya

Price Code: Gr 3

4 pages

Identical to Codex – Stan 183-1993 (Rev 1-2001), CHS 070:2005

Applies to fruits of commercial varieties of papayas to be supplied fresh to the consumer, after preparation and packaging.

COMESA ZWS HS 456:2005

Dried apricots

Price Code: Gr 3

6 pages

Identical to Codex – Stan 130-1981, CHS 033:2005

Applies to dried fruits of *Ameniaca vulgarea Lam.*, which have been suitably treated or processed and which are offered for direct consumption. Also covers dried apricots which are packaged in bulk containers and which are intended for repackaging into consumer size containers or for direct sale to consumers.

COMESA ZWS HS 460:2005

Dehydrated fruits and vegetables including edible fungi

Price Code: Gr 4

8 pages

Identical to Codex – Stan CAC/RCP 5-1971, CHS 039:2005

Applies to fruits and vegetables which are artificially dehydrated (including freeze-dried), either from the succulent stage or in combination with sun-drying, and covers the products commonly associated with the phrase “dehydrated food”.

COMESA ZWS HS 476:2005**Desiccated coconut**

Price Code: Gr 3

8 pages

Identical to Codex – Stan CAC/RCP 4-1971, CHS 047:2005

Applies to desiccated coconut, the dried product prepared for human consumption without requiring further processing which is obtained by shredding or otherwise comminuting the pared kernel of coconut, the fruits of the palm.

COMESA ZWS HS 501:2005**Canned mangoes**

Price Code: Gr 4

11 pages

Identical to Codex – Stan 159-1987, CHS 022:2005

Partially replaces ZWS 747-2003

Applies to canned mango prepared from stemmed, peeled, fresh, sound, clean and mature fruit of commercial varieties conforming to the characteristics of the fruits of *Mangifera Indica L.*, which may be packed with a suitable liquid packing medium, nutritive sweeteners and other seasoning or flavouring ingredients appropriate to the product.

COMESA ZWS HS 516:2005**Canned strawberries**

Price Code: Gr 4

6 pages

Identical to Codex – Stan 62-1981, CHS 050:2005

Partially replaces ZWS 747:2003

Applies to canned strawberries prepared from strawberries of varieties packed with water or other suitable liquid packing medium, processed by heat in an appropriate manner before or after being sealed in a container to prevent spoilage.

COMESA ZWS HS 539:2005**Canned Mandarin oranges**

Price Code: Gr 4

9 pages

Identical to Codex – Stan 68-1981, CHS 054:2005

Applies to canned mandarin oranges offered for direct consumption.

COMESA ZWS HS 552:2005**Canned apricots**

Price Code: Gr 4

9 pages

Identical to Codex – Stan 129-1970, CHS 059:2005

Partially replaces ZWS 747-2003

Applies to canned apricots processed by heat, in an appropriate manner before or after being sealed in a container, so as to prevent spoilage.

COMESA ZWS HS 563:2005**Quick frozen peas**

Price Code: Gr 3

5 pages

Identical to Codex – Stan 41-1981, CHS 048:2004

Applies to quick frozen peas for direct consumption without further processing, except for size grading or repacking if required. Does not apply to product intended for further processing or industrial purposes.

COMESA ZWS HS 565:2003**Canned pineapple**

Price Code: Gr 4

9 pages

Identical to Codex – Stan 42-1981, CHS 071:2005

Partially replaces ZWS 747-2003

Applies to canned pineapples intended for human consumption.

COMESA ZWS HS 566:2005**Quick frozen broccoli**

Price Code: Gr 4

8 pages

Identical to Codex – Stan 110-1981, CHS 031:2005

Applies to quick frozen broccoli for direct consumption without further processing, except for repacking if required.

COMESA ZWS HS 570:2005**Quick frozen French fried potatoes**

Price Code: Gr 4

8 pages

Identical to Codex – Stan 114-1981, CHS 043:2004

Applies to quick frozen French fried potatoes which have been prepared from tubers and meant for direct consumption without further processing except for repacking if required.

COMESA ZWS HS 607:2005**Quick frozen cauliflower**

Price Code: Gr 4

8 pages

Identical to Codex Stan 111-1984, CHS 055:2005

Applies to quick frozen French cauliflower offered for direct consumption without further processing, except for repacking if required.

COMESA ZWS HS 621:2005**Quick frozen carrots**

Price Code: Gr 4

11 pages

Identical to Codex – Stan 140-1983, CHS 060:2005

Applies to quick frozen carrots offered for direct consumption without further processing, except for repacking if required.

COMESA ZWS HS 635:2005**Canned sweet corn**

Price Code: Gr 3

6 pages

Identical to Codex – Stan 18-1981, CHS 045:2005

For further purposes of this standard, canned sweet corn does not include corn-on-the-cob.

COMESA ZWS HS 638:2005**Canned carrots**

Price Code: Gr 4

9 pages

Identical to Codex – Stan 129-1970, CHS 057:2005

Partially replaces ZWS 65-1970

Applies to canned carrots meant for direct consumption, processed by heat in an appropriate manner before or after being sealed in a container.

COMESA ZWS HS 640:2005**Processed meat and poultry products**

Price Code: Gr 7

30 pages

Technically equivalent to CAC/RCP 13 -1978(Rev 1-1985), CHS 024:2005

Specifies the minimum requirements of hygienic in the productions, handling, packaging, storing and transportation of processed meat products to assure a healthful and wholesome supply of products.

COMESA ZWS HS 644:2005

Canned tomatoes

Price Code: Gr 3

6 pages

Identical to Codex – Stan 13-1981, CHS 079:2005

Partially replaces ZWS S5-1970

Applies to processed canned tomatoes meant for human consumption.

COMESA ZWS HS 646:2005

Processed tomato concentrates.

Price Code: Gr 3

6 pages

Identical to Codex – Stan 57-1981, CHS 080:2005

Partially replaces ZWS S5 1970

This standard does not include the products commonly known as tomato sauce, chili sauce and ketchup, or similar products which are highly seasonal products of varying concentration.

COMESA ZWS HS 713:2005

Processed cereal – based foods for infants and children.

Price Code: Gr 3

7 pages

Amended by MD 668:2007

Identical to Codex – Stan74-1981, CHS 078:2004

Applies to processed cereal-based foods for infants and children which are intended to supplement the diet of infants and children.

COMESA ZWS HS 714:2006

Use of Dairy Terms

Price Code: Gr 3

3 pages

Technically equivalent to Codex – Stan 206-1999, CHS 090:2005

Specifies the use of dairy terms in relation to foods to be offered to the consumer or for further processing.

COMESA ZWS HS 716:2006

Sorghum flour

Price Code: Gr 3

5 pages

Technically equivalent to Codex – Stan 173-1989(Rev1-1995), CHS 064:2005

Specifies the requirements of sorghum flour destined for direct human consumption. It does not apply to grits or meals obtained from sorghum bicolor (L) Moench.

COMESA ZWS HS 876:2005

Margarine

Price Code: Gr 3

5 pages

Identical to Codex – Stan 32 1981 (Rev 1-'989), CHS 017:2004

This standard will not apply to any product which contains less than 80% fat and is not labeled in any manner which implies, either directly or indirectly that the product is margarine.

COMESA ZWS ISO ADOPTIONS

NOTE: Some COMESA endorsed standards appear under the IEC and ISO sections

COMESA ZWS HS ISO 137:2009

Wool – Determination of fibre diameter projection microscope method

Price Code: Gr. 4

7 pages

Identical to CHS 249:2006

Specifies the procedure and the conditions of measurement for determination of wool fibre diameter by means of the projection microscope.

COMESA ZWS HS ISO 404:2006

Steel and other steel products – General technical delivery requirements.

Price Code: Gr 5

13 pages

Identical to ISO 404-1992, CHS 062:2005

Specifies the general technical delivery requirements for all steel products covered by ISO 6929, with the exception of steel castings and powder metallurgical products.

COMESA ZWS HS ISO 445:2007

Pallets for materials handling – Vocabulary

Price Code: Gr 7

39 pages

Identical to ISO 445 -1996, CHS 215:2006

Defines terms relating to pallets for unit load methods of materials handling.

COMESA ZWS HS ISO 559:2006

Steel tubes for water and sewage

Price Code: Gr 5

14 pages

Identical to ISO 559:1991, CHS 101:2005

Specifies technical conditions for delivery of seamless and welded steel tubes for the conveyance of water and sewage at temperatures between 10°C and 120°C.

COMESA ZWS HS ISO 607:2007

Surface active agents and detergents – Methods of sample division.

Price Code: Gr 3

7 pages

Identical to ISO 607:1980, CHS 238:2005

Specifies methods for obtaining a reduced sample of surface active agent or detergent suitable for use with single or mixed products in the form of powders, pastes or liquids.

COMESA ZWS HS ISO 1035:2006

Hot – rolled steel bars.

Part 1: Dimensions of round bars

Price Code: Gr 2

4 pages

Identical to ISO 1035-1:1980, CHS 085.1:2005

Specifies dimensions of metric series hot-rolled steel round bars.

Part 2: Dimensions of square bars

Price Code: Gr 2

4 pages

Identical to ISO 1035:1989, CHS 085.2:2005

Specifies dimensions of metric series hot-rolled steel square bars.

Part 3: Dimensions of flat bars

Price Code: Gr 2
4 pages
Identical to ISO 1035-3:1980, CHS 085.3:2005

Specifies dimensions of metric series hot-rolled steel flat bars.

Part 4: Tolerances

Price Code: Gr 2
6 pages
Identical to ISO 1035-4:1980, CHS 085.4:2005

Specifies metric dimensional tolerances applicable to hot-rolled steel bars supplied straight length.

COMESA ZWS HS ISO 1127:2006

Stainless steel tubes – Dimensions Tolerances and conventional masses per unit length.

Price Code: Gr 4
8 pages
Identical to ISO 1127:1992, CHS 119:2005

Specifies the diameters, thicknesses, tolerances and conventional masses per unit length of stainless steel tubes.

COMESA ZWS HS ISO 1130:2008

Textile fibres – Some methods of sampling for testing

Price Code: Gr 4
9 pages
Identical to ISO 1130:1975, CHS 266:2006

Specifies several methods for preparing laboratory samples of fibres and presents a limited treatment of the problem of drawing specimens for testing.

COMESA ZWS HS ISO 1136:2009

Wool – Determination of mean diameter of fibres – Air permeability method

Price Code: Gr 4
8 pages
Identical to ISO 1136:1976, CHS 250:2006

Specifies a method for the determination of the mean diameter of wool fibres using an apparatus which passes a current of air through a bundle of fibres

COMESA ZWS HS ISO 1833:2008

Textiles – Binary fibre mixtures – quantitative chemical analysis

Price Code: Gr 5
15 pages
Identical to ISO 1833:1977, CHS 119:2005

Contains methods for the quantitative chemical analysis of various binary mixtures of fibres. The methods given are applicable in general to fibres in any textile form. Where certain textile forms are excepted these are listed in the “field of application” clause of the individual.

COMESA ZWS HS ISO 1973:2008

Textiles fibres – Determination of linear density gravimetric methods and vibroscope method

Price Code: Gr 4
8 pages
Identical to ISO 1973:1995, CHS 268:2006

Specifies a gravimetric method and a vibroscope method for the determination of the linear density of textile fibres applicable respectively.

COMESA ZWS HS ISO 2299:2008

Sawn timber of broadleaved species – Defects – Measurement

Price Code: Gr 4
6 pages
Identical to ISO 2299:1973, CHS 210:2006

Specifies the international classification of defects of sawn timber of broadleaved species growing in the temperate zone of the globe.

COMESA ZWS HS ISO 2300:2008

Sawn timber of broadleaved species – Defects – Terms and definitions

Price Code: Gr 7
32 pages
Identical to ISO 2300:1973, CHS 211:2006

Establishes international terms and definitions for defects of sawn timber of broadleaved species, classified in ISO 2299.

COMESA ZWS HS ISO 2301:2008

Sawn timber of broadleaved species – Defects – Measurement

Price Code: Gr 4
10 pages
Identical to ISO 2301:1973, CHS 212:2006

Specifies international methods of measuring defects of sawn timber of broadleaved species, classified in ISO 2299.

COMESA ZWS HS ISO 2370:2008

Textiles – Determination of fineness of flax fibres – Permeametric methods

Price Code: Gr 4
11 pages
Identical to ISO 2370:1980, CHS 269:2006

Specifies two permeametric methods for the determination of the fineness of flax fibres.

COMESA ZWS HS ISO 2408:2006

Steel wire ropes for general purposes – Minimum requirements.

Price Code: Gr 7
15 pages
Identical to ISO 1035-1:1980, CHS 121:2005
Specifies minimum requirements for the manufacture and testing of standard steel wire ropes for general purposes, including lifting equipment such as cranes and hoists.

COMESA ZWS HS ISO 2418:2007

Leather – Chemical, physical and mechanical and fastness tests – Sampling location.

Price Code: Gr 4
6 pages
Identical to ISO 2418:2002, CHS 230:2005

Specifies the location of a laboratory sample within a piece of leather and the method of labeling and marking the laboratory samples for future identification.

COMESA ZWS HS ISO 2419:2007

Leather – Physical and mechanical tests –sample preparation and conditioning.

Price Code: Gr 3
2 pages
Identical to ISO 2419:2002, CHS 231:2006

Specifies the preparation of leather test pieces for physical and mechanical testing together with two standard atmospheres for conditioning and testing.

COMESA ZWS HS ISO 2588:2007

Leather – Sampling – Number of items for a gross sample.

Price Code: Gr 2
1 page
Identical to ISO 2588:1985, CHS 233:2005

Specifies a method for the drawing, from a lot, of whole pieces of leather to form a gross sample.

COMESA ZWS HS ISO 2646: 2008
Wool – Measurement of the length of the fibres processed on the worsted system, using a fibre diagram machine
Price Code: Gr. 3
5 pages
Identical to ISO 2646:1974, CHS 253:2006

Specifies a method for the measurement of the length of wool fibres using a fibre diagram machine. The method is applicable to combed silvers processed on the worsted systems.

COMESA ZWS HS ISO 2647:2009
Wool – Determination of percentage of modulated fibres by the projection microscope
Price Code: Gr. 2
2 pages
Identical to ISO 2647:1973, CHS 270:2006

Utilizes the same apparatus and technique as that described in ISO/TR 137.

COMESA ZWS HS ISO 2701:2006
Drawn wire for general purpose – Non – Alloy steel wire ropes – Terms of acceptance.
Price Code: Gr 2
4 pages
Identical to ISO 12701:1999, CHS 122:2005

Specifies the terms of acceptance for drawn wire intended for the manufacture of general purpose non-alloy steel-wire ropes, as specified in ISO 2232.

COMESA ZWS HS ISO 2821:2007
Leather – Raw hides of cattle and horses – Preservation by stack salting.
Price Code: Gr 2
2 pages
Identical to ISO 2821:1974, CHS 232:2005

Analyses the various preserving process defects likely to affect the raw hides of cattle and horses and defines the nites for the preservation of these hides by stack salting.

COMESA ZWS HS ISO 3060:2009
Cotton fibres – Determination of breaking tenacity of flat bundles
Price Code: Gr 3
6 pages
Identical to ISO 3060:1974, CHS 271:2006

Specifies a method of test for the determination of the breaking tenacity of cotton fibres arranged in a parallel manner in a flat bundle. The method applies to fibres from raw cotton or to raw cotton or to fibres from various stages in the manufacturing process or to fibres separated or extracted from manufactured cotton products.

COMESA ZWS HS ISO 3129:2008
Wood – Sampling method and general requirements for physical and mechanical tests
Price Code: Gr 3
4 pages
Identical to ISO 3129:1975, CHS 203:2006

Specifies methods for the selective and mechanical sampling of wood, for the conditioning of selected material and for the preparation of test pieces.

COMESA ZWS HS ISO 3133:2008
Wood – Determination of ultimate strength in static bending
Price Code: Gr 2
2 pages
Identical to ISO 3133:1975, CHS 204:2006

Specifies a method for determining the ultimate strength of wood in static bending.

COMESA ZWS HS ISO 3376:2007
Leather – Physical and mechanical tests – Determination of tensile strength and percentage extension.
Price Code: Gr 4
4 pages
Identical to ISO 3376:2002, CHS 234:2006

Specifies a method for determining the tensile strength, elongation and a specified load and elongation and break of leather. It is applicable to all types of leather.

COMESA ZWS HS ISO 3377:2007
Leather – Physical and mechanical tests – determination of tear load.
Part 1: Single edge tear.
Price Code: Gr 3
3 pages
Identical to ISO 3377-1:2002, CHS 235.1:2006

Specifies a method for determining the tear strength of leather. Using a single edged tear.

Part 2: Double edge tear
Price code: Gr 3
3 pages
Identical to ISO 3377-2:2002, CHS 235.2:2006

Specifies a method for determining the tear strength of leather using a double edged tear.

COMESA ZWS HS ISO 3574:2007
Cold reduced carbon steel sheet of commercial and drawing qualities.
Price Code: Gr 5
14 pages
Identical to ISO 3574:1999, CHS 142:2005

Applies to cold reduced carbon steel sheet of commercial and drawing qualities. It is suitable for applications where surface is of prime importance.

COMESA ZWS HS ISO 3755:2006
Cast carbon steels for general engineering purposes.
Price Code: Gr 2
5 pages
Identical to ISO 13755:1991, CHS 058:2005

Specifies requirements for eight grades of heat-treated cast carbon steels for general engineering purposes. Four grades have a restricted chemical composition to ensure uniform weldability.

COMESA ZWS HS ISO 4019:2006
Structural steels – Cold – Formed, Welded, Structural Hollow sections – Dimensions and sectiona properties
Price Code: Gr 6
25 pages
Identical to ISO 4019:2001, CHS 126:2005

Specifies the tolerances for cold-formed welded structural hollow steel sections that are circular, square or rectangular and gives the dimensions and sectional properties for a range of standard sizes.

COMESA ZWS HS ISO 4198:2007

Surface Active agents – Detergents for hand dishwashing. Guide for comparative testing of performance.

Price Code: Gr 4

7 pages

Identical to ISO 4198:1984, CHS 240:2005

Establishes guidelines for carrying out comparative tests for determining the principal performance characteristics of detergents, solid or liquid, for domestic hand washing which are of interest to the consumer.

COMESA ZWS HS ISO 4317:2007

Surface – Active agents and detergents – determination of water Content – Karl Fischer method

Price Code: Gr 3

6 pages

Identical to ISO 4317:1991, CHS 241:2006

Specifies a method using Karl Fischer reagent for the determination of the water content of surface active agents and detergents.

COMESA ZWS HS ISO 4319:2007

Surface active agents – detergents for washing fabrics – Guide for comparative testing of performance.

Price Code: Gr 5

6 pages

Identical to ISO 4319:1977, CHS 239:2006

Constitute a guide for carrying out comparative tests of fabric washing products in such a way as to realistically reflect the performance of the products likely to be used by consumers.

COMESA ZWS HS ISO 4325:2007

Soaps and detergents – determination of chelating agent content – Titrimetric method.

Price Code: Gr 2

2 pages

Identical to ISO 4325:1990, CHS 243:2006

Specifies a method of analysis for the determination of the chelating agent content of detergent compositions and soaps containing not more than 2% (m/m) of chelating agent.

COMESA ZWS HS ISO 4344:2006

Steel wire ropes for lifts – Minimum requirements

Price Code: Gr 7

28 pages

Identical to ISO 4344:2004, CHS 127:2005

Specifies the minimum requirements for the manufacture and testing of stranded carbon steel wire ropes for suspension duty on traction drive and roped hydraulic lifts and for compensation and governor duties on passenger and freight lifts, dump-waiters, personnel hoists and man lifts moving between guides.

COMESA ZWS HS ISO 4858:2008

Wood – Determination of volumetric shrinkage

Price Code: Gr 3

3 pages

Identical to ISO 4858:1982, CHS 206:2006,

Specifies two methods for the determination of the volumetric shrinkage of wood.

COMESA ZWS HS ISO 4860:2008

Wood – Determination of volumetric swelling

Price Code: Gr 3

3 pages

Identical to ISO 4860:1982, CHS 207:2006

Specifies two methods for the determination of the volumetric swelling of wood. The stereometric method used for test pieces made in accordance with ISO 4859. The mercury volumenometer method used for test pieces of any shape.

COMESA ZWS HS ISO 4911:2008

Textiles – Cotton fibres – Equipment and artificial lighting for cotton classing rooms

Price Code: Gr 3

7 pages

Identical to ISO 4911:1980, CHS 257:2006

Specifies requirements for artificial illumination used for judging accurately and uniformly the colour of cotton. It also describes a method of test for appraising the colour quality of lamps procured for this purpose.

COMESA ZWS HS ISO 4912:2008

Textiles – Cotton fibres – Evaluation of maturity – Microscopic method

Price Code: Gr 4

8 pages

Identical to ISO 4912:1981, CHS 272:2006

Specifies a method for the evaluation of the maturity of raw cotton fibres, or fibres taken from cotton articles which have not been chemically processed

COMESA ZWS HS ISO 4913:2008

Textiles – Cotton fibres – Determination of length (span length) and uniformity index

Price Code: Gr 3

3 pages

Identical to ISO 4913:1981, CHS 258:2006

Specifies a method of test for the determination of the length and uniformity index of cotton fibres by scanning a test beard in an optical device.

COMESA ZWS HS ISO 4995:2006

Hot-rolled steel sheet of structural quality

Price Code: Gr 4

12 pages

Identical to ISO 4995:2001, CHS 123:2005

Applied to hot-rolled steel sheet of structural quality in grades and classes without the use of micro-alloying elements. It is intended for structural purposes where particular mechanical properties are required.

COMESA ZWS HS ISO 4997:2006

Cold-reduced steel sheet of structural quality

Price Code: Gr 5

12 pages

Identical to ISO 4997:1999, CHS 124:2005

Applies to cold-reduced steel sheet of structural quality of various grades, usually without the use of microalloying elements.

COMESA ZWS HS ISO 4998:2006

Continuous hot-dip zinc-coated carbon steel sheet of structural quality

Price Code: Gr 4

10 pages

Identical to ISO 4998:1996, CHS 125:2005

Applies to continuous hot-dip zinc-coated carbon steel sheet of structural quality in various grades.

COMESA ZWS HS ISO 5079:2008

Textile fibres – Determination of breaking force and elongation at break of individual fibres

Price Code: Gr 3
6 pages
Identical to ISO 5079:1995, CHS 273:2006

Specifies the method and conditions of test for the determination of the breaking force and elongation at break of individual fibres in the conditioned or wet state.

COMESA ZWS HS ISO 5088:2008

Textiles – Ternary fibre mixtures – Quantitative analysis

Price Code: Gr 5
13 pages
Identical to ISO 5088:1976, CHS 259:2006

Specifies methods of quantitative analysis of various ternary mixtures of fibres.

COMESA ZWS HS ISO/TR 5090:2008

Textiles – Methods for the removal of non-fibrous matter prior to quantitative analysis of fibre mixtures

Price Code: Gr 3
7 pages
Identical to ISO/TR 5090:1977, CHS 267:2006

Describes procedures for the removal of certain commonly found types of non-fibrous substances from fibres. Fibres to which the procedures are applicable and those to which they are not applicable are listed in the table, in relation to the non-fibrous substances to be removed. The names of these fibres are defined in ISO 2076.

COMESA ZWS ISO HS 5403:2007

Leather – Physical and mechanical tests – determination of H₂O resistance of flexible leather.

Price Code: Gr 4
7 pages
Identical to ISO 5403:2002, CHS 236:2006

Specifies a method for determining the dynamic H₂O resistance of leather. It is applicable to all flexible leathers but is particularly suitable for leathers intended for footwear uppers.

COMESA ZWS HS ISO 5431:2007

Leather – Wet blue goat skins – Specification.

Price code: Gr 4
7 pages
Identical to ISO 5431:1999, CHS 245:2006

Specifies requirements methods of sampling and methods of test for wet blue leather produced from goat skins tanned without hair and with the use of basic chromium sulfate as the primary tanning agent.

COMESA ZWS HS ISO 5432:2007

Leather – Wet blue sheep skins – Specification

Price Code: Gr 4
7 pages
Identical to ISO 5432:1999, CHS 246:2006

Specifies requirements, of sampling and test for wet blue leather produced from sheep skins tanned without wool and with the use of basic chrome sulphate as the primary tanning agent.

COMESA ZWS HS ISO 5433:2007

Leather – Bovine wet blue – Specification

Price Code: Gr 4
8 pages
Identical to ISO 5433:1999, CHS 247:2006
Specifies requirements, methods of sampling and methods of test for wet blue leather produced from bovine hides and parts of bovine hides tanned without hair and with the use of basic chromium sulfate as the primary tanning agent.

COMESA ZWS HS ISO 5954:2006

Cold-reduced steel sheet and corresponding hardness requirements

Price Code: Gr 5
11 pages
Identical to ISO 1035-1:1980, CHS 128:2005

Applies to cold-reduced steel sheet and corresponding hardness requirements. It is suitable for applications where surface is of prime importance.

COMESA ZWS HS ISO / TR 6306:2006

Chemical analysis of steel – Order of listing elements.

Price Code: Gr 2
2 pages
Identical to ISO/TR 6306:1989, CHS 129:2005

Sets out recommended order for listing elements determined in steels and most other iron-based alloys, excluding foundry irons, where priorities are different.

COMESA ZWS HS ISO 6316:2006

Hot-rolled steel strip of structural quality

Price Code: Gr 4
9 pages
Identical to ISO 6316:2000, CHS 130:2005

Applies to hot-rolled steel strip or structural quality in various grades and classes.

COMESA ZWS HS ISO 6741:2008

Textiles – Fibres and yarns – Determination of commercial mass of consignments

Part 1: Mass determination and calculations
Price Code: Gr 4 CHS 268:2006
10 pages
Identical to ISO 6741.1:1989, CHS 260.1:2006

Specifies methods for the determination of the commercial mass of homogeneous consignments of those textile fibres and yarns composed of a single generic species listed in part 4.

Part 2: Methods for obtaining laboratory samples

Price Code: Gr 3
5 pages
Identical to ISO 6741.2:1987, CHS 260.2:2006

Specifies methods for obtaining laboratory samples for mass determination by one of the methods given in ISO 6741.1. The method appropriate for particular fibres is indicated in ISO 6741.4.

Part 3: Specimen cleaning procedures

Price Code: Gr 3
4 pages
Identical to ISO 6741.3:1987, CHS 260.3:2006

Specifies specimen cleaning procedures to be used when the commercial mass is to be determined in accordance with ISO 6741.1 on a clean and dry basis.

Part 4: Values used for the commercial allowances and the commercial moisture regains

Price Code: Gr 3

6 pages

Identical to ISO/TR 6741.4:1987, CHS 260.4:2006

Gives values for the commercial allowances and commercial moisture regains commonly used in the calculation of the commercial mass of consignments of textile fibres and yarns composed of a single generic type in their morphological state.

**COMESA ZWS HS ISO 6934:2006
Steel for the prestressing of concrete**

Part 1: General requirements

Price Code: Gr. 3

7 pages

Identical to ISO 76934-1:1991, CHS 088.1:2005

Specifies requirements for high tensile strength steel to be used in prestressed concrete. Applies only to material in the condition as supplied by manufactures.

Part 2: Cold-drawn wire

Price Code: Gr. 3

6 pages

Identical to ISO 6934-2:1991, CHS 088.2:2006

Specifies requirements for round, cold-drawn, high-tensile steel wire, either plain, indented, ribbed or crimped.

Part 3: Quenched and tempered wire

Price Code: Gr 3

6 pages

Identical to ISO 6934-3:1991, CHS 088.3:2006

Specifies requirements for round wire made of quenched and tempered high tensile steel, with a surface with either plain, ribbed grooved or indented. Product is delivered in coils.

Part 4: Strand

Price Code: Gr. 3

5 pages

Identical to ISO 6934-4:1991 CHS 088.4:2006,

Specifies requirements for high – tensile steel strand which has been given a stress relieving heat treatment according to the general requirements specified in Part 1.

Part 5: Hot- rolled steel bars with or without subsequent processing.

Price Code: Gr.3

6 pages

Identical to ISO 6934-5:1991 CHS 088.5:2006,

Specifies requirements for round high tensile steel bars. Bars may be supplied either hot-rolled or in a hot-rolled and processed condition, according to the general requirements specified in Part 1.

**COMESA ZWS HS ISO 6935:2006
Steel for reinforcement of concrete**

Part 1: Plain bars

Price Code: Gr. 3

6 pages

Identical to ISO 6934-1:1999, CHS 089.1:2008

Specifies technical requirements for plain bars designated for reinforcement in ordinary concrete structures and for non-prestressed reinforcement in prestressed concrete structures.

Part 2: Ribbed bars

Price Code: Gr. 4

11 pages

Identical to ISO6934-2:1994, CHS 089.2:2006

Specifies technical requirements for ribbed bars designed for reinforcement in ordinary concrete, structures and for non- prestressed reinforcement in prestressed concrete structures.

COMESA ZWS HS ISO 6938:2008

Textiles – Natural fibres – Generic names and definitions

Price Code: Gr. 3

6 pages

Identical to ISO 6938:1984, CHS 261:2006

Gives the generic names and the definitions of the most important natural fibres according to their specific constitution or origin.

COMESA ZWS HS ISO 6984:2007

Rounded Non – Alloy Steel wires for stranded wire ropes for mine hoisting – Specifications.

Price Code: Gr. 4

9 pages

Identical to ISO 6984:1990, CHS 139:2005

Specifies round non-alloy steel drawn wires to be used in the manufacture of stranded wire ropes for mine hoisting as defined in ISO3154. It specifies the dimensional tolerances; mechanical exteristics; conditions with which coatings, if any shall comply and the conditions of sampling and control.

COMESA ZWS HS ISO 6989:2008

Textile fibres – Determination of length distribution of staple fibres (by measurement of single fibres

Price Code: Gr. 3

6 pages

Identical to ISO 6989:1981, CHS 274:2006

Specifies three methods for determination of the length of staple fibres by measuring individual fibres. Different methods of expressing the length distribution from values obtained by measurement of individual fibres.

COMESA ZWS HS ISO 7535:2007

Surface active agents – detergents for domestic machine dishwashing – guide for comparative testing of performance.

Price Code: Gr. 4

11 pages

Identical to ISO 7535:1984, CHS 242:2006

Establishes guidelines for carrying out comparative tests on machine dishwashing products solid or liquid, in an attempt to reflect realistically the performance of products likely to be used by consumers.

COMESA ZWS HS ISO 7900:2007

Zinc – Coated steel wire for fencing.

Price Code: Gr. 2

3 pages

Amended by MD 660:2007

Identical to ISO 7900:1988, CHS 140:2005

Specifies requirements for drawn steel wire zinc – coated by the hot dip process and intended for use in general – purpose wire fencing, barbed – wire fencing, barbed – wire fencing, field fencing and chain link fencing.

COMESA ZWS HS ISO 7535:2009

Cotton bales – Dimensions and density

Price Code: Gr. 3

2 pages

Identical to ISO 8115-1:1986, CHS 262.1:2006

Lays down the nominal overall dimensions and the bale density of banded cotton bales density of banded cotton bales. It applies to the shaping and forming the transport and the opening of the bales. It does not apply to wrapping, banding, and the marking of bales.

Part 2: Bales of man-made staple fibres – Dimensions

Price Code: Gr. 3
3 pages
Identical to ISO 8115-2:1994 , CHS 262.2:2006

Specifies the overall dimensions of banded bales of man-made staple fibres. The specified dimensions allow for an optimum utilization of the loading space of freight containers and trucks.

Part 3: Bales of cotton – Packaging and labeling

Price Code: Gr. 3
2 pages
Identical to ISO 8115-3:1995, CHS 262.3:2006

Specifies details for packaging and labelling of cotton bales.

COMESA ZWS HS ISO 8159:2009

Textiles – Morphology of fibres and yarns – Vocabulary

Price Code: Gr. 3
3 pages
Identical to ISO 8159:1987, CHS 263:2006

Defines the principal terms used to describe the various forms into which textile fibres can be assembled, up to and including cabled yarns.

COMESA ZWS HS ISO 8375:2008

Solid timber in structural sizes – Determination of some physical and mechanical properties

Price Code: Gr. 3
10 pages
Identical to ISO 8375:1985, CHS 199:2006

Specifies laboratory methods for determining the following properties of solid timber in structural sizes. Modulus of elasticity in static bending, shear modulus, bending strength, modulus of elasticity in tension, tension strength parallel to the grain, modulus of elasticity in compression, compression strength parallel to the grain.

COMESA ZWS HS ISO 8528:2013

Reciprocating internal combustion engine driven alternating current generating sets

Part 2:Engines

Price Code: Gr.5
12 pages.
Identical to ISO 8528.2:2005, CHS 287.2:2007

Specifies the principal characteristics of a reciprocating internal combustion (RIC) engine when used for alternating current (a.c.) generating set applications.

Part 3: Alternating current generators for generating sets

Price Code: Gr.5
15 pages
Identical to ISO 8528.3:2005, CHS 287.3:2007

Specifies the principal characteristics of alternating current (a.c.) generators under the control of their voltage regulators when used in generating set applications. It supplements the requirements of IEC 60034.1.

Part 4: Alternating current generators for generating sets

Price Code: Gr. 5
18 pages
Identical to ISO 8528.4:2005 CHS 287.4:2007,

Specifies the criteria for control gear and switchgear for generating sets with reciprocating internal combustion engines.

Part 7: Technical declarations for specifications and design

Price Code: Gr. 5
14 pages
Identical to ISO 8528.7:1994, CHS 287.7:2007

Specifies the requirements and parameters for the specification and design of a reciprocating internal combustion (RIC) engine driven generating set.

Part 8: Requirements and tests for low-power generating sets

Price code: Gr 5
9 pages
Identical to ISO 8528.8:2016,

Defines design requirements, minimum performances and type tests for low-power generating sets driven by reciprocating internal combustion engines for land and marine use excluding generating sets used on aircraft

Part 9: Measurement and evaluation of mechanical vibrations

Price Code: Gr. 5
15 pages
Identical to ISO 8528.9:1995, CHS 287.9:2007

Describes procedures for measuring and evaluating the external mechanical vibration behaviour of generating sets at the measuring points stated in that international standard.

Part 10: Measurement of airborne noise by the enveloping surface method

Price Code: Gr. 6
17 pages
Identical to ISO 8528.10:1998 , CHS 287.10:2007

Defines measurement methods for the determination of airborne noise emitted by reciprocating internal combustion engine driven generating sets in such a way that the total of relevant noise emissions e.g. exhaust and cooling system noise, together with all other sources of engines noise are evaluated on a similar basis to yield comparable results.

Part 12: Emergency power supplies to safety services

Price Code: Gr. 5
12 pages
Identical to ISO 8528.12:1997, CHS 287.12:2007

Applies to generating sets driven by reciprocating internal-combustion (RIC) engine for emergency power supply to safety services.

COMESA ZWS HS ISO 8611:2007

Pallets for materials handling – flat pallets.

Part 1:Test methods.

Price Code: Gr. 7
Identical to CHS 216:2006
27 pages

Specifies test methods of existing and prototype flat pallets for materials handling (for all types of use).

Part 2: Performance requirements and selection of tests.

Price Code: Gr. 4
11 pages
Identical to ISO 8611-2:2005, CHS 217:2006

Specifies the performance requirements and the selection of tests for flat pallets of all materials being subjected to the tests defined in ISO 8611-1. It is not intended to apply to pallets with a fixed superstructure or a rigid, self-supporting container and maybe mechanically attached to the pallet and which contributes to the strength of pallet.

Part 3: Maximum working loads.

Price Code: Gr. 4

10 pages

Identical to ISO 8611-3:2005, CHS 218:2006

Proposes relevant test methods to determine a range of maximum working loads for different payloads and loading and support conditions, which depend on the nature of the load being carried.

COMESA ZWS HS ISO 8903:2008

Broadleaved sawn timber – Nominal sizes

Price Code: Gr. 2

1 page

Identical to ISO 8903:1994, CHS 200:2006

Specifies nominal sizes of unplanned, square-edged and unedged, broadleaved sawn timber.

COMESA ZWS HS ISO 8904:2008

Broadleaved sawn timber – Sizes – Methods of measurement

Price Code: Gr. 2

1 page

Identical to ISO 8904:1990, CHS 201:2006

Specifies the methods of measurement of the length, width, thickness and volume of broadleaved sawn timber. It is applicable to unplanned, square-edged and unedged broadleaved sawn timber.

COMESA ZWS HS ISO 8905:2008

Sawn timber – Test methods – Determination of ultimate strength in shearing parallel to grain

Price Code: Gr. 2

2 pages

Identical to ISO 8905:1988, CHS 202:2006

Specifies a method of testing sawn timber of coniferous and broadleaved species in shearing parallel to the grain to determine the ultimate strength.

COMESA ZWS HS ISO 9086:2008

Wood – Methods of physical and mechanical testing – Vocabulary

Part 1: General concepts and macrostructure

Price Code: Gr. 3

6 pages

Identical to ISO 9086.1:1987, CHS 208:2006

Gives terms and definitions relating to general concepts and wood macrostructure.

COMESA ZWS HS ISO 9444:2007

Continuously hot-rolled stainless steel strip, plate/sheet and cut lengths tolerances on dimensions and form

Price Code: Gr. 4

10 pages

Identical to ISO 9444:2007, CHS 146:2005

Specifies the tolerances on dimensions and form for continuously hot-rolled stainless steel narrow strip in actual width of less than 600mm. It applies to cut lengths taken from such strip.

COMESA ZWS HS ISO 9477:2007

High strength cast steels for general engineering and structural purposes.

Price Code: Gr. 3

3 pages

Identical to ISO 9477:1992, CHS 144:2005

Specifies requirements for four grades of heat – treated cast carbon and alloy steels for general engineering and structural purposes.

COMESA ZWS HS ISO 9709:2008

Structural timber – Visual strength grading – Basic principles

Price Code: Gr. 6

25 pages

Identical to ISO 9709:2005, CHS 213:2006

Establishes the basic principles for rules and procedures governing the visual sorting of timber for use in structural applications.

COMESA ZWS HS ISO 10144:2007

Certification scheme for steel bars and wires for the reinforcement of concrete structures.

Price Code: Gr. 3

5 pages

Identical to ISO 10144:1991, CHS 143:2005

Specifies rules for a certification scheme for continuous production of steel bars and wires for ordinary reinforcement of concrete structures in order to verify the conformity with the requirements specified in product Standards such as ISO 6935-1 and ISO 6935-2.

COMESA ZWS HS ISO 10306:2008

Textiles – Cotton fibres – Evaluation of maturity by the air flow method

Price Code: Gr. 3

5 pages

Identical to ISO 10306:1993, CHS 264:2006

Specifies a method for the evaluation of the maturity of loose randomized cotton fibres by measuring the resistance to air flow of a plug of cotton fibres under two prescribed conditions. The method is applicable to cotton taken at random from bales. Laps and slivers or other sources of lint cotton may be tested, however results may differ if fibres are taken from bales.

COMESA ZWS HS ISO 10474:2007

Steel and steel products – Inspection documents.

Price Code: Gr. 3

6 pages

Identical to ISO 10474:1991, CHS 141:2005

Defines the different types of inspection documents supplied to the purchaser, in accordance with the requirements of the order, for the delivery of iron and steel products.

COMESA ZWS HS ISO 12952:2008

Textiles – Burning behavior of bedding items

Part 1: General test methods for the ignitability by a smouldering cigarette

Price Code: Gr. 4

9 pages

Identical to ISO 12952-1:1998, CHS 265.1:2006

Specifies a general test method common to all bedding items, for assessment of their ignitability when subjected to a smoldering cigarette.

Part 2: Specific test methods for the ignitability by a smoldering cigarette

Price Code: Gr. 3

5 pages

Identical to ISO 12952-2:1998 CHS 265.2:2006,

Specifies product specific details concerning specimens size, wash procedures, set up of specimens and positions of cigarettes for testing bedding items according to the method described in EN ISO 12952-1.

Part 3: General test methods for the ignitability by a small open flame

Price Code: Gr 4
9 pages
Identical to ISO 12952-3:1998, CHS 265.3:2006

Specifies a general test method common to all bedding items, for assessment of their ignitability when subjected to a smoldering cigarette.

Part 4: Specific test methods for the ignitability by a small open flame

Price Code: Gr 3
4 pages
Identical to ISO 12952-4:1998, CHS 265.4:2006

Specifies product-specific details concerning specimen size, wash procedures, set-up of specimens and positions of the ignition source for testing bedding items according to the method described in EN ISO 12952.3.

**COMESA ZWS HS ISO 13912:2008
Structural timber – Machine strength grading – Basic principles**

Price Code: Gr 4
22 pages
Identical to ISO 13912:2008, CHS 214:2006

Establishes the basic principles for rules and principles governing the machine sorting of timber for use in structural applications.

**COMESA ZWS HS ISO 14284:2007
Steel and Iron – Sampling and preparation of samples for the determination of chemical composition.**

Price Code: Gr 7
30 pages
Identical to ISO 14284:1996, CHS145:2005

Specifies methods for sampling and sample preparation for the determination of the chemical composition of pig iron, cast-iron and steel. Methods are specified for use with both liquid and solid metal.

**COMESA ZWS ISO14931:2007
Leather – Guide to the selection of leather for apparel (excluding furs)**

Price Code: Gr 3
4 pages
Identical to ISO14931:2004, CHS 237:2006

Gives recommended values and related test method for apparel leather excluding furs. This document also specifies the sampling and conditioning procedures of laboratory samples.

**COMESA ZWS HS ISO 16020:2006
Steel for reinforcement and prestressing of concrete – Vocabulary.**

Price Code: Gr 6
21 pages
Identical to ISO 16020:2005, CHS 099:2005

Defines terms and symbols to be used in the field of reinforcing and prestressing steel for concrete.

**COMESA ZWS HS 16143:2007
Stainless steels for general purposes
Part 1: Flat products**

Price Code: Gr 6
23 pages
Identical to ISO 16143-1:2004, CHS 147.1:2005

Specifies the technical delivery conditions for hot/cold rolled sheet/plate and strip for general purposes made of the most important corrosion – resistant stainless steel grades.

Part 2: Semi-finished products, bars, rods and sections

Price Code: Gr 6
25 pages
Identical to ISO 16143-2:2004, CHS 147.2:2005

Specifies a technical delivery conditions for semi-finished products, hot or cold formed bars, rod and sections for general purposes made of the most important corrosion – resistant stainless steel grades.

Part 3: Wire

Price Code: Gr 5
20 pages
Identical to ISO 16143-3:2005, CHS 147.3:2005

Specifies requirements for stainless steel wire for which no product standard exists. It includes round, flat and shaped wire, made of the most commonly used types of stainless steels for general corrosion resistance and high temperature service. The wire maybe supplied in coils or in straightened and cut lengths.

**COMESA ZWS HS ISO 17186:2007
Leather – Physical and mechanical tests – determination of surface coating thickness.**

Price Code: Gr 3
5 pages
Identical to ISO 17186:2002, CHS 244:2006

Specifies a method for determining the thickness of the surface coating applied to leather when measured under zero compression. It is applicable to all types of leather.

**COMESA ZWS HS ISO 17227:2007
Leather – Physical and mechanical tests – determination of dry heat resistance of leather**

Price Code: Gr 3
4 pages
Identical to ISO 17227:2002, CHS 248:2006

Specifies a method of determining the dry heat resistance of conditioned leathers. It is applicable to all leathers.

**COMESA ZWS HS ISO 18613:2007
Repair of flat wooden pallets**

Price Code: Gr 5
16 pages
Identical to ISO 18613:2003. CHS 219:2006

Specifies the maximum defects and damage allowed before a flat wooden pallet shall be repaired and defines the minimum repair criteria that shall be used.

COMESA ZWS HS IEC ADOPTIONS

NOTE: Some COMESA endorsed standards appear under the IEC and ISO sections

COMESA ZWS HS IEC 884-2.5:2009

Plugs and socket-outlets for household and similar purposes

Price Code: Gr. 7

37 pages

Identical to IEC 884-2.5:1995

Applies to shuttered and non-shuttered, fused and non-fused adaptors for a.c only.

COMESA ZWS HS IEC 60034:2013

Rotating electrical machines

Part 11: Thermal protection

Price Code: Gr.6

25 pages

Identical to IEC 60034.11, CHS 282.11:2007

Specifies requirements relating to the use of thermal protectors and thermal detectors incorporated into the stator windings or placed in other suitable positions in induction machines in order to protect them against serious damage due to thermal overloads.

COMESA ZW HS IEC 60038:2013

Standard voltages

Price Code: Gr. 4

21 pages

Identical to IEC 60038:1997, CHS 288:2007

Applies to a.c. transmission, distribution and utilization systems and equipment for use in such systems with standard frequencies 50Hz having a nominal voltage above 100V.

COMESA ZW HS IEC 60041:2017

Field accepted tests to determine the hydraulic performance of hydraulic turbines, storage pumps and pump-turbines

Price Code: Gr. 14

419 pages

Identical to IEC 60050-466:1990, FDHS 283

Specifies methods for any size and type of impulse or reaction turbine, storage pump or pump turbine. Determines whether the contract guarantees have been fulfilled and deals with the rules governing these tests as well as the methods of computing the results and the content and style of the final report.

COMESA ZW HS IEC 60050-421:2017

International electrotechnical vocabulary – Overhead lines

Price Code: Gr. 7

37 pages

Identical to IEC 60050-466:1990, FDHS 275

Covers terms and definitions used within power transformers and reactors

COMESA ZW HS IEC 60050-461:2017

International electrotechnical vocabulary – Overhead lines

Price Code: Gr. 7

29 pages

Identical to IEC 60050-466:1990, FDHS 276

Covers terms and definitions used for electrical cable

COMESA ZW HS IEC 60050-466:2017

International electrotechnical vocabulary – Overhead lines

Price Code: Gr. 7

49 pages

Identical to IEC 60050-466:1990, FDHS 277

Covers terms and definitions used within the Overhead lines

COMESA ZW HS IEC 60059:2013

Standard current ratings

Price Code: Gr..7

5 pages

Identical to IEC 60059, CHS 289:2007

Specifies standard current ratings for electrical devices, apparatus, instruments and equipment and should be applied to the designing of utilization systems or equipment as well as to operating characteristics.

COMESA ZW HS IEC 60076:2013

Power transformers

Part 1: General

Price Code: Gr. 7

89 pages

Identical to IEC 60076:2000, CHS 303.1:2010

Applies to three –phase and single-phase power transformers (including auto-transformers) with the exception of certain categories of small and special transformers.

COMESA ZW HS IEC 60104:2013

Aluminium – magnesium – silicon alloy wire for overhead line conductors

Price Code: Gr. 5

11 pages

Identical to IEC 60104, CHS 309:2007

Applicable to aluminium-magnesium-silicon alloy wires of two types having different mechanical and electrical properties for the manufacture of stranded conductors for overhead power transmission purposes.

COMESA ZW HS IEC 60227:2009

Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V

Part 1: General requirements

Price Code: Gr. 6

39 pages

Identical to IEC 60227.1:1998, CHS 225.1:2006

Applies to rigid and flexible cables with insulation and sheath if any based on polyvinyl chloride of rated voltages Uo/U up to and including 450/750 V used in power installations of nominal voltage not exceeding 450/750 V.

Part 2: Test methods

Price Code: Gr. 5

25 pages

Identical to IEC 60227.2:2003, CHS 225.2:2006

The methods of carrying out the tests specified in all parts of IEC 60227.

Part 3: Non – sheathed cables for fixed wiring

Price Code: Gr. 6

33 pages

Identical to IEC 60227.3:1997, CHS 225.3:2006

Details the particular specifications for polyvinyl chloride insulated single-core non-sheathed cables for fixed wiring of rated voltages up to and including 450/750 V.

Part 4: Sheathed cables for fixed wiring

Price Code: Gr. 5
39 pages
Identical to IEC 60227.4:1997, CHS 225.4:2006

Details the particular specification for light polyvinyl chloride sheathed cables of rated voltage of 300/500 V

Part 5: Flexible cables (cords)

Price Code: Gr. 6
43 pages
Identical to IEC 60227.5:2003, CHS 225.5:2006

Details the particular specifications for polyvinyl chloride insulated flexible cables (cords) of rated voltages up to and including 300/500 V.

Part 6: Lift cables and cables for flexible connections

Price Code: Gr. 6
39 pages
Identical to IEC 60227.6:2001, CHS 225.6:2006

Details the particular specifications for both circular and flat lift cables and cables for flexible connections of rated voltages up to and including 450/750 V.

Part 7: Flexible cables screened and unscreened with two or more conductors

Price Code: Gr. 6
21 pages
Identical to IEC 60227.7:2003, CHS 225.7:2006

Details the particular specifications for polyvinyl chloride insulated screened control cables of rated voltages up to and including 300/500 V.

COMESA ZW HS IEC 60228:2009

Conductors for insulated cables
Price Code: Gr. 7
37 pages
Identical to 60228:2004, CHS 221:2005

Specifies the nominal cross-sectional areas, in the range 0, 5 mm² to 2 500 mm² for conductors in electric power cables and cords of a wide range of types. Requirements for numbers and sizes of wires and resistance values are also included. These conductors include solid and stranded copper, aluminium and aluminium alloy conductors in cables for fixed installations and flexible copper conductors.

COMESA ZW HS IEC 60309:2009

Plugs socket-outlets and couplers for industrial purposes

Part 1: General requirements
Price Code: Gr. 10
183 pages
Identical to IEC 60309.1:2005, CHS 226.1:2006

Applies to plugs and socket-outlets, cable couplers and appliance couplers with a rated operating voltage not exceeding 690V d.c or a.c and 500 Hz a.c and a rated current not exceeding 250 A, primarily intended for industrial use either indoors or outdoors.

Part 2: Dimensional interchangeability requirements for pin and contact tube accessories

Price Code: Gr. 9
101 pages

Identical to IEC 60309.2:2005, CHS 226.2:2006

Applies to plugs and socket-outlets, cables couplers and appliance couplers with a rated operating voltage not exceeding 690 V, 500 Hz and a rated current not exceeding 125 A primarily intended for industrial use, either indoors or outdoors

COMESA ZW HS IEC 60433:2013

Insulators for overhead lines with a nominal voltage above 1000 V – Ceramic insulators for A.C. systems – Characteristics of insulator units of the long rod type

Price Code: Gr. 4
13 pages
Identical to IEC 60433:1998, CHS 228:2006

Applies to string insulator units of the long rod type with insulating parts of ceramic material intended for use in a.c. overhead power lines with a nominal voltage greater than 1000 V and a frequency not greater than 100 Hz. It is also applicable to insulators of similar design, used in substations.

COMESA ZW HS IEC 60502:2009

Power cables with extruded insulation and their accessories for rated voltages from 1 kV (U_m = 1,2 Kv) Up to 30 Kv (U_m = 36 kV)

Part 1: Cables for rated voltages of 1 kV (U_m 1,2 Kv) and 3 kV (U_m = 3,6 kV)

Price Code: Gr. 7
115 pages
Identical to IEC 60502.1:1998, CHS 227.1:2006

Specifies the construction, dimensions and test requirements of power cables with extruded solid insulation for rated voltages of 1 Kv (U_m = 1,2 kV) and 3 kV (U_m = 3,6 kV) for fixed installations such as distribution networks or industrial installations.

Part 2: Cables for rated voltages of 6 kV (U_m = 7,2 kV) up to 30 kV (U_m = 36 kV)

Price Code: Gr. 7
157 pages
Identical to IEC 60502.2:2005, CHS 227.2:2006

Specifies the construction, dimensions and test requirements of power cables with extruded solid insulation from 6 kV up to 30 kV for fixed installations such as distribution networks or industrial installations.

Part 4: Test requirements on accessories for cables with rated voltages of 6 kV (U_m = 7,2 kV) up to 30 kV (U_m = 36 kV)

Price Code: Gr. 7
61 pages
Identical to IEC 60502.4:2005, CHS 227.4:2006

Specifies the test requirements for type testing of accessories for power cables with rated voltages from 3, 6/6 (7, 2) kV up to 18/30 (36) kV, complying with IEC 60502.2.

COMESA ZW HS IEC 60884:2009

Plugs and socket-outlets for household and similar purposes

Part 1: General requirements

Price Code: Gr. 12
247 pages
Identical to IEC 60884.1:2002, CHS 229.1:2006

Applies to plugs and fixed or portable socket-outlets for a.c only with or without earthing contact with a rated voltage greater than 50V but not exceeding 440V and a related current not exceeding 32A intended for household and similar purposes either indoors or outdoors.

COMESA ZW HS IEC 60884-2.1:2009
Plugs and socket-outlets for household and similar purposes
Part 2: Particular requirements for fused plugs
Price Code: Gr 5
15 pages
Identical to IEC 60884-2.1:1987, CHS 229.2.1:2006

Applies where fuses are primarily intended to protect the flexible cable or cord (e.g. with ring circuits). The fuses are not intended to protect appliances or parts of them against overload

COMESA ZW HS IEC 60884-2.2:2009
Plugs and socket-outlets for household and similar purposes
Part 2: Particular requirements for socket-outlets for appliances
Price Code: Gr 6
25 pages
Identical to IEC 60884-2.2:1989, CHS 292.2.2:2006

Applies to socket-outlets integrated or intended to be incorporated in or fixed to appliances (hereinafter referred to as "socket-outlets for appliances)

COMESA ZW HS IEC 60888:2009
Hard-drawn aluminium wire for overhead line conductors.
Price Code: Gr 3
9 pages
Identical to IEC 60888:1987, CHS 223:2006
Applicable to hard-drawn aluminium wires for the manufacture of stranded conductors for overhead power transmission purposes. It specifies the mechanical and electrical properties of wires in the diameter range 1.25mm to 5.00mm.

COMESA ZW HS IEC 60889:2009
Zinc-coated steel wires for stranded conductors
Price Code: Gr 5
25 pages
Identical to IEC 60889:1987, CHS 22:2005

Applies to zinc-coated steel wires used in the construction and/or reinforcement of conductors for overhead power transmission purposes.

COMESA ZW HS IEC 61140:2013
Protection against electric shock – Common aspects for installation and equipment
Price Code: Gr 8
83 pages
Identical to IEC 61140:2001, CHS 301:2010

Applies to the protection of persons and animals against electric shock. It is intended to give fundamental principles and requirements which are common to electrical installations, systems and equipment or necessary for their co-ordination.

COMESA ZW HS IEC 61328:2013
Live working – Guidelines for the installation of transmission line conductors and earth wires – Stringing equipment and accessory items
Price Code: Gr 7
131 pages
Identical to IEC 61328:2003, CHS 311:2007

Provides recommendations for the selection and testing where necessary of conductor stringing equipment and accessory items used for the installation of overhead conductors and overhead earthwires.

COMESA ZW HS IEC 61378:2013
Converter transformers
Part 1: Transformers for industrial applications
Price Code: Gr 6
57 pages
Identical to IEC 61378.1:1997, CHS 310.1:2010

Deal with the specification, design and testing of power transformers and reactors which are intended for integration within semiconductor converter plants. It is not applicable to transformers designed for industrial or public distribution of a.c. power in general.

Part 2: Transformers for HVDC applications
Price Code: Gr 5
45 pages
Identical to IEC 61378.2:2001, CHS 310.2:2010

Applies to oil-immersed three-phase converter transformers for use in HDVC power transmission. It applies to transformers having two, three or multiple windings.

COMESA ZW HS IEC 61427:2009
Secondary cells and batteries for photovoltaic energy systems (PVES) – General requirements and methods of test
Price Code: Gr 5
29 pages
Identical to IEC 61427:2005, CHS 220:2006

Gives general information relating to the requirements of the secondary batteries used in photovoltaic energy systems (PVES) and to the typical methods of test used for the verification of battery performances.

COMESA ZW HS IEC 61466:2013
Composite string insulator units for overhead lines with a nominal voltage greater than 1 000V
Part 1: Standard strength classes and end fittings
Price Code: Gr 7
43 pages
Identical to IEC 61466.1:1997, CHS 297.1:2010

Applicable to composite string insulator units for a.c. overhead lines with a nominal voltage greater than 1 000V and a frequency not greater than 100Hz. It also applies to insulators of similar design used in substations or on electric traction lines.

Part 2: Dimensional and electrical characteristics
Price Code: Gr 4
13 pages
Identical to IEC 61466.2:2002, CHS 297.2:2010

Applies to composite string insulator units with a specified mechanical load (SML) of 40 Kn to 210 Kn for a.c. overhead lines with a nominal voltage greater than 1 000V and a frequency not greater than 100Hz.

COMESA ZW HS IEC 61865:2013
Overhead lines - Calculation of the electrical component of distance between live parts and obstacles – Method of calculation
Price Code: Gr 7
45 pages
Identical to IEC 61865:2001, CHS 299:2007

Provides guidance for the calculation of electrical distances between live and earthed parts required to prevent air-gap breakdown which may endanger members of the public who legitimately come close to live parts. It is applicable only to overhead lines designed to operate at more than 45kV phase-to-phase a.c.

COMESA ZW HS IEC 62219:2009

Overhead electrical conductors – Formed wire, concentric lay, stranded conductors

Price Code: Gr 6

47 pages

Identical to IEC 62219:2002, CHS 224:2006

Specifies the electrical and mechanical characteristics of concentric lay, overhead conductors of wires formed or shaped before, during or after stranding.



ZWS SADC ADOPTIONS

SADC ZWS HS 78:2017

Canned Sardines and Sardine-Type Products

Price Code: Gr 5
8 pages
Identical to SADCSTAN HS 78:2017

This Standard applies to canned Sardines-type products packed in water or oil or other suitable packing medium. It does not apply to products where fish content constitute less than 50% m/m of the net contents of the can.

SADC ZWS HS 79:2017

Dried Fresh Water Small Pelagics

Price Code: Gr 4
5 pages

Standard applies to farmed fresh whole bream of genus *Oreochromis* and *Tilapia*, For direct consumption or further processing.

SADC ZWS HS 80:2017

Farmed Tilapia (Bream)

Price Code: Gr 4
6 pages

Specifies the requirements and methods of test for dried *Rastrineobola argentea*, *Rastrineobola sardella*, *Stolothrissa tanganicae*, *Limnothrissa miodon* and *Poecilothrissa moeruensis* and *Engraulicypris bangweuluensis*.

SADC ZWS HS 81:2017

Fresh And Frozen Whole Fin Fish

Price Code: Gr 5
8 pages
Identical to SADCSTAN HS 81:2017

This Standard specifies requirements and methods of sampling and test for fresh and frozen whole fin fish intended for human consumption.

SADC ZWS HS 82:2017

Fresh And Chilled Fish

Price Code: Gr 5
9 pages

This standard applies to fresh and chilled fish as defined and offered for direct consumption without further processing. It does not apply to products indicated as intended for further processing or for other industrial use.

SADC ZWS HS 83:2017

General Standard For Quick Frozen Fish Fillets

Price Code: Gr 5
8 pages
Identical to SADCSTAN HS 83:2017

This Standard applies to quick frozen of fish as defined below and offered for direct consumption without further processing. It does not apply to products indicated as intended for further processing or for other industrial purposes.

SADC ZWS HS 84:2017

Smoked Finfish, Smoke –Flavoured Finfish And Smoke-Dried Finfish

Price Code: Gr 6
11 pages

This standard applies to smoked, smoke-flavoured and smoked –dried finfish prepared from fresh, chilled or frozen raw material. It deals with whole finfish, fillets and sliced and similar products thereof.

SADC ZWS HS 85:2017

Salted fish and dried salted fish

Price Code: Gr 6
14 pages
Identical to SADCSTAN HS 85:2017

This Standard applies to salted fish and dried salted fish which has been fully saturated with salt (heavy salted) or to salted fish which has been preserved by partial saturation to a salt content not less than 12% by weight of the salted fish for human consumption.

SADC ZWS HS 86:2017

Fish Sausages

Price Code: Gr 4
7 pages

This standard specifies requirements and methods of sampling and test for fish sausages intended for human consumption or as an ingredient in other foods.

SADC ZWS HS 87:2017

Crackers from marine and fresh fish, crustacean and Molluscan shellfish

Price Code: Gr 4
8 pages
Identical to SADCSTAN HS 87:2017

This Standard specifies requirements crackers, biscuits and other similar snacks prepared from marine and freshwater fish, crustacean and molluscan shellfish

SADC ZWS HS 88:2017

Good Aquaculture Practices Bream (TILAPIA) Farm

Price Code: Gr 6
16 pages

This standard applies to Good Aquaculture Practices (GAP) for bream (Tilapia) in pond and cage farming including harvesting and post –Harvest handling in order to produce products of good quality and safe for consumption. This standard however does not cover hatching and nursing.

SADC ZWS HS 89:2017

Railway Safety Management General

Price Code: Gr 7
49 pages

This SADC SARA standard describes the minimum elements of safety management system (SMS) to enable the RAs to develop an SMS for the management of safe railway operations under his/her control, taking into account each of the following in the following in the asset life cycle phases.

SADC ZWS HS 90:2017

Technical Requirements For Engineering and Operational Standards -General

Price Code: Gr 5
12 pages

This SADC SARA HT 90 gives the generic technical requirements for engineering and operational systems that from part of a railway safety management system which complies with the SADC SARA HT 90 Regional Safety Policy

SADC ZWS HS 91:2017
Technical Requirements For Engineering and Operational Standards –Track ,civil and electorical infrastructure
 Price Code: Gr 7
 28 pages

This Standard covers the asset life cycle components of design, construction/manufacturing and implementation, commissioning, monitoring and maintainance, modification and decommissioning and disposal

SADC ZWS HS 92:2017
Technical Requirements For Engineering and Operational Standards –Rolling Stock
 Price saCode: Gr 5
 13 pages

This Standard covers the asset life cycle components of design ,construction/manufacturing and implementation ,commissioning ,monitoring and maintainance ,modification and decommissioning and disposal of rolling stock

SADC ZWS HS 93:2017
Human Factors
 Price Code: Gr 9
 122 pages

This Standard provides the minimum requirements to RA’s for the management of HF for employees who undertake safety-related work.It is to read and implement in conjunction with the relevant national legislation standards applicable in the country in which the RA operates as well as other SARA safety standards

SADC ZWS HS 94:2017
Technical Requirements For Engineering and Operational Standards –Track, civil and electorical infrastructure level crossing
 Price Code: Gr 7
 43 pages

This Standard aims to provide guidance and information for the utilization of standards applicable to the transportation of dangerous goods adopted by SADCTAN/TC2 SARA members in accordance with the provisions of the Southern African Development Community Protocol on Transport, Communications and Meteorology.

SADC ZWS HS 95:2017
Technical requirements For Engineering and Operational Standards –Operational Principles For Safe Movement On Rail
 Price Code: Gr 6
 17 pages

This Standard covers the minimum requirements for operational principles for safe movement on rail.It includes the operational to be complied with to ensure that operational safety is appropriately addressed in all operational circumstances.

SADC ZWS HS 96:2017
Requirements For Systematic Engineering and Operational Safety Standards – Train Authorisation and Control and Telecommunications
 Price Code: Gr 8
 48 pages

This Standard covers the minimum requirements for train authorization and control systems and telecommunications systems,which provide a means to enable safe train and shunt movements of rolling stock through the use of appropriate technology.

SADC ZWS HS HT :104:2020
ARS ZW HS 1371:2022
Cross border road Management System
 Price Code: Gr 7
 28 pages

This Standard is designated for application by member states of the Tripartite Region.It is a self regulatory scheme that encourages cross boarder transport operators to implement a cross boarder road Transport Management System

SADC ZWS HT 105 Part 1:2020
ARS ZW HS 1355 Part 1:2022
Vehicle Standards – Specification For vehicle Road Worthiness
Part 1: Roadworthiness of vehicles already in use
 Price Code: Gr 7
 30 pages

This Part 1 of the specification covers the requirements for the examination and testing for roadworthiness of motor vehicles operating within the territories and across the borders within the Tripartite Region of COMESA-EAC-SADC.

SADC ZWS HS HT 105 Part 2 :2020
ARS ZW HS 1355: Part 2:2022
Vehicle Standards – Specification For vehicle Road Worthiness
Part 2: Roadworthiness of vehicles prior to entry into service and thereafter
 Price Code: Gr 6
 28 pages

Part 2 of this specification deals with methods and considerations to provide for the future introduction of more advanced safety requirements such as those detailed in Table 1 whilst offering options to minimize costly and burdensome technical and administrative controls and procedures. It caters for the situation where many countries or regions have requirements which differ in certain detail, but which are intended and designed to afford a reasonable degree of safety to the vehicle occupants and to other road users. Examples of where differences between national or regional requirements do, or may exist, but which are considered as providing an equal or an acceptable degree of safety are given in Table 2 using UN ECE Regulations as the base.

SADC ZWS HS HT 105 Part 3 :2020
ARS ZW ARS HS 1355 Part 3: 2022
Vehicle Standards – Specification For vehicle Road Worthiness
Part 3: Supporting Information
 Price Code: Gr 7
 46 pages

Covers the requirements intended to support the vehicle examiner and test stations using other Parts of this specification

SADC ZWS HS HT 105 Part 4 :2020
ARS ZW HS Part 4:2022
Vehicle Standards – Specification For vehicle Road Worthiness
Part 4: Requirements for vehicles examiners
 Price Code: Gr 6
 28 pages

Covers information intended to aid in the selection and appointment of vehicle examiners their duties ,their training and ongoing updating of vehicle examiners

SADC ZWS HT 105 Part 5 :2020
ARS ZW HS 1355:2020
Vehicle Standards – Specification For vehicle Road Worthiness
Part 5: Requirements for Testing Equipment
 Price Code: Gr 6
 28 pages

This specification contains information on selection and installation of testing equipment required to test the roadworthiness of vehicles in accordance with the requirements for the range of defined test lane classes that compromise the defined vehicle test station categories

SADC ZWS HT 105 Part 6 :2020
ARS ZW HS 1355:Part 6:2022
Vehicle Standards – Specification For vehicle Road Worthiness
Part 6: Requirements For Combination Of Vehicles
 Price Code: Gr 3
 28 pages

This specification contains information to aid vehicle examiners or any person wishing to perform a visual inspection to determine whether a vehicle combination exhibits features or conditions which would result in it being classed as unworthy

SADC ZWS HT 106 Part 1 :2020
ZWS ISO/IEC 18013: Part 1:2018
Information Technology - Personal Identification – ISO-Compliant Driving licence
Part 1: Physical characteristics and basic data set
 Price Code: Gr 8
 90 pages

This document establishes guidelines for the design format and data content of an ISO-compliant driving licence (IDL) in regard to both visual human-readable features and ISO machine-readable technologies. It creates a common basis for international use and mutual recognition of the IDL without impeding individual national/community/regional motor vehicle authorities in taking care of their specific needs.

SADC ZWS HS HT 106 Part 2 :2020
ZWS ISO/IEC 18013: Part 2:2018
Part 2: Machine Readable Technologies
 Price Code: Gr 8
 90 pages

ISO/IEC 18013 establishes guidelines for the design format and data content of an ISO-compliant driving licence (IDL) with regard to human-readable features (ISO/IEC 18013-1), ISO machine-readable technologies (ISO/IEC 18013-2), and access control, authentication and integrity validation (ISO/IEC 18013-3). It creates a common basis for international use and mutual recognition of the IDL without impeding individual countries/states in applying their privacy rules and national/community/regional motor vehicle authorities in taking care of their specific needs.

SADC ZWS HS HT 106 Part 2:2020
ZWS ISO/IEC 18013: Part 3:2017
Part 3: Access control, authentication and integrity validation
 Price Code: Gr. 8
 202 pages

ISO/IEC 18013 establishes guidelines for the design format and data content of an ISO-compliant driving licence (IDL) with regard to human-readable features (ISO/IEC 18013-1), machine-readable technologies (ISO/IEC 18013-2), and access control, authentication and integrity validation (ISO/IEC 18013-3). It creates a common basis for international use and mutual recognition of the IDL without impeding individual countries/states to apply their privacy rules and

national/community/regional motor vehicle authorities in taking care of their specific needs

SADC ZWS HS HT 106 Part 4:2020
ZWS ISO/IEC 18013: Part 4:2019
Part 4: Test methods
 Price Code: Gr 8
 208 pages

This document describes the test methods used for conformity testing, that is methods for determining whether a driving licence can be considered to comply with the requirements of the ISO/IEC 18013 series for: machine readable technologies (ISO/IEC 18013-2), and access control, authentication and integrity validation (ISO/IEC 18013-3). The test methods described in this document are based on specifications defined in ISO/IEC 18013-2 and ISO/IEC 18013-3 and underlying normative specifications. This document deals with test methods specific to IDL requirements. Test methods applicable to (smart) cards in general (e.g. those specified in the ISO/IEC 10373 series) are outside the scope of this document.

SADC ZWS HS 107:2020
ARS ZW HT 107:2022
Transportation of dangerous goods by road
 Price Code: Gr 11
 261 pages
 Adoption of SADC HT 107:2019

This standard establishes requirements for the safe operation of all road vehicles used for the transport of dangerous goods.

-In quantities in excess of the specified exempt quantities
 -In operations that are not exempt from compliance with this standard.
 The following elements of the road transport operation are included in this standard:

- The classification of dangerous goods
- The operation of dangerous good vehicles, which in turn, includes responsibilities and requirements for the consignor, the consignee, the operator, the driver and the qualified person as well as en route procedures
- Loading, off-loading of vehicles and the handling of dangerous goods in the course of the operation
- Load constraints and cargo handling
- Requirements governing vehicle and equipment design and construction
- Vehicle and equipment maintenance, inspections and tests
- Information systems and documentation

SADC ZWS HT 108:2022
Honey
 Price Code: Gr 5
 13 pages
 Replaces COMESA ZWS HS 349:2004

This Standard applies to all honeys produced by honey bees and covers all styles of honey presentations which are processed and ultimately intended for direct consumption.

SADC ZWS HS 180:2008
Industrial restraint belts
 Price Code: Gr 5
 13 pages
 Replaces ZWS 180:1998

Specifies the general design, material, construction and performance requirements for industrial restraint belts.

SADC ZWS HS 318:2004**Uniform provisions concerning the approval of pneumatic tyres for commercial vehicles and their trailers**

Price	Code:	Gr	7
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44 pages

Identical to UN ECE Regulation 54

Applies to new pneumatic tyres primarily designed for use by all road vehicles.

SADC ZWS HS 328:2004**Uniform provisions concerning the approval of pneumatic tyres for motor vehicles and their trailers**

Price	Code:	Gr	7
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34 pages

Identical to UN ECE Regulation 30

Covers new pneumatic tyres designed primarily not only for vehicles in categories M₁, O₁, and O₂

SADC ZWS HS 630:2006**Metrological and technical requirements for non – automatic, non – self or semi – self indicating, ungraduated counter scales subject to legal metrology control**

Price	Code:	Gr	4
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9 pages

Specifies the metrological and technical requirements for non-automatic, non-self or semi-self indicating, ungraduated vibrating counter scales that are subject to metrological control in terms of legal metrology legislation.

SADC ZWS HS 715:2006**Metrological and technical requirements for non automatic, denominated beam scales and balances subject to legal metrology control**

Price	Code:	Gr	5
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12 pages

Specifies the metrological and technical requirements for non-automatic, undenominated beam scales and balances that are subject to metrological control in terms of legal metrology legislation.

SADC ZWS HS 899:2010**High penetration – Resistant laminated safety glass for vehicles**

Price	Code:	Gr.5	
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13 pages

Covers high penetration-resistant laminated safety glass including bullet-resistant glazing materials for use in vehicles.

SADC ZWS HS 911:2003**Frozen lobster and frozen lobster products**

Price	Code:	Gr	8
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7 pages

Covers requirements for handling preparation, processing, packaging, freezing, storage and quality of frozen lobster tails, frozen whole lobster (cooked or raw) or any other frozen lobster product derived from lobsters. Also covers requirements for factories and employees involved in the production.

SADC ZWS HS 912:2003**Frozen shrimps (prawns) langoustines and crabs**

Price	Code:	Gr	7
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30 pages

Covers the requirements for the hygienic harvesting, preparation, processing and shrimps langoustines and crabs whether frozen at sea or on shore and the

requirements for raw materials and the final product including its packaging and storage.

SADC ZW HS 943:2014**Lights for motor vehicles****Part 1: Incandescent lamps**

Price	Code:	Gr.	7
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43 pages

Covers incandescent tungsten filament lamps of the following categories for use in motor vehicles and trailers.

Part 2: Headlights

Price	Code:	Gr.	5
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14 pages

Covers the requirements for the photometric properties of headlights emitting an asymmetrical dipped beam or a main beam, or both, and used in headlight system meeting left-hand rule-of-road requirements.

Part 3: Secondary lights

Price	Code:	Gr.	6
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25 pages

Covers the photometric characteristics of secondary lights for vehicles, (i.e. position lights, stop lights, direction-indicator lights, parking lights, reversing lights, rear registration-plate lights and end-outline marker lights) and of assemblies of these.

SADC ZW HS 944:2014**The determination of performance (at net power) of internal combustion engines****Part 1: Road Vehicle Internal Combustion Engines at Sea Level**

Price	Code:	Gr.	4
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33 pages

Covers a method for testing engines designed for road vehicles. It is applicable to the evaluation of their performances with a view, in particular, to presenting curves of power, torque and specific fuel consumption at full load as a function of engine speed.

Part 2: Compression ignition engines at altitude

Price	Code:	Gr.	4
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9 pages

Covers a method for determining the net power of compression ignition engines at an altitude of 1 400m above sea level.

Part 3: Agricultural vehicle internal combustion engines at sea level

Price	Code:	Gr.	7
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33 pages

Covers a bench method for testing the following categories of engines, which are intended for use in agricultural tractors and machines which may be fitted with a supercharging device using a mechanical supercharger or turbocharger.

SADC ZW HS 945:2014**Braking motor and towed vehicles, designed for low speed or for use off public roads****Part 1: Low speed vehicles**

Price	Code:	Gr.	7
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12 pages

Applies to the braking systems of low speed motor vehicles with a maximum design speed of between 6km/h and 40km/h and motor vehicles for use off public roads.

Part 2: Low speed trailers
 Price Code: Gr. 7
 23 pages

Applies to the braking systems of low speed trailers, including trailers purely for agricultural and forestry purposes, with a maximum design speed of between 6km/h and 40 km/h.

SADC ZW HS 946:2014
Anchorage for Restraining Devices in Motor Vehicles
 Price Code: Gr. 5
 14 pages

Covers requirements for the location, dimensions and strength of anchorages for safety belt assemblies and lap belts for adult occupants of forward-facing seats of vehicles of categories M and N, as defined in SANS 1207.

SADC ZW HS 947:2014
Rear underrun protection devices
 Price Code: Gr. 5
 6 pages

Covers requirements for rear underrun protection devices and their installation on category M,N and O vehicles having a gross vehicle mass (GVM) exceeding 3 500kg and intended for use on public roads except for the vehicles listed in 1.2.

SADC ZW HS 948:2014
The measurement of noise emitted by road vehicles when stationary
 Price Code: Gr.4
 8 pages

Covers the measurement at a readily available site of noise produced by road vehicles when stationary as a check on vehicles in service.

SADC ZW HS 949.4:2014
Retro-Reflective and Fluorescent Warning Signs for Road Vehicles
Part 4. Retro-Reflective Chevron Signs
 Price Code: Gr.5
 13 pages

Covers requirements for retro-reflective chevron signs that incorporate a substrate and that are intended for use on motor vehicles that operating on public roads.

SADC ZW HS 949.5:2014
Retro-Reflective and Fluorescent Warning Signs for Road Vehicles
Part 5. Retro-Reflective Chevron Decals
 Price Code: Gr.5
 14 pages

Covers requirements for retro-reflective warning signs manufactured as protective coated chevron decals having self-adhesive bases of pigmented vinyl or other polymeric material and intended for use on motor vehicles operating on public roads.

SADC ZW HS 979:2014
Uniform provisions concerning the approval of retro-reflecting devices for power driven vehicles and their trailers

Price Code: Gr. 7
 23 pages

This regulation applies to retro-reflecting devices used on road vehicles.

SADC ZW HS 980:2014
Globally harmonized system of classification and labelling of chemicals (GHS)
 Price Code: Gr. 13
 315 pages

Covers the harmonized criteria for the classification of hazardous substances and mixtures including waste for their safe transport use at the workplace or in the home according to their health, environmental and physical hazards. It gives the harmonized communication elements for labeling and safety data sheets.

SADC ZW HS 981:2014
Burnt clay masonry units – Specification
 Price Code: Gr. 6
 22 pages
 Replaces ZWS 221:1996

Covers burnt clay masonry units for use in masonry walling

SADC ZW HS 982:2014
Concrete masonry units – Specification
 Price Code: Gr. 6
 Amended by MD 623:2000, MD 659:2005
 17 pages
 Replaces ZWS 119:1995
 Covers precast solid and precast hollow concrete masonry units for use in walling.

SADC ZW HS 983:2014
Rammed earth structures – Code of practice
 Price Code: Gr. 7
 40 pages

Gives guidance on the design, construction and test methods for rammed earth structures.

WITHDRAWN STANDARDS

NOTE: Standards, which have been withdrawn and replaced by a later edition with the same number, are not listed here

ZWS A1 replaced by ZWS 308,ZWS 311	ZWS C6 replaced by ZWS 129
ZWS A2 replaced by ZWS 309, ZWS 329	ZWS C7 replaced by ZWS 131
ZWS A3 replaced by ZWS 310, ZWS 313	ZWS C8 replaced by ZWS 146
ZWS A4 replaced by ZWS 827	ZWS C10 replaced by ZWS 109
ZWS A5 withdrawn not replaced	ZWS C11 replaced by ZWS 109
ZWS A6 incorporated into ZWS 221	ZWS C12 replaced by ZWS 109
ZWS A7 incorporated into ZWS 221	ZWS C13 replaced by ZWS 277
ZWS A8 replaced by ZWS 319	ZWS C14 replaced by ZWS 833
ZWS A9 replaced by ZWS 119	ZWS C15 replaced by ZWS 834
ZWS A10 replaced by ZWS 119	ZWS C16 replaced by ZWS 241
ZWS A11 replaced by ZWS 110	ZWS C17 replaced by ZWS 835
ZWS A12 replaced by ZWS 467	ZWS C18 replaced by ZWS 836
ZWS A13 replaced by ZWS 467	ZWS C18 replaced by ZWS 834
ZWS A14 withdrawn not replaced	ZWS C19 replaced by ZWS 837
ZWS A15 replaced by ZWS 818	ZWS C20 replaced by ZWS 838
ZWS A16 replaced by ZWS 342	ZWS C21 replaced by ZWS 312
ZWS A17 replaced by ZWS 315	ZWS C22 replaced by ZWS 556
ZWS A18 replaced by ZWS 307	ZWS CA1 replaced by ZWS 334
ZWS A19 replaced by ZWS 815	ZWS CA2 withdrawn not replaced
ZWS A20 replaced by ZWS 105	ZWS CA3 replaced by ZWS 204
ZWS A21 replaced by ZWS 232	ZWS CA5 replaced ZWS 843
ZWS A22 replaced by ZWS ENV 413	ZWS CA6 replaced by ZWS 822
ZWS A23 replaced by ZWS 307	ZWS CA7 replaced by ZWS 314
ZWS A24 replaced by ZWS 830	ZWS CC1 replaced by ZWS 400
ZWS A25 replaced by ZWS 276	ZWS CC2 replaced by ZWS 350,351
ZWS A26 replaced by ZWS 829	ZWS CL1 replaced by ZWS 107
ZWS A27 replaced by ZWS 184	ZWS CZ1 replaced by ZWS 913
ZWS A28 replaced by ZWS 816	ZWS CZ2 replaced by ZWS 341
ZWS A29 replaced by ZWS 814	ZWS D1 replaced by ZWS 189
ZWS A30 replaced by ZWS 321	ZWS D2 withdrawn not replaced
ZWS A31 Parts 1 to 4 withdrawn not replaced	ZWS D3 replaced by ZWS 255
ZWS A31 Part 5 replaced by ZWS 813	ZWS D4 replaced by ZWS 223
ZWS A32 replaced by ZWS 113	ZWS D5 replaced by ZWS 171
ZWS A33 replaced by ZWS 190	ZWS D6 replaced by ZWS 839
ZWS A34 replaced by ZWS 233	ZWS D7 replaced by ZWS 133
ZWS A35 replaced by ZWS 221	ZWS D8 replaced by ZWS 845
ZWS A36 replaced by ZWS 528	ZWS E1 withdrawn not replaced
ZWS A37 replaced by ZWS 196	ZWS H1 replaced by ZWS 820
ZWS A38 replaced by ZWS 196	ZWS H2 replaced by ZWS 857
ZWS A39 replaced by ZWS 193	ZWS H3 replaced by ZWS 860
ZWS A40 replaced by ZWS 538	ZWS H4 replaced by ZWS 242
ZWS A41 replaced by ZWS 119	ZWS H5 replaced by ZWS 850
ZWS A42 replaced by ZWS 812	ZWS H6 replaced by ZWS 883
ZWS A43 replaced by ZWS 185	ZWSK1 replaced by ZWS 542- 550 & 567
ZWS A44 replaced by ZWS 272	ZWS K2 replaced by ZWS 163
ZWS A45 replaced by ZWS 842	ZWS K3 withdrawn not replaced
ZWS A46 replaced by ZWS 307	ZWS K4 replaced by ZWS 443
ZWS A47 replaced by ZWS 519	ZWS K5 withdrawn not replaced
ZWS A48 replaced by ZWS 187	ZWS K6 withdrawn not replaced
ZWS B1 replaced by ZWS 823	ZWS K8 withdrawn not replaced
ZWS B2 replaced by ZWS 824	ZWS K9 replaced by ZWS 355
ZWS B3 replaced by ZWS 825	ZWS K10 replaced by ZWS 356
ZWS B4 replaced by ZWS 679	ZWS K11 withdrawn not replaced
ZWS B5 replaced by ZWS 215	ZWS K12 withdrawn not replaced
ZWS B6 replaced by ZWS 731	ZWS K13 replaced by ZWS 357
ZWS B7 replaced by ZWS 192	ZWS K14 replaced by ZWS 540
ZWS B8 replaced by ZWS 192	ZWS K15 Parts 12-22 replaced by ZWS 401-435
ZWS B9 replaced by ZWS 826	ZWS K16 replaced by ZWS 865
ZWS C1 replaced by ZWS 129	ZWS K17 replaced by ZWS K31
ZWS C2 replaced by ZWS 213	ZWS K19 replaced by ZWS 296
ZWS C3 replaced by ZWS 240	ZWS K20 replaced by ZWS 448
ZWS C4 withdrawn not replaced	ZWS K21 replaced by ZWS 327
ZWS C5 replaced by ZWS 138	ZWS K22 replaced by ZWS 140

ZWS K23 replaced by ZWS 134
 ZWS K24 replaced by ZWS 135
 ZWS K25 replaced by ZWS 136
 ZWS K26 replaced by ZWS 128 now withdrawn
 ZWS K27 replaced by ZWS 620
 ZWS K28 replaced by ZWS 219
 ZWS K29 replaced by ZWS 207
 ZWS K30 replaced by ZWS 864
 ZWS K31 replaced by ZWS 302
 ZWS K32 replaced by ZWS 220
 ZWS K33 withdrawn not replaced
 ZWS L1 replaced by ZWS 247
 ZWS L2 replaced by ZWS 247
 ZWS L3 replaced by ZWS 247
 ZWS L4 replaced by ZWS 247
 ZWS L5 replaced by ZWS 174
 ZWS L6 replaced by ZWS 856
 ZWS L7 withdrawn not replaced
 ZWS L8 replaced by ZWS 855
 ZWS L9 withdrawn not replaced
 ZWS L10 replaced by ZWS 854
 ZWS N1 replaced by ZWS 142
 ZWS N2 replaced by ZWS 518
 ZWS N3 replaced by ZWS 517
 ZWS N4 replaced by ZWS 853
 ZWS N5 replaced by ZWS 284
 ZWS N6 replaced by ZWS 849
 ZWS N8 replaced by ZWS 847
 ZWS N9 replaced by ZWS 848
 ZWS N10 replaced by ZWS 846
 ZWS O1 withdrawn not replaced
 ZWS O2 replaced by ZWS 130
 ZWS O5 replaced by ZWS 114
 ZWS O3 replaced by ZWS 334
 ZWS O4 replaced by ZWS 336
 ZWS O6 replaced by ZWS 257
 ZWS O7 replaced by ZWS 553
 ZWS O8 replaced by ZWS 120
 ZWS O9 withdrawn not replaced
 ZWS O10 replaced by ZWS 333
 ZWS O11 replaced by ZWS 197
 ZWS O12 replaced by ZWS 130
 ZWS O14 replaced by ZWS 130
 ZWS O15 replaced by ZWS 569
 ZWS O16 replaced by ZWS 169
 ZWS CO1 replaced by ZWS 208
 ZWS P1 replaced by ZWS 502&ZWS 786
 ZWS R1 replaced by ZWS 236
 ZWS R2 replaced by ZWS 886
 ZWS S1 replaced by ZWS 265
 ZWS S2 replaced by ZWS 888
 ZWS S3 replaced by ZWS 887
 ZWS S4 replaced by ZWS 746
 ZWS S5 partially replaced by COMESA ZWS HS 638,644,646
 ZWS S5 replaced by ZWS 1073
 ZWS S6 replaced by ZWS 1075
 ZWS S7 replaced by ZWS 747
 ZWS S8 replaced by ZWS S25
 ZWS S9 replaced by ZWS 348
 ZWS S10 replaced by ZWS S25
 ZWS S11 replaced by ZWS S25
 ZWS S12 replaced by ZWS S25
 ZWS S13 replaced by ZWS S25
 ZWS S15 replaced by ZWS 905
 ZWS S16 replaced by ZWS 1088
 ZWS S17 replaced by ZWS 974
 ZWS S20 replaced by ZWS 126
 ZWS S22 replaced by ZWS 748
 ZWS S21 replaced by ZWS 352
 ZWS S24 replaced by ZWS 1069
 ZWS S26 replaced by ZWS 795
 ZWS S27 replaced by ZWS 1049
 ZWS S28 replaced by ZWS 851
 ZWS S23 withdrawn not replaced
 ZWS S30 replaced by ZWS 1070
 ZWS S29 replaced by ZWS 394
 ZWS S31 replaced by ZWS 763
 ZWS S32 replaced by ZWS 151
 ZWS S34 replaced by ZWS 532
 ZWS S35 replaced by ZWS 1089
 ZWS S36 replaced by ZWS 841
 ZWS S39 replaced by ARS ZW HS 1224, ARS ZW HS 1226
 ZWS S40 replaced by ZWS 1090
 ZWS S41 replaced by ZWS 1074
 ZWS X1 replaced by ZWS 361
 ZWS X2 replaced by ZWS 919
 ZWS X5 withdrawn not replaced
 ZWS Z3 replaced by ZWS 1114
 ZWS Z5 replaced by ZWS 529
 ZWS Z7 replaced by ZWS 186
 ZWS Z8 replaced by ZWS 202
 ZWS Z9 withdrawn not replaced
 ZWS Z10 replaced by ARS ZW HS 1558
 ZWS Z11 replaced by ZWS 1055
 ZWS Z12 replaced by ZWS 153
 ZWS Z13 replaced by ZWS 303
 ZWS Z14 Part 1 replaced by ZWS 229
 ZWS Z14 Part 2 replaced by ZWS 159
 ZWS Z14 Part 3 replaced by ZWS 229
 ZWS Z14 Part 4 replaced by ZWS 159
 ZWS Z14 Part 6 replaced by ZWS 217
 ZWS Z15 replaced by ZWS 1054
 ZWS Z16 replaced by ZWS 700
 ZWS Z18 replaced by ZWS 1100
 ZWS Z19 replaced by ARS ZW HS 1555 and 1557
 ZWS Z20 replaced by ZWS 1101
 ZWS Z21 replaced by ZWS 558
 ZWS Z22 replaced by ZWS 235
 ZWS Z23 replaced by ZWS 1098
 ZWS Z24 replaced by ZWS 154
 ZWS CZ1 replaced by ZWS 913.1
 ZWS 108 replaced by ZWS 109
 ZWS 119 replaced by SADC ZW HS 982
 ZWS 124 withdrawn not replaced
 ZWS 128 withdrawn not replaced
 ZWS 129 replaced by ZWS IEC 60335-1
 ZWS 131 replaced by ZWS IEC 60335-2.6
 ZWS 132 replaced by ZWS IEC 60335-2:30
 ZWS 144 replaced by ZWS 467
 ZWS 145 replaced by ZWS 467
 ZWS 146 replaced by ZWS IEC 335
 ZWS 151 replaced by COMESA ZWS HS 349
 ZWS 155 withdrawn not replaced
 ZWS 161 replaced by ZWS 336
 ZWS 163 withdrawn not replaced
 ZWS 177 replaced by ZWS ISO 4427.1
 ZWS 180 replaced by SADC ZWS HS 180:2008
 ZWS 183 replaced ZWS 256
 ZWS 200 replaced by ZWS 336
 ZWS 211 replaced by ZWS 336
 ZWS 221 replaced by SADC ZW HS 981
 ZWS 230 replaced by ZWS 344
 ZWS 245 replaced by ZWS 1077
 ZWS 256 replaced by ZWS 1045
 ZWS 257 replaced by ZWS 257 Part 4
 ZWS 269 replaced by ZWS 1045
 ZWS 275 replaced by ZWS 1006;2016/IS 2189:2008
 ZWS 299 replaced by ZWS IEC 947 Part 2
 ZWS 300 replaced by ZWS ISO 9000 series
 ZWS 301 replaced by ZWS ISO 8402

ZWS 306 replaced by ZWS 119
ZWS 307 replaced by ZWS EN 196 & ZWS EN 197
ZWS 312 replaced by ZWS IEC 60335.2-3
ZWS 334 replaced by replaced by ZWS 906
ZWS 335 replaced by ZWS 257 Parts 1 and 2
ZWS 336 replaced by ZWS 257 Part 3
ZWS 388 replaced by ARS ZW HS 461
ZWS 389 replaced by COMESA ZWS HS 364
ZWS 393 replaced by COMESA ZWS HS 404
ZWS 648 replaced by ZWS ISO 1461
ZWS 724 replaced by SADC ZW HS 983
ZWS 745 replaced by ZWS ISO 10002
ZWS 747 partially replaced by COMESA ZWS HS 501,516,552,565
ZWS 751 replaced by ARS ZW HS 1363
ZWS 752 replaced by ZWS 963
ZWS 753 replaced by ARS ZW HS 1362
ZWS 757 Part 1 replaced by ZWS ISO IEC17799
ZWS 757 Part 2 replaced by ZWS ISO/ IEC 27001:2022
ZWS 760 replaced by ARSO ZW HS 466:2017
ZWS 799 replaced by COMESA ZWS HS 353
ZWS 801 replaced by ZWSOHSAS18001
ZWS 807 replaced by ZWSOHSAS 18002
ZWS 859 replaced by ZWS IEC 60335-2:76
ZWS 879 replaced by ZWS ISO 31000
ZWS 885 replaced by ARS ZW HS 1199
ZWS IEC 1089 replaced by ZWS Iec 61089
ZWS ISO 5541 replaced by ZWS ISO 4831
ZWS ISO 8009 parts 1-10 replaced by ZWS ISO 8009:2005

ZWS ISO 8401 replaced by ZWS ISO 9000
ZWS ISO 8782 part 1- 8 not replaced
ZWS ISO 9002 replaced by ZWS ISO 9001
ZWS ISO 8187 replaced by ZWS IEC 62552
ZWS ISO 5155 replaced by ZWS IEC 62552
ZWS ISO 7371 replaced by ZWS IEC 62552
ZWS ISO 9003 replaced by ZWS ISO 9001
ZWS ISO 9004.1 replaced by ZWS ISO 9004
ZWS ISO 10011 replaced by ZWS ISO 19011
ZWS ISO 14010 replaced by ZWS ISO 19011
ZWS ISO 14011 replaced by ZWS ISO 19011
ZWS ISO 14012 replaced by ZWS ISO 19011
ZWS ISO 14042 replaced by ZWS ISO 14044
ZWS ISO 14043 replaced by ZWS ISO 14044
ZWS ISO/IEC TS 17021:2011 replaced by ZWS ISO 17021.1
ZWS 1026 replaces ZWS 213
ZWS 1032 Part 1 replaces ZWS 713 Part 1
ZWS 1032 Part 2 replaces ZWS 713 Part 2
ZWS 1025 Replaces ZWS 278
ZWS OHSAS 18001 replaced by ZWS ISO 45001
ZWS ARS 462 Replaces COMESA ZWS HS 402
ZWS ARS 461 Replaces COMESA ZWS HS 409
ZWS ARS 464 Replaces COMESA ZWS HS 404
ZWS ARS 468 Replaces COMESA ZWS HS 716
SADC ZWS HT Replaces COMESA ZW HS 349
ZWS S37 Replaced by ZWS 1094
ZWS S38 Replaced by ZWS 1093



CLASSIFIED SECTION

01 Generalities, terminology

Standardization documentation

Environment, Health protection, Safety (Vocabulary)

01.040.07

Natural and applied sciences (Vocabularies)

ZWS EN 1659:2023

In vitro diagnostic systems - culture media for microbiology – Terms and definitions

01.040.13 Environment, Health protection, Safety (Vocabulary)

ZWS ISO 4880

Burning behavior of textiles and textile products - Vocabulary

01.040.77 Metallurgy (Vocabulary)

COMESA ZWS HS ISO 16020: 2006

Steel for reinforcement and prestressing of concrete - Vocabulary

01.120 Standardization, General rules

ZWS 100:2010

Code of practice for standard for standards

ZWS Directive: Part 2:2022

ZWS Directive

Part 2: Drafting and presentation of Zimbabwe national standards

01.140 Information sciences. Publishing

ZWS 106: 1974

Standard export documents

ZWS 757: 2005

Information security management

ZWS ISO 15489:2016

Information and documentation records management
Part 1: Concepts

ZWS ISO IEC 27002:2007

Information security management

03 Services. Company organization, Management and Quality. Administration. Transport. Sociology

03.020 Sociology. Demography

ZWS ISO 20252:2019

Market, opinion and social research, including insights and data analytics — Vocabulary and service requirements

03.080 Service

03.080.10 Industrial services

ZWS 320: 2007

Cleaning services Industry – Cleaning performance for commercial, residential and health premises.

03.080.30 Services for consumers

ZWS 904: 2008

Guidelines for the design control measured for street vended foods in Zimbabwe.

ZWS ISO 10002:2004

Quality management - Customer satisfaction - Guidelines for complaints handling in organizations

03.080.99 Other services

ZWS ISO/IEC 20000

Information technology – Service Management – Service Management System Requirements

ZWS ISO 13810:2015

Tourism services – Industrial Tourism – Service provision

ZWS ISO 14785:2014

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03.330.20**ZWS ISO 39001:2012**

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11.040.20 Transfusion, infusion and injection equipment

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11.100.01 Laboratory medicine in general**ZWS ISO 22870:2006**

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13.030.30 Special waste

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13.040.50 Transport exhaust emissions**ZWS ISO 789:1999**

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Motorcycles and mopeds - Pollution tests - Chassis dynamometer bench

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Road vehicles - Smoke measurement of compression - Ignition (diesel) engines - Survey of short in-service tests

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Natural mineral water

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13.060.20 Drinking water

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13.060.30 Sewage water

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Waste water

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Waste water - Determination of dissolved oxygen

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Waste water - Determination of chemical oxygen demand

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Waste water - Determination of soap, oil or grease

ZWS 582:1997

Waste water - Determination of free and saline ammonia

ZWS 583:1997

Waste water - Determination of arsenic content - Gutzeit method

ZWS 584:1997

Waste water - Determination of barium content

ZWS 585:1997

Waste water - Determination of boron content - UV spectrometric method

ZWS 586:1997

Waste water - Determination of cadmium content - Dithizone method

ZWS 587:1997

Waste water - Determination of chlorides content

ZWS 589:1997

Waste water - Determination of total chromium content (as Cr)

ZWS 590:1997

Waste water - Determination of copper content - UV spectrometric method after complexation

ZWS 591:1997

Waste water - Determination of cyanides content

ZWS 593:1997

Waste water - Determination of non-ionic surfactants using Dragendorff reagent

ZWS 594:1997

Waste water - Determination of fluoride content

ZWS 595:1997

Waste water - Determination of lead content - UV spectrometric method using dithizone

ZWS 596:1997

Water Quality - Determination of manganese content - Persulfate colorimetric method

ZWS 597:1997

Waste water - Determination of mercury content

ZWS 598:1997

Waste water - Determination of nickel content - UV spectrometric method after complexation with dimethylglyoxime

ZWS 599:1997

Waste water - Determination of total nitrogen content - Kjeldahl distillation using selenium catalyst

ZWS 600:1997

Waste water - Determination of phenolic compounds content (as phenol) – UV Spectrometric analysis

ZWS 601:1997

Waste water - Determination of sulfides content - Titrimetric method

ZWS 602:1997

Waste water - Determination of zinc content - UV spectrometric method

ZWS 603:1997

Waste water - Determination of total phosphates content (as P)

ZWS 627:1997

Waste water - Determination of sodium content - Flame photometric method

ZWS 699:1997

Waste water - Determination of residual organophosphorus pesticides - Gas chromatographic method

13.060.50 Examination of water for chemical substances

ZWS 459:1993

Measurement of water pH value

ZWS 479:1995

Water quality - Determination of chloride - Silver nitrate titration with chromate indicator (MOHR's method)

ZWS 480:1995

Water quality - Determination of sulfate - Gravimetric method using barium chloride

ZWS 481: 995

Water quality - Determination of nitrate - Spectrometric method using sulfosalicylic acid

ZWS 482:1995

Water quality - Determination of nitrite - Molecular absorption spectrometric method

ZWS 483:1995

Water quality - Determination of ammonium - Distillation and titration method

ZWS 484:1995

Water quality - Determination of calcium content – EDTA - titrimetric method

ZWS 485:1995

Water quality - Determination of the sum of calcium and magnesium - EDTA titrimetric method

ZWS 486:1995

Water quality - Determination of iron - Spectrometric method using 1, 10-phenanthroline

ZWS 487:1995

Water quality - Determination of manganese - Formaldoxime spectrometric method

ZWS 488:1995

Water quality - Determination of cobalt, nickel, copper zinc, cadmium and lead - Flame atomic absorption spectrometric methods

ZWS 489:1996

Water quality - Determination of phosphorus - Ammonium molybdate spectrometric method

ZWS 490:1995

Water quality - Determination of fluoride - Electrochemical probe method for potable and lightly polluted water

ZWS 491:1996

Water quality - Guidelines for the determination of total organic carbon (TOC)

ZWS 492:1995

Water quality - Determination of total arsenic - Silver diethyl-dithiocarbamate spectrophotometric method

ZWS 493:1996

Water quality - Determination of cyanide as cyanogen chloride

ZWS 494:1996

Water quality - Determination of total chromium - Atomic absorption spectrometric methods

ZWS 495:1995

Water quality - Determination of chemical oxygen demand

ZWS 496: 1995

Water quality - Determination of biochemical oxygen demand after 5 days (BOD₅) – Dilution and seeding method

ZWS 497: 1995

Water quality - Determination of total mercury by flameless atomic absorption spectrometric method after digestion with bromine

ZWS 578:1997

Water quality - Determination of sulfate content - Turbidimetric method

ZWS 580:1997

Water quality - Determination of sodium and potassium - Flame emission spectrometry

ZWS 588:1998

Water quality - Determination of residual chlorine

ZWS 592:1997

Water quality - Determination of anionic surfactants by measurement of methylene blue index (MBAS)

ZWS 593:1997

Water quality - Determination of non-ionic surfactants using Dragendorff reagent

ZWS 596:1997

Water quality - Determination of manganese content - Persulfate colorimetric method

ZWS 602:1997

Water quality - Determination of zinc content - UV spectrometric method

ZWS 604:1997

Water quality - Determination of total chromium (VI)

ZWS 605:1997

Water quality - Determination of selenium - Atomic absorption spectrometric method (hydride technique)

ZWS 606: 1997

Water quality - Determination of alkalinity - Titrimetric method

ZWS 626:1997

Water quality - determination of iron, manganese, potassium and sodium content – Direct air-acetylene flame method

ZWS 628:1997

Water quality - Determination of potassium content - Flame photometric method

ZWS 642:1997

Water quality - Determination of calcium content - Direct flame atomic absorption

ZWS 643:1998

Water quality - Determination of electrical conductivity

ZWS 681:2001

Water quality - Determination of atrazine and other nitrogen and phosphorus containing pesticides in water by gas chromatography with nitrogen-phosphorus detector

ZWS 682:1999

Water quality - Determination of organochlorine pesticides - Liquid - liquid extraction gas chromatographic method

ZWS 683:2000

Water quality - Determination of N-Methylcarbamoyloximes and N-Methylcarbamates - Direct aqueous injection HPLC with post column derivatization

ZWS 711:2000

Water quality - Determination of Chlorinated phenoxy acids and other acidic herbicides by gas chromatography

ZWS 722:1998

Water quality - Determination of sodium by atomic absorption spectrometry

ZWS 723:1998

Water quality - Determination of phenol index - 4 aminoantipyrine spectrometric methods after distillation

ZWS ISO 5815.2:2003

Water quality – Determination of biochemical oxygen demand after n days (BOD_n): Method for undiluted samples\

13.060.60 Examination of physical properties of water

ZWS 477:1996

Water quality - Examination and determination of colour

ZWS 478:1995

Water quality - Determination of turbidity

ZWS 641:1997

Water quality - Determination of total hardness of water ethylene diamine tetra-acetic (EDTA) method

13.060.70 Examination of biological properties of water

ZWS 577:1997

Water quality - Determination of total dissolved solids - Conductivity methods

ZWS 629:1997

Water quality - Detection of and enumeration of coliform organisms thermos tolerant coliform organisms and presumptive *Escherichia coli*

ZWS 880:2010

Water quality – Detection and enumeration of vibro cholerae

13.100 Occupational safety

ZWS 202:1977

Safety colours and safety signs

ZWS 645:2002

Safety on construction sites

ZWS ISO 8086:2005

Dairy plant - Hygiene conditions

ZWS ISO 37301:2021

Compliance management systems — Requirements with guidance for use

ZWS ISO 45001:2018

Occupational health and safety management systems – requirements with guidance for use

ZWS ISO 45003:2021

Occupational health and safety management – Psychological health and safety at work – Guidelines for managing psychosocial risks

ZWS ISO PAS 45005:2020

Occupational health and safety management – General guidelines for safe working during the COVID 19 pandemic

13.120 Domestic safety

ZWS 101:1976

Safety factors and smoke emission of domestic stoves burning solid fuels at a rate not exceeding 5kg per hour

ZWS IEC 60335:2013

Household and similar electrical appliances – safety

ZWS IEC 62257:2013

Recommendations for small renewable energy and hybrid systems for rural electrification

ZWS IEC TS 62257 Part 9-5:2018

Recommendations for renewable energy and hybrid system for rural electrification Part 9-5: Integrated systems – Laboratory evaluation of standalone renewable energy products for rural electrification

ZWS IEC 62257 Part 9-8:2020

Integrated systems – Requirements for standalone renewable energy products with power rating less than or equal to 350W.

13.220.10 Fire fighting

ZWS 176:2000

Fire doors

ZWS 225:2018

Portable fire extinguishers

ZWS 251:1980

Code of practice for fire extinguishing installations and equipment on premises – Sprinkler systems

ZWS 813:1974

Portable fire extinguishers - Hand operated fire extinguishers for aircraft and other purposes

ZWS 829:1973

Rubber reel hose for fire fighting purposes

ZWS 916:2011

Disposable portable condensed aerosol fire extinguishers

ZWS 972:2019

Selection, installation and Maintenance of First-Aid Fire Extinguishers

13.220.40 Ignitability and burning behavior of materials and products

ZWS ISO 6940:2011

Textile fabrics – Burning behavior – Determination of ease of ignition of vertically oriented specimens

ZWS ISO 6941:2011

Textile fabrics – Burning behavior – Measurement of flame spread properties of vertically oriented specimens

13.260 Protection against electric shock. Live working

COMESA ZWS HS IEC 61140:2013

Protection against electric shock – Common aspects for installation and equipment

13.280 Radiation protection

ZWS ISO 361:361

Basic Ionizing radiation symbol

ZWS 701:2000

Radiological protection in dentistry

ZWS 702:2000

The use of radioactive materials in medical practice

ZWS 703:2000

Radiation protection in veterinary radiology

ZWS 705:2000

The safe use of x-rays in medical diagnosis

13.030 Waste

13.030.30 Special waste

ZWS 704:2000

Radioactive waste management

13.300 Protection against dangerous goods

ZWS 341:1972

The storage, transport and use of small quantities of flammable liquids

13.310 Protection against crime

ZWS 468:1995

Burglar resisting safes

ZWS 535:2021

Manned security services

ZWS 1009:2016

Vehicle security – whole of vehicle marking – Datadot systems.

ZWS 1057:2022

Manned security services – cash and valuables in transit services (collection and delivery)

13.320 Alarm and warning systems

ZWS 271:1993

Intruder alarm systems in buildings

13.340 Protective equipment

13.340.10 Protective clothing

ZWS 125:1974

Protective apparel for use against pesticides

ZWS 143:1975

Life-jackets

ZWS 231:2002

Boiler suits

ZWS 339:1991

Industrial leather hand protectors and leather protective clothing

ZWS ISO 20471:2013/ Amd 1:2016

High visibility clothing – test methods and requirements

13.340.20 Head protective equipment

ZWS 239:1998

Protective helmets for equestrian activities

ZWS 303:1993

Safety helmets for industrial use and for firemen

ZWS 395:1993

Hearing protectors - Ear-plugs

ZWS 442:1993

Hearing protectors – Ear-muffs

ZWS 564:1998

Protective helmets for pedal cyclists

ZWS 700:1998

Protective helmets for motor cyclists

13.340.30 Respiratory protective devices

ZWS 1058:2020

General washable/reusable barrier masks.

ZWS EN 14683:2019

Medical face masks- requirements and testing methods

ZWS 608:1998

Respiratory protective devices for self-rescue - Self-contained closed circuit breathing apparatus - Chemical oxygen (KO₂) escape apparatus - Requirements, testing and marking

ZWS 653:2000

Respiratory protective devices - Definitions

ZWS 654:1998

Respiratory protective devices - Classification

ZWS 655:1998

Respiratory protective devices - Nomenclature of components

ZWS 656:1998

Respiratory protective devices - List of terms

ZWS 657:1998

Respiratory protective devices - Full face masks for special use

ZWS 659:1998

Respiratory protective devices - Compressed air line breathing apparatus for use with a full face mask, half mask or a mouth-piece assembly - Requirements, testing and marking

ZWS 660:1998

Respiratory protective devices - Gas filters and combined filters

ZWS 661:1998

Respiratory protective devices - Particle filters - Requirements, testing and marking

ZWS 662:1998

Respiratory protective devices - Gas cylinder valves - Thread connection for insert connector

ZWS 663:1998

Respiratory protective devices - Powered particle filtering devices incorporating helmets or hoods

ZWS 664:1998

Respiratory protective devices - Power assisted particle filtering devices incorporating full face mask, half masks or quarter masks - Requirements, testing and marking

ZWS 665 – 1998

Respiratory protective devices - Threads for face pieces - Thread Connection M 45 x 3

ZWS 666:1998

Respiratory protective devices - Powered fresh air hose breathing apparatus incorporating a hood - Requirements, testing and marking

ZWS 667:1998

Respiratory protective devices - Compressed air line breathing apparatus incorporating a hood – Requirements, testing and marking

ZWS 668:1998

Respiratory protective devices - Compressed air line or powered fresh air hose breathing apparatus incorporating a hood for use in abrasive blasting operations - Requirements, testing and marking

ZWS 669:2000

Respiratory protective devices - AX gas filters and combined filters for use against low boiling organic compounds - Requirements, testing and marking

ZWS 670:1998

Respiratory protective devices - SX gas filters and combined filters for use against specific named compounds - Requirements, testing and marking

ZWS 672: 1998

Respiratory protective devices for escape - Self-contained open-circuit compressed air breathing apparatus with full face mask or mouthpiece assembly – Requirements, testing and testing

13.340.40 Protective gloves

ZWS Z17:1971
Industrial gloves

13.340.50 Protective footwear

ZWS Z4:1961
Miners boots (Derby type with premoulded stuck-on sole and heel)

ZWS ISO 20344:2021
Personal protective equipment — Test methods for footwear

ZWS ISO 2345:2011
Personal protective Equipment – Safety Footwear

ZWS 280:1985
Lined polyvinyl chloride boots
ZWS 281:1985
Lined rubber gumboots

ZWS ISO 8782:2002
Safety protective and occupational footwear for professional use

13.340.99 Other protective equipment

SADC ZWS HS 180:2008
Industrial restraint belts

17 Metrology and measurement physical phenomena

17.060 Measurement of volume, mass, density and viscosity

ZWS 432:1993
Relative density of liquids

ZWS ISO 1042:1998
Laboratory glassware – one-mark volumetric flasks

17.100 Measurement of force, weight and pressure

SADC ZWS HS 630:2006
Metrological and technical requirements of non-automatic, non-self or semi self-indicating, ungraduated counter scales subject to legal metrology control

SADC ZWS HS 715:2006
Metrological and technical requirements for non-automatic, undenominated beam scales and balances subject to legal metrology control

17.140.01 Acoustic measurements and noise abatement in general

ZWS ISO 3740:2000
Acoustic – Determination of sound power levels of noise sources – Guidelines for the use of basic standards

ZWS ISO 3747:2010
Acoustic – Determination of sound power and sound energy levels of noise sources using sound pressure – Engineering/survey methods for use insitu in a reverberant environment

19 Testing

19.060 Mechanical testing

19.100 Non-destructive testing

ZWS 671:1999
Non-destructive testing of winding equipment

ZWS 884:2003
Method of magnetic particle flaw detection

ZWS ISO 3057:1998
Non-destructive testing – Metallographic replica techniques of surface examination

ZWS ISO 3058:1998
Non-destructive testing – Aids to visual inspection – Selection of low-power magnifiers

ZWS ISO 3059:2012
Non-destructive testing – penetrant testing and magnetic particle testing – viewing conditions

ZWS ISO 3452.1:2013
Non destructive testing – penetrant testing – General principles

ZWS ISO 3452.2:2013
Non - destructive testing – penetrant testing – Testing of penetrant materials

ZWS ISO 3452.3:2013
Non- destructive testing – penetrant testing – Reference test blocks

ZWS ISO 3452.4:1998
Non- destructive testing - penetrant testing – Equipment

ZWS ISO 3452.5:2008
Non- destructive testing – penetrant testing – Penetrant testing at temperatures lower than 10°C

ZWS ISO 3452.6:2008
Non- destructive testing – penetrant testing – Penetrant testing at temperatures higher than 50°C

ZWS ISO 5579:2013
Non-Destructive testing – radiographic testing of metallic materials using film and X – or gamma rays – Basic Rules

ZWS ISO 9712:2013
Non- destructive testing – Qualification and certification of NDT personnel

ZWS ISO 9934.1:2016
Non- destructive testing – magnetic particle testing – General principles

ZWS ISO 9934.2:2002
Non -destructive testing – magnetic particle testing – Detection media

ZWS ISO 9934.3:2013
Non -destructive testing – magnetic particle testing – Equipment

ZWS ISO 12706:2009
Non -destructive testing – penetrant testing - Vocabulary

ZWS ISO/TR 25108:2006
Non-destructive testing – Guidelines for NDT personnel training organizations

21 Mechanical systems and components for general use

21.040 Screw threads

ZWS 882:2005

Pipe threads for tubes and fittings where pressure tight joints are made on the threads

21.060 Fasteners

21.060.10 Bolts, Screws, Studs

ZWS O10:1968

Wood screws

ZWS 116:1974

Self-tapping screws and metallic drive screws

ZWS 474:1996

Mechanical properties of fasteners – Bolts, screws and studs

21.060.50 Pins, Nails

ZWS 285:1986

Mild steel wire nails

21.220 Flexible drives and transmissions

ZWS 227:1978

Endless V-belt drives sections Y, Z, A, C and D

ZWS 228:1978

Endless wedge belt drives of SPZ, SPA, SPB and SPC sections

23 Fluid systems and components for general use

23.020 Fluid storage devices

23.020.10 Stationary containers and tanks

ZWS 783:2005

Carbon steel welded horizontal cylindrical storage tanks

23.020.30 Pressure vessels/gas cylinders

ZWS 199:1984

Non-refillable metallic containers up to 1.4 litres capacity and 85mm diameter for liquefied or compressed non-flammable gases

ZWS 215:1993

Design and manufacture of welded steel cylinders for low pressure service

ZWS 293:1986

Fusion welded steel air receivers

ZWS 529:1973

Identification colours for gas cylinders

23.040 Pipelines components and pipelines

ZWS 186:1976

Identification of pipelines

23.040.10 Iron and steel pipes

ZWS 102:1993

Steel pipes

ZWS 243:1979

Cast iron pipes and pipe fittings for use above ground in drainage installations

23.040.20 Plastics pipes

ZWS 156:1975

Plasticized polyvinyl chloride (UPVC) components for rainwater systems

ZWS 177:1976

Black polyethylene pipes for cold water services

ZWS 219:1993

Unplasticized polyvinyl chloride (UPVC) sewer and drain pipes and pipe fittings

ZWS 220:1993

Unplasticized polyvinyl chloride (UPVC) soil, waste and vent pipes and fittings

ZWS 327:2001/2002

Unplasticized polyvinyl chloride pressure pipes

ZWS 900:2004

Structured wall pipes and fittings of unplasticized poly (vinyl chloride) (PVC -U) for buried drainage and sewage systems

ZWS ISO 1167: Part 1:2006

Thermoplastics pipes, fittings, and assemblies for the conveyance of fluids – Determination of the resistance to internal pressure
Part 1: General method

ZWS ISO 1167: Part 2:2006

Thermoplastics pipes, fittings, and assemblies for the conveyance of fluids – Determination of the resistance to internal pressure
Part 2: Preparation of pipe test pieces

ZWS ISO 1167: Part 3:2007

Thermoplastics pipes, fittings, and assemblies for the conveyance of fluids – Determination of the resistance to internal pressure
Part 3: Preparation of components

ZWS ISO 1167: Part 4:2007

Thermoplastics pipes, fittings, and assemblies for the conveyance of fluids – Determination of the resistance to internal pressure
Part 4: Preparation of assemblies

ZWS ISO 2505:2005

Thermoplastics pipes — Longitudinal reversion — Test method and parameters

ZWS ISO 3127:1994

Thermoplastics pipes – Determination of resistance to external blows – Round-the-clock method

ZWS ISO 3219:1993

Plastics – Polymers/resins in the liquid state or as emulsions or dispersions – Determination of viscosity using a rotational viscometer with defined shear rate

ZWS ISO 4427:2007

Polyethylene (PE) pipes for water supply specification

ZWS ISO 9852:2007

Unplasticized poly(vinyl chloride) (PVC-U) pipes — Dichloromethane resistance at specified temperature (DCMT) — Test method

23.040.40 Metal fittings**ZWS141: 1978**

Cast iron fittings for asbestos-cement pressure pipes

ZWS 325:1990

Capillary and compression fittings for copper tubes

ZWS 326:1990

Copper tubes

ZWS 537:1997

Malleable cast iron fittings threaded to ISO 7: Part 1

23.040.50 Pipes/fittings of other materials**ZWS 1076:1964**

Concrete pipe laying design

ZWS 113:2000

Fibre-cement pressure pipes and joints

ZWS 195:1976

Asbestos-cement pipes for sewerage and drainage

ZWS 315:1995

Concrete pipes (non-pressure)

ZWS 342:1977

Earthenware drain and sewer pipes and fittings

23.040.70 Hoses and hose reel assemblies**ZWS 814:1968**

Concrete pipe fittings including manholes and inspection covers

ZWS 816:1968

Precast reinforced box culverts

23.040.60 Flanges /couplings and joints**ZWS 196:1976**

Materials for elastomeric joint rings for pipework and pipelines

ZWS 238:1978

Hose clamps (worm drive type) for general purpose use

ZWS 1045:2019

Installation, commissioning and maintenance of fire hose reels

23.040.99 Other pipeline components**ZWS 237:1978**

Testing water boreholes

23.060 Valves**ZWS 222:1984**

Draw-off taps and above-ground stop valves for water services (screw-down pattern)

23.060.30 Gate valves**ZWS 148:1993**

Cast steel gate valves

ZWS 149:1993

Cast iron gate valves for water works

ZWS 289:1986

Cast iron wedge and double disk gate valves for general purposes

ZWS 148:1994

Cast steel gate valves

23.080 Pumps**ZWS 881:2013**

B – Type bush pump

25 Manufacturing engineering**25.080 Machine tools****25.080.60 Sawing machines****ZWS 731:1992**

Woodcutting band saw blades

25.100 Cutting tools**25.100.30 Drills****ZWS 279:1995**

Twist drills

25.100.40 Saws**ZWS 139:1975**

Meat-cutting band saw blades

25.100.60 Files**ZWS 824:2012**

Files and rasps – Rasps and engineer's file

25.100.70 Abrasives**ZWS 248:1983**

Abrasive papers and cloths

25.140 Hand-held tools**25.140.30 Hand operated tools****ZWS 168:1975**

Screwdrivers

ZWS 282:1993

Open-end, ring and combination spanners

25.160 Welding, brazing and soldering**25.160.20 Welding consumables****ZWS 192:1976**

Covered electrodes for the manual metal-arc welding of carbon and carbon manganese steels

ZWS 270:1992

Filler metals for brazing

25.160.30 Welding equipment

ZWS 347:1991

Handheld blowpipes, mixers and nozzles, using fuel gas and oxygen, for gas welding, cutting and related processes

25.160.40 Welded joints and welds

ZWS EN 1435:2002

Non-destructive examination of welds – Radiographic examination of welded joints

25.160.50 Brazing and soldering

ZWS 860:1967

Soft solders

ZWS 242:1979

Resin cored solders (metric units)

25.220.40 Metallic coatings

ZWS ISO 1461:1998

Hot-dip galvanized coatings on iron and steel articles

27 Energy and heat transfer engineering

ZWS ISO 50001:2018

Energy management systems – Requirements with guidance for use

ZWS ISO 50002:2014

Energy audits – Requirements with guidance for use

ZWS ISO 50003:2014

Energy management systems – Requirements for bodies providing audit and certification of energy management systems

ZWS ISO 50004:2020

Energy Management System- Guidance for the Implementation Maintenance and Improvement of and 50001 Energy management System

ZWS ISO 50006:2014

Energy management systems – Measuring energy performance using energy baselines

ZWS ISO/TS 50008:2018

Energy management and energy savings – Building energy data management for energy performance – Guidance for a systemic data exchange approach

ZWS ISO 50015:2014

Energy management systems – Measurement and verification of energy performance of organizations

ZWS ISO 50021:2019

Energy management and energy savings — General guidelines for selecting energy savings evaluators

ZWS ISO/TS 50044:2019

Energy saving projects (EnSPs) guidelines for economic and financial evaluation.

ZWS ISO 50045:2019

Technical guidelines for the evaluation of energy savings of thermal power plants

ZWS ISO 50046:2019

General methods for predicting energy savings

ZWS ISO 50049:2020

Calculation methods for energy efficiency and energy consumption variations at country, region and city levels: Relation to energy savings and other factors

27.020 Internal combustion engines

COMESA ZWS HS ISO 8528:2013

Reciprocating internal combustion engine driven alternating current generating sets

27.060 Burners and boilers

ZWS 182:1976

Steel boiler and superheater tubes

ZWS 649:200

The inspection and repair of boilers

27.160 Solar energy engineering

ZWS 278:1984

Collectors for solar water heaters

ZWS 322:1993

Photovoltaic modules

ZWS 522:2017

Solar batteries

ZWS 523:1999

Fluorescent lights for use in photovoltaic systems

ZWS 524:1998

Charge controllers for photovoltaic systems using lead-acid batteries

ZWS 536:1998

Design, sizing and installation of battery based photovoltaic systems

ZWS 713:2007

Domestic solar heaters

ZWS 744:2003

Code of practice for the installation of solar water heaters

ZWS 1017:2017

Domestic solar water heaters – mechanical qualification test methods

ZWS 1025:2017

Domestic storage solar heating systems

ZWS 1026:2017

Fixed electric storage water heaters

ZWS 1029:2017

Thermostats for electric storage water heaters

ZWS 1031:2017

The installation, maintenance replacement and repair of fixed electric storage water heating systems

ZWS 1032-1:2017

Thermal performance test using outdoor method

ZWS 1032-2:2017

Thermal performance test using indoor method

ZWS 1033:2017

Energy efficiency of electrical and electronic apparatus

ZWS ISO 9459:1999
Solar heating – Domestic water heating systems

ZWS ISO 6509-1:2014
Corrosion of Metals and Alloys

27.200 Refrigeration Technology

ZWS 1012:2019
Requirements for certification of refrigeration and air conditioning practitioners.

29 Electrical engineering

29.020 Electrical engineering in general

ZWS 316:1997
Graphical symbols for electrical diagrams

ZWS 400: 2006
Electrical wiring of premises (ZWS wiring rules)

COMESA ZW HS IEC 60038:2013
Standard voltages

COMESA ZWS HS 60059:2013
Standard current ratings

29.035 Insulating materials

ZWS 138:1975
Bitumen-based filling compounds for electrical purposes

29.040.20 Insulating gases

COMESA ZWS HS IEC 62219:2009
Overhead electrical conductors – Formed wire, concentric lay, stranded conductors

29.060 Electrical wires and cables

29.060.10 Wires

ZWS 834:1872
Enameled copper conductors (polyvinylacetal base with high mechanical properties)

ZWS 109:1995
Winding wires

ZWS 526:1996
Copper for electrical purposes

ZWS 834:1972
Enameled copper conductors (polyvinyl acetal base with high mechanical properties)

ZWS 890:2005
Specification of high-voltage bus bar and bus bar connections

29.060.20 Cables

ZWS 188:1976
Cable glands for elastomer and plastic insulated cables

ZWS 240:1999
Electric cables with extruded solid dielectric insulation for fixed installations (300/500V to 1 900/3 330V)

ZWS 680:1998
Materials of insulated electric cables and flexible cords

ZWS 732:2001
Electric cables – Flexible cords and flexible cables

ZWS 764:2001
Cables and conductors – Dimensions of the components of electric cables, flexible cables and flexible cords

ZWS 765:2001
Cables and conductors – Flexing test and flexible cords

ZWS 766:2001
Cables and conductors – Kink resistance of circular flexible cords

ZWS 767:2001
Cables and conductors – Conductor resistance

ZWS 768: 2001
Cables and conductors – Alternating current spark test on electric cables and cords

ZWS 769:2001
Cables and conductors – Power frequency voltage test on electric cables

ZWS 770:2001
Cables and conductors – Dielectric resistance on electric cables

ZWS 771:2001
Cables and conductors – Heat resistances of cables and flexible cords

ZWS 772:2001
Cables and conductors – Flexing test for extensible loads

ZWS 773:2001
Cables and conductors - Wear resistance of braided and uninkable cords

ZWS 774:2001
Cables and conductors – Bending test for highly flexible cords such as tinsel cords

ZWS 775:2001
Cables and conductors – Extension test for extensible leads

ZWS 776:2001
Cables and conductors – Overall dimensions and ovality of electric cables and cords

ZWS 889:2004
Conductors for overhead electrical transmission lines

COMESA ZWS HS IEC 60227:2009
Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Flexible cables (Cords)

COMESA ZWS HS IEC 60228:2009
Conductors for insulated cables

COMESA ZWS HS IEC 60502:2009
Power cables with extruded insulation and their accessories for rated voltages from 1kV ($U_m = 1,2kV$) Up to 30 kV ($U_m = 36kV$)

COMESA ZWS HS IEC 60889:2009
Zinc coated steel wires for stranded conductors

COMESA ZWS HS IEC 61427:2009
Secondary cells and batteries for photovoltaic energy systems (PVE) – General requirements and methods of test

29.080 Insulation

29.080.10 Insulators

ZWS 172:1975

Ceramic insulators and pole fittings for telephone lines

ZWS 178:1976

Low voltage insulators

COMESA ZWS HS IEC 60433:2013

Insulators for overhead lines with a nominal voltage above 1000V – Ceramic insulator for A.C. systems – Characteristics of insulator units of the long rod type

COMESA ZW HS IEC 61466:2013

Composite string insulator units for overhead lines with a nominal voltage greater than 1000 V

29.120 Electrical accessories

29.120.10 Conduits

ZWS 179:1976

Cleats, bobbins and leading-in tubes

ZWS 241:1979

Screwed metal conduit and fittings for electrical wiring

ZWS 277:1993

Non-metallic conduit (metric units)

29.120.20 Connecting devices

ZWS 206:1977

Snap-on connectors

ZWS 555:1997

Cold pour resin compound and heat-shrink cable joints in the voltage range up to 1 000V a.c. and 1 500 d.c.

29.120.30 Plugs, socket outlets, couplers

ZWS 121:1989

Two-pole and earthing-pin plugs socket-outlets and socket-outlet adaptors for circuits up to 250volts

ZWS 205:1977

Electric cable soldering sockets

ZWS 556:1977

13 A plugs, socket-outlets adaptors and connection units

COMESA ZWS HS IEC 884.2.5:2009

Plugs and socket-outlets for household and similar purposes

COMESA ZWS HS IEC 60309-1:2009

Plugs, socket – outlets and cables for industrial purposes – General requirements

COMESA ZWS HS IEC 60309.2:2009

Plugs socket-outlets and couplers for industrial purposes – Dimensional interchangeability requirements for pin and contact tube accessories

COMESA ZWS HS IEC 60884-1:2009

Plugs and socket – Outlets for household and similar purposes – General requirements

COMESA ZWS HS IEC 60884.2.1:2009

Plugs and socket-outlets for household and similar purposes – Particular requirements for fused plugs

COMESA ZWS HS IEC 60884.2.2:2009

Plugs and socket-outlets for household and similar purposes – Particular requirements for socket-outlets for appliances

29.120.40 Switches

ZWS 147:1998

Switches for household and similar fixed electrical installations – General requirements

29.120.50 Fuses

ZWS 122:1991

General purpose fuse links for domestic and similar purpose (primarily for use in plugs)

29. 130 Switchgear and control gear

29.130.20 Low voltage switchgear and control gear

ZWS IEC 439:1996/1998

Low-voltage switchgear and control gear assemblies

ZWS IEC 947:1998

Low-voltage switchgear and control gear

29.140 Lamps and related equipment

29.140.20 Incandescent lamps

ZWS 464:1995

Incandescent lamps

ZWS IEC 432:1995

Safety specifications for incandescent lamps

29.140.30 Fluorescent / Discharge lamps

ZWS 127:1978

Ballasts for fluorescent lamps

ZWS 249:1980

Ballasts for low pressure sodium vapour and high intensity discharge lamps and reference ballasts for low pressure sodium vapour and high intensity discharge lamps

ZWS 354:1978

Fluorescent lamp ballasts

29.140.40 Luminaires

ZWS 273:1982

Electric luminaires

ZWS 290:1986

Electric luminaires-handlamps

29.160 Rotating machinery

COMESA ZWS HS IEC 60034:2013

Rotating electrical machines

29.160.20 Generators

COMESA ZWS HS ISO 8528:2013

Reciprocating internal combustion engine driven alternating current generating sets – Alternating current generators for generating sets

29.160.30 Motors

ZWS 274:1983

Single-phase induction motors

ZWS 835:2003

Three-phase induction motors

29.160.40 Generating sets

COMESA ZW HS ISO 8528:2013

Reciprocating internal combustion engine driven alternating current generating sets

29.180 Transformers, reactors

ZWS 191:1976

Current transformers

ZWS IEC 76:1998

Power transformers

COMESA ZWS HS IEC 60076:2013

Power Transformers

COMESA ZWS HS IEC 61378:2013

Converter transformers

29.220 Galvanic cells and batteries

ZWS 212:1978

Primary cells and batteries

ZWS 291:1986

Multi-cell dry batteries

29.240 Power distribution networks

ZWS 120:2022

Eucalyptus poles, cross-arms and spacers for power distribution and communication systems

ZWS 833:1971

Tubular steel poles

29.240.20 Power transmission and distribution lines

ZWS IEC 1089:2013

Round wire concentric lay overhead electrical stranded conductors

ZWS IEC 61089:2013

Amendment 1

Round wire concentric lay overhead electrical stranded conductors

COMESA ZWS HS IEC 60104:2013

Aluminum-Magnesium-Silicon alloy wire for overhead line conductors

COMESA ZWS HS IEC 60888:2009

Hard-Drawn aluminum wire for overhead line conductors

COMESA ZWS HS IEC 61328:2013

Live working – Guidelines for the installation of transmission line conductors and earth wires – Stringing equipment and accessory items

COMESA ZW HS IEC 61865:2013

Overhead lines – Calculation of the electrical component of distance between live parts and obstacles – Method of calculation

31 Electronics

31.180 Printed circuits and boards

ZWS 832:1968

Distribution miniature circuit-breaker boards for low and medium voltages

33 Telecommunications

33.120 Components and accessories for telecommunications equipment

33.120.40 Aerials

ZWS 386:1993

Aerials for the reception of sound and television broadcasting in the frequency range 30MHz to 1 GHz: Electrical and mechanical characteristics

35 Information Technology

35.020 Information technology (IT) in general

ZWS 387:1993

Aerials for the reception of sound and television broadcasting in the frequency range 30 MHz to 1 GHz; Methods of measurement of electrical performance parameters

ZWS 498:1998

The installation of communal and single antenna systems for the reception of television and sound broadcast transmissions

ZWS 499:1995

Passive antennae for the reception of VHF and UHF television and VHF sound transmissions

ZWS ISO/ IEC 20000.5:2013

Information technology – service management – Exemplar implementation plan for ISO/IEC 20000-1

ZWS ISO/ IEC 20000.10:2013

Information technology – service management – Concepts and terminology

ZWS ISO/IEC 22237: Part 1:2021

Information technology — Data centre facilities and infrastructures

Part 1: General concepts

ZWS ISO/IEC 22237: Part 2:2018

Information technology — data centre facilities and infrastructures

Part 2: building construction

ZWS ISO/IEC 22237: Part 3:2021

Information technology – Data centre facilities and infra-structures

Part 3: Power distribution

ZWS ISO /IEC 27001:2022

Information Security, cybersecurity and privacy protection – Information security management system – Requirements

ZWS ISO/IEC 27002:2022

Information security, cybersecurity and privacy protection – Information security controls

ZWS ISO/IEC 27003:2017

Information technology – Security techniques – Information security management systems – Guidance

ZWS ISO/IEC 27004:2016

Information technology - Security techniques - Information security management systems - Monitoring, measurement, analysis and evaluation

35.040 Character sets and information coding**ZWS ISO/IEC 27005:2022**

Information security, cybersecurity and privacy protection – Guidance on managing information security risks

ZWS ISO/IEC 27006:2011

Information technology – Security techniques – Requirements for bodies providing audit and certification of information security management systems

ZWS ISO/IEC 27007:2020

Information security, cybersecurity and privacy protection – guidelines for information security management systems auditing

ZWS ISO/IEC 27013:2012

Information technology – Security techniques – Guidance on the integrated implementation of ISO/IEC 27001 and ISO/IEC 20000.1

ZWS ISO/IEC 27014:2020

Information security, cybersecurity and privacy protection - governance of information security

ZWS ISO/IEC 27032:2023

Cybersecurity - Guidelines for internet security

ZWS ISO/IEC 27033.6:2016

Information technology – Security techniques – Network security: Securing wireless IP network access

ZWS ISO/IEC 27040:2022

Information technology – Security techniques – Storage security

ZWS ISO IEC/TR 38502:2014

Information technology – Governance of IT – Framework and model

35.240.15 Identification cards and related devices**ZWS ISO 8583**

Financial transaction card originated messages – Interchange message specification

35.240.40 IT applications in banking**ZWS ISO 13492:2007**

Financial services – Key management related data element – Application and usage of ISO 8583 data elements 53 and 96

35.080 Software**ZWS ISO/IEC 38500: 2015**

Information technology — Governance of IT for the organization

37 Image Technology**37.100 Graphic technology****ZWS 857:1964**

Printers' metal

39 Precision mechanics, jewellery**39.060 Jewellery****ZWS 1114:2023**

Marking articles made of gold

ZWS Z2:1961

Marking articles made of sterling silver

ZWS Z2:1961

Marking articles made of sterling silver

49.140 Space systems and operations**ZWS ISO 20780:2018**

Space systems — fibre optic components — Design and verification requirements

43 Road vehicle engineering**43.020 Road vehicles in general****ARS ZW HS 1379:2022**

Definitions and classifications of power-driven vehicles and trailers

ARS ZW HS 1595 :2022

Vehicle homologation

ZWS ISO 3779:1998

Road vehicles – Vehicles identification number (VIN) – Content and structure

ZWS ISO 4100:1998

Road vehicles – World parts manufacturer identifier (WPMI) code

ZWS ISO TR/3780:1998

Road vehicles – World manufacturer identifier (WMI) code

ZWS ISO 3833:1998

Road vehicles – Types – Terms and definitions

ZWS ISO TR/8357:1998

Road vehicles – Instructions for the implementation of the assignment of world manufacture identifier (WMI) codes for vehicle identification number (VIN) systems and for world parts manufacturer identifier (WPMI) codes

43.040 Road vehicle system

43.040.01 Road vehicle systems in general

SADC ZW HS 944:2014

The determination of performance (at net power) of internal combustion engines

SADC ZW HT 104:2020

Cross border road management system.

SADC ZWS HT 105 Part 1:2020

ARS ZW HS 1355 Part 1:2022

Vehicle Standards – Specification For vehicle Road Worthiness

SADC ZW HT 105: Part 2 2020

ARS ZW HS: Part 2:2022

Roadworthiness of vehicles prior to entry into service and thereafter

SADC ZW HT 105: Part 3:2020

ARS ZW HS 1355

Supporting information.

SADC ZW HT 105 Part 4:2020

ARS ZW HS 1355 Part 4:2022

Requirements for vehicle examiners.

SADC ZW HT 105: Part 5: 2020

ARS ZW HS 1355: Part 5:2022

Requirements for testing equipment.

SADC ZW HT 105: Part 6: 2020

ARS ZW HS 1355 Part 6:2022

Requirements for combination of vehicles

SADC ZW HT 104:2020

ARS ZW HS 1371:2022

Cross border road management system.

SADC ZW HT 105: Part 1 2020

Roadworthiness of vehicle already in use.

ZWS ISO/IEC 18013: Part 2:2018

Information technology- personal identification – ISO –

SADC ZWS HT 106 Part 1 :2020

ZWS ISO/IEC 18013: Part 1:2018

Information Technology - Personal Identification – ISO- Compliant Driving licence

Part 1: Physical characteristics and basic data set

SADC ZW HS 106: Part 2:2020

Compliant driving licence. Machine- readable technologies

ZWS 1079:2022

Uniform provisions concerning the approval of M2 and M3 small capacity vehicles with regard to their general construction

ZWS ISO 4925:2020

Road vehicles – Specification of non-petroleum-based brake fluids for hydraulic system

ZWS ISO 4926:2020

Road vehicles – Hydraulic braking systems – Non-petroleum-based reference fluid

ZWS ISO/IEC 18013: Part 4:2019

Personal identification –ISO- compliant driving license

SADC ZWS HS 106 Part 4 2020

Test methods.

ZWS ISO/IEC 18013: Part 3:2017

Information technology personal identification –ISO –

SADC ZW HS 106: Part 3:2020

Compliant driving license. Access control, authentication and integrity validation

43.040.20 Lighting devices

ZWS 258:1982

Motor vehicle lighting and signaling equipment

SADC ZW HS 943:2014

Lights for motor vehicles

43.040.40 Braking systems

SADC ZW HS 943:2014

Lights for motor vehicles

SADC ZW HS 945:2014

Braking motor and towed vehicles, designed for low speed or for use off public roads

SADC ZW HS 948:2014

The measurement of noise emitted by road vehicles when stationary

SADC ZWS HS 949:2014

Retro-reflective and fluorescent warning signs for road vehicles

43.040.50 Transmission, suspension

ZWS 226:1978

Automotive V-belt drives

ZWS 922:2011

Safety tyre bands

ZWS 956:2014

Ball joints

ZWS ISO 3894:2010

Road Vehicles – Wheels/Rims for commercial vehicles – Test Methods

43.040.60 Bodies and body components

ZWS 223:1985

Restraining devices (safety belts) for occupants of adult built in motor vehicles

ZWS 845:1971

Reflex-reflecting vehicle number plates

SADC ZW HS 947:2014
Rear underrun protection devices

43.040.65 Glazing and wiper systems

ZWS 236:1978
Safety glass for land transport

SADC ZWS HS 899:2010
High penetration – Resistant laminated safety glass for vehicles

43.040.80 Crash protection and restraint systems

SADC ZW HS 946:2014
Anchorages for restraining devices in motor vehicles

43.060 Internal combustion engines for road vehicles

43.060.01 Internal combustion engines for road vehicles in general

SADC ZW HS 944:2014
The determination of performance (at net power) of internal combustion engines

ZWS ISO 20766: Part 1:2018
Road vehicles - liquefied petroleum gas (LPG) fuel system components. Part 1: general requirements and definitions

ZWS ISO 20766: Part 2:2018
Road vehicles — liquefied petroleum gas (LPG) fuel system components.
Part 2: performance and General test methods

ZWS ISO 20766: Part 3:2018
Road vehicles — liquefied Petroleum gas (LPG) fuel system components.
part 3: 80% stop valve

ZWS ISO 20766: Part 4:2018
Road vehicles — liquefied petroleum gas (LPG) fuel system components
Part 4: level indicator

ZWS ISO 20766: Part 5:2023
Road vehicles – liquefied petroleum gas (LPG) fuel system components.
Part 5: fuel selection system and electrical in-stallations

ZWS ISO 20766: Part 6:2019/Amd 1:2022
Road vehicles – liquefied petroleum gas (LPG) fuel system components.
Part 6: pressure relief valves (prv)

ZWS ISO 20766: Part 7:2023
Road vehicles – liquefied petroleum gas (LPG) fuel system components.
Part 7: remotely controlled service valve with excess flow valve

ZWS ISO 20766: Part 8:2023
Road vehicles – liquefied petroleum gas (LPG) fuel system components.
Part 8: fuel pump

ZWS ISO 20766: Part 9:2019
Road vehicles — liquefied petroleum gas (LPG) fuel system components —Part 9 : pressure relief Devices (prd)

ZWS ISO 20766: Part 10:2019
Road vehicles - liquefied Petroleum gas (LPG) fuel system Components
Part 10: gas-tight housing

ZWS ISO 20766: Part 11:2020
Road vehicles — liquefied petroleum gas (LPG) fuel system components
Part 11: manual shut-off valve

ZWS ISO 20766: Part 12:2019
Road vehicles — liquefied petroleum gas (LPG) fuel system components
Part 12: non-return valve

ZWS ISO 20766: Part 13:2022
Road vehicles — liquefied petroleum gas (LPG) fuel system components .
Part 13: multivalve

ZWS ISO 20766: Part 14:2023
Road vehicles — Liquefied petroleum gas (LPG) fuel system components
Part 14: Vaporizer/pressure regulator

ZWS ISO 20766: Part 15:2023
Road vehicles — Liquefied petroleum gas (LPG) fuel system components
Part 15: Excess flow valve

ZWS ISO 20766: Part 16:2023
Road vehicles — Liquefied petroleum gas (LPG) fuel system components:
Part 16: Injectors and gas mixing device/fuel rail

ZWS ISO 20766: Part 17:2022
Road vehicles — Liquefied petroleum gas (LPG) fuel system components:
Part 17: Gas dosage unit

43.060.20 Air/exhaust systems

ZWS 520:1996
Inlet air cleaning equipment for internal combustion engines and compressors – Performance testing

ZWS 839:1970
Exhaust silencers for passenger cars

43.120 Electric road vehicles

ZWS IEC 60364:Part 4-42:2014
Low voltage electrical installations
Part 4-42 Protection for safety – protection against thermal effects

ZWS IEC 62196: Part 1:2014
Plugs, socket-outlets, vehicle connectors and vehicle inlets – conductive charging of electric vehicles
Part 1: General requirements

ZWS IEC 62196: Part 2:2016
Plugs, socket-outlets, vehicle connectors and vehicle inlets – conductive charging of electric vehicles
Part 1: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories

ZWS IEC 61851: Part 1:2017
Electric vehicle conductive charging system
PART 1: General requirements

ZWS IEC 61851: Part 21-1:2017
Electric vehicle conductive charging system

PART 21-1: Electric vehicle on-board charger EMC requirements for conductive connection to AC/DC supply

ZWS IEC 61851: Part 21-2:2018

Electric vehicle conductive charging system
Part 21-2: Electric vehicle requirements for conductive connection to an AC/DC supply – EMC requirements for off-board electric vehicle charging systems

ZWS IEC 61851: Part 23:2014

Electric vehicle conductive charging system
Part 23: DC electric vehicle charging station

ZWS IEC 61851: Part 24:2014

Electric vehicle conductive charging system
Part 24: Digital communication between a d.c EV charging station and an electric vehicle for control of d.c charging

ZWS IEC 61980: Part 1: 2020

Electric vehicle wireless power transfer (WPT) systems
Part 1: General requirements

ZWS IEC TS 61980: Part 2: 2019

Electric vehicle wireless power transfer (WPT) systems
Part 2: Specific requirements for communication between electric road vehicle (EV) and infrastructure

ZWS IEC 62576:2018

Electric double-layer capacitors for use in hybrid electric vehicles – test methods for electrical characteristics

ZWS IEC 62840: Part 1:2016

Electric vehicle battery swap system
Part 1: General and guidance

ZWS IEC 62840: Part 2:2016

Electric vehicle battery swap system
Part 2: Safety requirements

ZWS IEC 62840: Part 3:2021

Electric vehicle battery swap system
Part 3: Particular safety and interoperability requirements for battery swap systems operating with removable RESS/battery systems

ZWS IEC 63119: Part 1:2019

Information exchange for electric vehicle charging roaming service
Part 1: General

53 Materials handling equipment

53.020 Lifting equipment

53.020.30 Accessories for lifting equipment

ZWS 259:1982

Short link chain for lifting purposes - General conditions of acceptance

ZWS 260:1982

Short link chain for lifting purposes – grade M (4), non-calibrated for chain slings etc

ZWS 261:1982

Short link chain for lifting purposes – Grade M (4), calibrated for chain hoists and other lifting appliances

ZWS 262:1982

Short link chain for lifting purposes – Grade T (8), non-calibrated, for chain slings etc

ZWS 263:1982

Short link chain for lifting purposes – Grade T (8), calibrated, for chain hoists and other lifting appliances

ZWS 878:2003

Snatch blocks

53.020.99 Other lifting equipment

ZWS 268:1992

Mechanical jacks

ZWS 337:1991

Hydraulic jacks

53.040 Continuous handling equipment

53.040.10 Conveyors

ZWS 848:1973

Portable and mobile screw conveyors for agricultural use

53.040.20 Components for conveyors

ZWS Z14:1971

Conveyor belting for use in flammable or explosive atmospheres

ZWS 159:1975

Rubber and plastics belting of textile construction for use on bucket elevators

ZWS 217:1978

Rubber, balata or plastics flat transmission belting of textile construction for general use

ZWS 229:1979

General purpose textile-reinforced conveyor belting

53.120 Equipment for manual handling

ZWS 117:1974

Small garden implements

ZWS 153:2000

Spades and shovels

ZWS 154:1975

Forks and rakes

55 Packaging and distribution of goods

55.020 Packaging and distribution of goods in general

ZWS ISO 780:2015

Packaging – Distribution packaging – Graphical symbols for handling and storage of packages

ZWS ISO 3394:2012

Packaging – Complete, filled transport packages and unit loads – Dimensions of rigid rectangular packages

ZWS ISO 8317:2003

Child-resistant packaging – Requirements and testing procedures for reclosable packages

ZWS ISO 15394:2017

Packaging - Bar code and two-dimensional symbols for shipping, transport and receiving labels

ZWS ISO 18603:2013
Packaging and environment— reuse

ZWS ISO 18604:2013
Packaging and environment - material recycling

ZWS ISO 18605:2013
Packaging and the environment – energy recovery

ZWS ISO 18606:2013
Packaging and the environment – organic recovery

ZWS ISO 21067: Part1:2016
Packaging – Vocabulary:
Part 1: General terms

55.040 Packaging materials and accessories

ARS ZW HS 1710:2023
Natural and extensible sack Kraft paper

ARS ZW HS 1711:2023
Paper and board food contact packaging material

ARS ZW HS 1712:2023
Paper plates and cups for food packaging

ARS ZW HS 1716:2023
Migration of constituents of plastic materials and articles intended to come into contact with foodstuffs

ZWS 201:1977
Liners and fluting for corrugated board

ZWS 779:2001
Tobacco wrapping paper (moisture-barrier coated)

55.080 Sacks and bags

ZWS 294:1999
Woven polypropylene bags

ZWS 465:1994
Woven polypropylene grain bags

ZWS 527:1997
Heavy duty thermoplastic flexible film sacks

ZWS ISO 6591:1996
Packaging – Sacks – Description and method of measurement

ZWS ISO 7023:1996
Packaging – Sacks – Method of sampling empty sacks for testing

ZWS ISO 7965:1996
Sacks – Drop test

55.100 Bottles, Pots and jars

ARS ZW HS 1718:2023
Aluminium cans for beverages

ARS ZW HS 1719:2023
Packaging – Code of practice – Glass containers

ARS ZW HS 1748: Part 1:2023
Glass containers
Part 1: Bottles for carbonated and non-carbonated drinks

ZWS ISO 7458:2000
Glass containers – Internal pressure resistance – Test methods

ZWS ISO 8113:2000
Glass containers – Resistance to vertical load

55.140 Barrels, drums and canisters

ZWS 360:1993
Self-supporting plastics containers of nominal capacities 5 to 220 litres

ZWS ISO 13106:2014
Plastic – blow-moulded polypropylene containers for packaging of liquid foodstuffs

55.160 Cases, boxes and crates

ARSO ZW HS 988:2023
Plastic crates

ZWS O1:1965
Box timber

ZWS 252:1980
Agricultural box shooks and box boards

ZWS 858:2005
Timber drums for insulated electric cables and bare conductors

55.180.20 General purpose pallets

ZWS ISO 6780:2000
General purpose flat pallets for through transit goods – Principal dimensions and tolerances

ZWS ISO 8611:2000
General purpose flat pallets for through transit of goods – Test methods

55.180.99 Freight distribution of goods

ZWS ISO 21898:2004
Packaging – Flexible intermediate bulk containers (FIBCs) for non-dangerous goods

55.230 Distribution and vending machines

ZWS 1080:2022
Nicotine-containing tobacco free oral product 3-(1- methyl, 2- Pyrroldinyl) Pyrindine

59 Textile and leather technology

59.060 Textile fibres

COMESA ZWS HS ISO/ TR 5090:2008
Textiles – Methods for the removal of non-fibrous matter prior to quantitative analysis of fibre mixtures

COMESA ZWS HS ISO 6989:2008
Textile fibres – Determination of length distribution of staple fibres (By measurement of single fibres)

COMESA ZWS HS ISO 12952:2008
Textiles – Burning behavior of bedding items

COMESA ZWS HS ISO 1130:2008
Textile fibres – Some methods of sampling for testing

59.060.01 Textile fibres in general

COMESA ZWS HS ISO 6741

Textiles – Fibres and Yarns – Determination of commercial mass of consignments

COMESA ZWS HS ISO 6938:2008

Textiles – Natural fibres – Generic names and definition

59.060.10 Natural fibres

COMESA ZWS HS ISO 8159:2009

Textiles – Morphology of fibres and yarns – Vocabulary
COMESA ZWS HS ISO 8115:2009
Cotton bales – Dimensions and density

COMESA ZWS HS ISO 3060:2009

Cotton fibres – Determination of breaking tenacity of flat bundles

COMESA ZWS HS ISO 2647:2009

Wool – Determination of percentage of medullated fibres by the projection microscope

COMESA ZWS HS ISO 1973:2008

Textiles fibres – Determination of linear density gravimetric methods and vibroscope method

COMESA ZWS HS ISO 2370:2008

Textiles – Determination of fineness of flax fibres permeametric methods

COMESA ZWS HS ISO 2646:2008

Wool – Measurement of the length of fibres processed on the worsted system using a fibre diagram machine

COMESA ZWS HS ISO 4913:2008

Textiles – Cotton fibres – Determination of length (span length) and uniformity index

COMESA ZWS HS ISO 5079:2008

Textile fibres – Determination of breaking force and elongation at break of individual fibres

COMESA ZWS HS ISO 5088:2008

Textiles – Ternary mixtures – Quantitative analysis

COMESA ZWS HS ISO 10306:2008

Textiles – Cotton fibres – evaluation of maturity by the air flow method

COMESA ZWS HS I:2009

Wool – Determination of fibre diameter – Projection microscope method

59.080 Products of the textile industry

59.080.01 Textiles in general

ZWS 840:2002

Conditioning of textiles and standard temperature atmospheres for determining their physical and mechanical properties (metric units)

ZWS ISO 3758:2000

Textile – care labeling code using symbols

59.080.30 Textiles fabrics

ZWS 107:1998

The assessment of defects in textile piece-goods and made-up articles

ZWS 1068:2023

Reusable menstrual cups

COMESA ZWS HS ISO 1136:2009

Wool – Determination of mean diameter of fibres – Air permeability method

ZWS 234:1978

Terry toweling, towels and other terry weave articles

ZWS 247:1985

Cotton sailcloth, cotton jean and drill fabrics, cotton denim and cotton indigo denim

ZWS 709:1998

Bow and skewness in woven textile fabrics

ZWS 710:1999

Fluidity of cotton certain cellulosic man-made fibres with cuprammonium solution (modified method)

ZWS 730:2015

The manufacture of disposable pads

ZWS 855:1971

Loomstate cotton duck

ZWS ISO 3801:1998

Textiles – Woven fabrics – Determination of mass per unit length and mass per unit area

ZWS ISO 3932:1998

Textiles – Woven fabrics – Measurement of width of pieces

ZWS ISO 3933:1998

Textiles – Woven fabrics – measurement of length of pieces

ZWS ISO 5077:1998

Textiles – Woven fabrics - Determination of dimensional change in washing and drying

ZWS ISO 5081:1998

Textiles – Woven fabrics – Determination of breaking strength and elongation (strip method)

ZWS ISO 5082:1998

Textiles – Woven fabrics – Determination of breaking strength – Grab

ZWS ISO 7211:1998

Textiles – Woven fabrics – Construction – Methods for analysis

COMESA ZWS HS ISO 1136:2009

Wool – Determination of mean diameter of fibres – Air permeability method

59.080.40 Coated fabrics

ZWS174:1983

Tarpaulins

ZWS 854:1972

Coated knitted fabrics for upholstered furniture (PVC) types

59.080.50 Ropes

ZWS 286:1985

Natural fibre ropes

ZWS ISO 2307:2000

Ropes – Determination of certain physical and mechanical

ZWS ISO 3758:2000

Textile – care labeling code using symbols

59.080.99 Other products of the textile industry

ZWS 750:2002
Absorbent cotton wool

59.140 Leather technology

59.140.20 Raw skins, hides

ZWS 295:1989
Salt cured and shade dried bovine hides

59.140.30 leather and furs

ARS ZW HS 1555:2023
Leather – gloves

ARS ZW HS 1556:2023
Leather – Chrome tanned bend outer sole

ARS ZW HS 1557:2023
Leather – Vegetable tanned bend outer sole

COMESA ZWS HS ISO 5403:2007
Leather – Physical and mechanical tests. Determination of water resistance of flexible
Leather

COMESA ZWS HS ISO 5433:2007
Leather – Bovine wet blue – specification

COMESA ZWS HS ISO 2419:2007
Leather – Physical and mechanical tests – Sample preparation and conditioning

COMESA ZWS HS ISO 3376:2007
Leather – Physical and mechanical tests –Determination of tensile strength and percentage extension

COMESA ZWS HS ISO 5431:2007
Leather – Wet blue Goat skins – specification

COMESA ZWS HS ISO 17186:2007
Leather – Physical and mechanical tests – Determination of surface coating thickness

COMESA ZWS HS ISO 17227:2007
Leather – Physical and mechanical tests – Determination of dry heat resistance of leather

COMESA ZWS HS ISO 5432:2007
Leather – Wet blue sheep skins – Specification

COMESA ZWS HS ISO 14931:2007
Leather – Guide to the selection of leather for apparel (excluding furs)

COMESA ZWS HS ISO 2418:2007
Leather – Chemical, Physical and Mechanical and Fastness tests – Sampling location

COMESA ZWS HS ISO 3377:2007
Leather – Physical and mechanical tests – Determination of tear load

COMESA ZWS HS ISO 9477:2007
High strength cast steels for general engineering and structural purposes

COMESA ZWS HS ISO 2588:2007
Leather – Sampling – number of items for a gross sample

61 Clothing industry

61.040 Headgear, clothing accessories, fastening of clothing

ZWS 324:1990
Slide fasteners

61.020 Clothes

ZWS 755:2002
Knee – High stockings and ankle socks

ZWS 756:2002
Men's and women's hose for industrial use

ZWS 828:2002
Dimensions for hosiery

ARS ZW HS 1568:13-2019
School clothing –Athletic Wear

ARS ZW HS 1568:12-2019
School clothing –tracksuits

ARS ZW HS 1568:10-2019
School clothing –Jersey and cardigans

ARS ZW HS 1568:9-2019
School clothing –Knee highs and socks

ARS ZW HS 1568:8-2019
School clothing –Warp Knitted Fabrics

ARS ZW HS 1568:7-2019
School clothing – Slacks and skirts

ARS ZW HS 1568:6-2019
School clothing – Dresses, Tunics and Gyms

ARS ZW HS 1568:4-2019
School clothing –Shirts

ARS ZW HS 1568:3-2019
School clothing –Trousers and shorts

ARS ZW HS 1568:2-2019
School clothing –Blazers

ARS ZW HS 1568:1-2019
School clothing –General Requirements

61.060 Footwear

ZWS Z1:1961
Minimum requirements for youths' and men's footwear

ZWS 1055:1986
Men's quality shoes for town and office wear

ZWS 1054:1971
Tennis shoes for adults

ZWS 1100:2023
Men's heavy Oxford style shoes for services' use

ZWS 1101:2023
Men's military style service boots

ZWS 1098:2023
Boot and shoe laces

ARS ZW HS 1554:2019

Leather –Ladies fashion Handbags specification

ARS ZW HS 1553:2019

Leather –Mens and Women’s belts specification

ARS ZW HS 1558:2023

Footwear – Children’s school shoes with direct injection

ARS ZW HS 1559:2023

Footwear – men’s open shoes

ARS ZW HS 1561:2019

Footwear – Women’s open shoes – specification

ARS ZW HS 1562:2019

Footwear – Women’s closed shoes – specification

ARS ZW HS 1563:2023

Footwear – Children’s shoes (above 2 years and below)

ARS ZW HS 1563:2023

Footwear – Children’s shoes (2 to 6years)

ARS ZW HS 1565:2019

Footwear – Sports shoes – specification

65 Agriculture**ZWS 862:2004**

The production, processing, labelling and marketing of organically produced foods

65.020 Farming and forestry**ZWS 915:2012**

Organic Farming

ZWS 1019:2017

Zimbabwe Horticulture – Good agricultural Practice (GAP)

65.040.10 Farm buildings and installations in general**65.060 Agricultural machines, implements and equipment****65.060.20 Soil working equipment****ZWS N7:1971**

Agricultural discs

ZWS 861:2003

Farm-animal drawn plough share

65.060.30 Sowing and planting equipment**ZWS ISO 7256: 2000**

Sowing equipment – Test methods

65.060.35 Irrigation and drainage equipment**ZWS 362:994**

Aluminum tubes for irrigation purposes

ZWS 363:1996

Irrigation equipment – Irrigation sprayers and rotating sprinklers

ZWS 531:1996

Polyethylene (PE) pipes for irrigation laterals

ZWS 620:1985

Flexible polyvinyl chloride garden hose (metric units)

65.060.40 Plant care equipment**ZWS 849:1969**

Knapsack sprayers

65.060.50 Harvesting equipment**ZWS 209:1992**

Sickles

65.060.70 Horticulture equipment**ZWS 679:1999**

Power lawn-mowers, lawn tractors, lawn and garden tractors, professional lawn-mowers and lawn and garden tractors with lawn-mowing attachments

65.060.99 Other agricultural machines and equipment**ZWS 1092:2023**

Requirements for power operated threshing and shelling equipment

ZWS 1102:2023

Requirements for Agricultural/ General Purpose Tractors

65.080 Fertilizers**ZWS 866:2003**

Fertilizers – Magnesium nitrate

ZWS 867:2015

Fertilizers – Potassium sulfate

ZWS 868:2017

Fertilizers – Magnesium silicate anhydrous

ZWS 869:2015

Fertilizers – Calcium Nitrate

ZWS 870:2015

Fertilizers – Potassium nitrate (Nitrate of Potash)

ZWS 871:2015

Fertilizers – Ammonium nitrate

ZWS 872:2015

Fertilizers – Monoammonium phosphate (MAP)

ZWS 873:2015

Fertilizers – Zinc sulfate monohydrate

ZWS 874:2015

Fertilizers – Urea

ZWS 875:2015

Potassium chloride (muriate of potash) Fertilizer

ZWS 1021:2016

The safety of water treatment chemicals for use in the food industry

ZWS ISO 8157:2015

Fertilizers and soil conditions – Vocabulary

ARSO ZW HS 72:2016
Fertilizers – Sampling from a conveyor stopping the belt

ARSO ZW HS 73:2016
Fertilizers – Determination of nitrate nitrogen content

ARSO ZW HS 74:2016
Fertilizers – Determination of bulk density (loose)

ARSO ZW HS 212:2016
Fertilizers – Marking – Preservation and declaration

ARSO ZW HS 213:2016
Fertilizers and solid conditioners – Final samples – practical arrangements

ARSO ZW HS 500:2016
Solid fertilizers – Sampling

ARSO ZW HS 501:2016
Compound fertilizers – method of test

ARSO ZW HS 504:2016
Fertilizers – Ammonium sulphate – method of test

ARSO ZW HS 505:2016
Fertilizers – Ammonium sulphate

ZWS ISO 18644:2016
Fertilizers and soil conditioners – controlled release fertilizer – General requirements

ZWS ISO 18788:2015
Management system for private security operations - Requirements with guidance for use.

65.100 Pesticides and other agrochemicals

ZWS 158:1975
The use and disposal of acaricides (cattle dips)

ZWS 224:1978
The handling, storage and disposal of pesticides and their containers

ZWS 250:1980
Code of practice for the handling, storage and disposal of pesticides and used pesticides containers

ZWS 345:1991
Pesticides in the form of five percent disulfoton granules

65.100.10 Insecticides

ZWS 344:1991
Insecticides in the form of one percent or three percent trichlorfon granules

ZWS 346:1991
Insecticides in the form of two and half percent trichlorfon granules

65.120 Animal feeding stuffs

ZWS 112:2023
Dog and cat food

ZWS 142:2023
Pig feeds

ZWS 517:2023
Poultry feeds

ZWS 518:2022
Cattle feeds

ZWS 530: 2022
Animal feeding stuffs – Sampling and preparation of test samples

ZWS 542:1996
Animal feeding stuffs – Determination of available lysine

ZWS 543:1996
Animal feeding stuffs – Determination of total nitrogen content and calculation of crude protein content

ZWS 544:1996
Animal feeding stuffs – Determination of crude ash

ZWS 545:1996
Animal feeding stuffs – Determination of calcium content – Titrimetric method

ZWS 546:1997
Animal feeding stuffs – Determination of total phosphorus content – Spectrophotometric method

ZWS 547:1996
Animal feeding stuffs – Determination of moisture content

ZWS 548:1996
Animal feeding stuffs – Determination of aflatoxin B1 content

ZWS 549:1996
Animal feeding stuffs – Determination of urea content

ZWS 550:1996
Animal feeding stuffs – Determination of free and total gossypol

ZWS 567:1996
Animal feeding stuffs – Determination of sodium chloride content

ZWS 571:1997
Animal feeding stuffs – General directions for the determination of nitrogen by the Kjeldahl method

ZWS 725:1999
Ostrich feed

ZWS 847:1972
Limestone flour for use in animal feeding stuffs

ZWS 1027:2017
Good Agricultural Practice For Animal Production Food Safety (ZSGAPAPFS)

ZWS 1051:2022
Good Agricultural Practices For free range poultry production

65.140 Beekeeping

ZWS 853:1974
Beehives

65.160 Tobacco, tobacco products and related equipment

ZWS 823:1975
Underfeed stokers (ram or screw type)

ZWS 846:1973
Tobacco tying twine

67 Food technology

67.020 Processes in the food industry

ZWS 126:1997/1999/2001

Food hygiene

ZWS 650:1997

Efficacy of cleaning plant, equipment and utensils – Swab technique

ZWS 651:1997

Efficacy of cleaning plant, equipment and utensils – Strip technique

ZWS 652:1997

Efficacy of cleaning plant, equipment and utensils – Agar sausage technique

ZWS 676:1998

Code of practice for the application of pesticides in the food industry

ZWS 749:2023

Requirements for a hazard analysis and critical control point (HACCP) Systems

8086:2005

Dairy plant – Hygiene conditions – General guidance on inspection and sampling procedures

ZWS ISO 15161:2003

Guidelines on the application of ISO 9000:2000 for the food and drink industry

ZWS ISO 22000:2018

Food safety management systems requirements for organizations throughout the chain

ZWS ISO/TS 22002:2009

Technical specification – Prerequisite programmes on food safety – Food Manufacturing

67.040 Agricultural food products in general

ZWS 373:1993

Agricultural food products – Determination of crude fibre content – General method

ZWS 375:1993

Agricultural food products – Determination of crude fibre content – Modified Scharer method

ZWS ISO/TS 22002:2013

Prerequisite programs on food safety

ZWS ARS AES 02:2017

Fisheries – Sustainability and ecolabeling Requirements

ARS ZW HS 833:2020

Fried banana chips

ARS ZW HS 852:2020

Fried potato chips

ARS ZW HS 831:2020

Fresh Bananas Specifications

ARS ZW HS 1109:2020

Good agriculture practices for food crops

67.060 Cereals, pulses and derived products

ZWS 330:1991

Storage of cereals and pulses

ZWS 331:1991

Storage of cereals and pulses

ZWS 392:1995

Sunflower seeds

ZWS 390:1995

Soya beans

ZWS 391:1996

Wheat grain

ZWS 1050:2022

Instant cereal and pulse based porridge

ZWS ARS HS 461:2022

Maize Grains (Corn)

ARSO ZW HS 462:2023

Sorghum Grains

ARS ZW HS 463:2023

Pearl Millet Grains

ARSO ZW HS 464:2023

Milled Rice

ARSO ZW HS 466:2023

Milled maize (corn) products

ZWS ARS HS 468:2017

Sorghum Flour

ARSO ZW HS 469:2019

Millet flour

ZWS 500:1999

Wheat flour

ZWS 609:2000: Part 1

Bread - White

ZWS 609:2002: Part 2

Bread - Brown

ZWS 631:1998

Bakery products – Determination of total solid content

ZWS 632:1998

Bakery products – Determination of pH

ZWS 633:1998

Bakery products – Determination of acid insoluble ash

ZWS 634:1998

Bakery products – Determination of crude fibre

ZWS 636:1998

Bakery products – Determination of fat content

ZWS 637:1998

Bakery products – Determination of volume/mass ratio

ZWS 673:1998

Cereals and cereal products – Determination of ash

ZWS 675:1998
Wheat flower – Determination of total carbon dioxide

ZWS 677:1999
Wheat flower – Determination of particle size

ZWS 728:1999
Wheat flour – Determination of colour

ZWS 729:1999
Wheat flour – Determination of bran mass fraction

67.020 Processes in the food industry

ZWS 806:2021
Hazardous waste management

ZWS ISO/TS 22002:2009
Technical specification – Prerequisite programmes on food safety – Food Manufacturing

ZWS ISO /TS 22003: Part 1:2022
Food safety
Part 1 – Requirements for bodies providing audit and certification of food safety management

ZWS ISO/TS 22003: Part 2:2022
Food safety
Part 2 – Requirements for bodies providing evaluation and certification of products, processes and services, including an audit of the food safety system

67.050 General methods of tests and analysis for food products

ZWS 332:2015
Labelling of food and feed that are and not products of genetic modification

67.060 Cereals, pulses and derived products

ARSO ZW HS 857:2018
Finger Millet Grains

ARSO ZWS HS 859:2015
Brown rice – Specification

ARSO ZW HS 864:2015
Dry beans – Specification

ARSO ZW HS 865:2015
Dry green grams

ARSO ZW HS 866:2015
Dry chickpeas

ARSO ZW HS 867:2015
Dry cowpeas

ARSO ZW HS 868:2015
Dry pigeon peas

ARSO ZW HS 869:2015
Dry whole peas

ARSO ZW HS 870:2015
Lentils

ARSO ZW HS 873:2015
Faba beans - Specification

ARSO ZW HS 874:2015
Dry lima beans – Specification

ARSO ZW HS 858:2017
Rough (Paddy) Rice – Specification

ARSO ZW HS 935:2015
Edible full fat soya flour

ARSO ZW HS 936:2015
Soy milk

ARSO ZW HS 937:2015
Soy protein products

ARSO ZW HS 938:2015
Textured soy protein products

ZWS 760:2002
Maize roller meal

ZWS 887:1994
Ready-to-eat breakfast cereals

ZWS 989:2015
Cereal legume blend

ZWS ISO 712:1996
Cereals and cereal products – Determination of moisture content (Routine reference method)

ZWS ISO 2170:1998
Cereals and pulses – Sampling of milled products

ZWS ISO 2171:2002
Cereals and milled cereal products – Determination of total ash

ZWS ISO 3093:1996
Cereals - Determination of falling number

ZWS ISO 5531:1998
Wheat flour – Determination of wet gluten

ZWS ISO 6540:2002
Maize – Determination of moisture content (on milled grains and on whole grains)

ZWS ISO 7302:2003
Cereals and cereal products – Determination of fat content

ZWS ISO 7971:1996
Cereals – Determination of bulk density, called “mass per hecto-litre” (reference method)

COMESA ZWS HS 358:2004
Certain pulses

COMESA ZWS HS 402:2004
Sorghum grains

COMESA ZWS HS 403:2004
Whole and decorticated pearl millet grains

COMESA ZWS HS 404:2004
Rice

COMESA ZWS HS 716:2006
Sorghum flour

67.080 Fruits, vegetables

67.080.01 Fruits, vegetables and derived products in general

ZWS ISO 750:1998

Fruit and vegetable products – Determination of titratable acidity

ZWS ISO 751:1998

Fruit and vegetable products – Determination of water in soluble solids

ZWS ISO 762:2003

Fruit and vegetable products – Determination of mineral impurities content

ZWS ISO 763:1982

Fruit and vegetable products – Determination of ash insoluble in hydrochloric acid

ZWS ISO 1026:1982

Fruit and vegetable products – Determination of dry matter content by drying under reduced pressure and of water content by Azeotropic distillation

ZWS ISO 1842:1991

Fruit and vegetable products – Determination of pH

ZWS ISO 1955:1982

Citrus fruits and derived products – Determination of essential oil content (Reference Method)

ZWS ISO 2173:2003

Fruit and vegetable products – Determination of soluble solids – Refractometric method

ZWS ISO 5517:1978

Fruits, vegetables and derived products – Determination of iron content – 1,10 – Phenanthroline photometric method

ZWS ISO 5518:2007

Fruits, vegetables and derived products – Determination of benzoic acid content – Spectrophotometric method

ZWS ISO 5519:2008

Fruits, vegetables and derived products – Determination of sorbic acid content

ZWS ISO 5520:1981

Fruits, vegetables and derived products – Determination of alkalinity of total ash and of water-soluble ash

ZWS ISO 5522:1981

Fruits, vegetables and derived products – Determination of total Sulphur dioxide content

ZWS ISO 7447:1998

Fruit and vegetable products – Determination of tin content

67.080.10 Fruits and derived products

ZWS 458:1994

Wax emulsion for coating citrus fruits

ZWS 746:2004

Fruit jams, jellies and marmalades

ZWS 747:1971

Canned fruits

COMESA ZWS HS 364:2004

Peanuts

COMESA ZWS HS 452:2005

Recommended code of practice for packaging and transport of tropical fresh fruits and vegetables

COMESA ZWS HS 453:2005

Avocados

COMESA ZWS HS 454:2005

Fresh mangoes

COMESA ZWS HS 455:2005

Fresh papaya

COMESA ZWS HS 456:2005

Dried apricots

COMESA ZWS HS 460:2005

Dehydrated fruits and vegetables including edible fungi

COMESA ZWS HS 476:2005

Desiccated coconut

COMESA ZWS HS 501:2005

Canned mangoes

COMESA ZWS HS 516:2005

Canned strawberry

67.080.20 Vegetables and derived products

ZWS S18:1968

Worcestershire sauce

ZWS S19:1968

Cucumber pickles

ZWS S25:1970

Canned soups

ZWS S33:1971

Potato crisps

ZWS 1013:2017

Tomatoes

ZWS 1040:2021

Leafy vegetables

ZWS 1073:2001

Canned vegetables

ZWS 1075:1999

Quick frozen vegetables

COMESA ZWS HS 427:2005

Babycorn

COMESA ZWS HS 566:2005

Quick frozen broccoli

COMESA ZWS HS 635:2005

Canned sweet corn

COMESA ZWS HS 638:2005

Canned carrots

COMESA ZWS HS 644:2005

Canned tomatoes

COMESA ZWS HS 646:2005

Processed tomato concentrates

67.100.01 Milk and milk products in general

ZWS ISO 17997:2014

Milk – Determination of nitrogen Content

ZWS ISO 3890:2009

Milk and milk products – Determination of residues of organochlorine compound (Pesticides)

ZWS ISO 5536:2009

Milk fat products – Determination of water content – Karl Fischer Method

ZWS ISO 8070:2007

Milk fat products – Determination of calcium, sodium, potassium and magnesium contents-atomic absorption Spectrometric Method

ZWS ISO 8260:2008

Milk and milk products – Determination of organochlorine pesticides and colichlobybiopheny - method using capillary gas – liquid chromatography with electron capture detection

ZWS ISO 13082:2011

Milk and milk products – Determination of the lipase activity of pregastric lipase preparation

ZWS ISO 15163:2012

Milk and milk products – Calf rennet and adult bovine rennet – Determination by chromatography of chymosin and bovin pepsin contents

ZWS ISO 15174:2012

Milk and milk products – Microbial coagulants – Determination of total milk-clotting activity

ZWS ISO/TS 17193:2012

Milk – Determination of the lactoperoxidase activity – Photometric method (Reference Method)

ZWS ISO 17792:2006

Milk, milk products and mesophilic starter cultures – Enumeration of citrate-fermenting lactic acid bacteria – Colony count technique at 25°C

ZWS ISO 18252:2009

Anhydrous milk fat – Determination of sterol composition by gas liquid chromatography (Routine Method)

ZWS ISO 20541:2011

Milk and milk products – Determination of nitrate content – Method by enzymatic reduction and molecular absorption spectrometry after Griess reaction

ZWS ISO 22662:2009

Milk and milk products – Determination of lactose content by high-performance liquid chromatograph (Reference Method)

ZWS ISO 22935.3:2009

Milk and milk products – Sensory analysis – Guidance on a method for evaluation of compliance with products specifications for sensory properties by scoring

ZWS ISO 27105:2016

Milk and cheese – Determination of hen's egg white lysozyme content by high performance liquid chromatography

67.100.10 Milk and processed milk products

ZWS ISO 450:2005

Milk fat products

ZWS ISO 707:2008

Milk and milk products – Guidance on sampling

ZWS 782:2003

Pasteurized milk and pasteurized homogenized milk

ZWS 787:2003

Skimmed milk powder

ZWS 788:2003

Whole milk powder

ZWS 789:2003

Sterilized milk

ZWS 790:2003

Ultra-high temperature milk

ZWS 792:2003

Yoghurt and sweetened yoghurt

ZWS 793:2003

Flavoured yoghurt and products heat-treated after fermentation

ZWS794:2004

Cultured milk

ZWS 831:2003

Cream powder

ZWS 988:2015

Milk fat products

ZWS ISO 1211:2002

Milk – Determination of fat content – Gravimetric method (reference method)

ZWS ISO 1736:2009

Dried milk and dried milk products – Determination of fat content – Gravimetric method (reference method)

ZWS ISO 1737:2002

Evaporated milk and sweetened condensed milk – Determination of fat content

ZWS ISO 1740:2005

Milkfat products and butter – Determination of fat acidity (Reference method)

ZWS ISO 2450:2001

Cream – Determination of fat content – Gravimetric method (Reference method)

ZWS ISO 2911:2005

Sweetened and condensed milk – Determination of sucrose content – Polarimetric method

ZWS ISO 3356:2001

Milk and dried milk, buttermilk and buttermilk powder, whey and whey powder – Determination of phosphatase activity (reference method)

ZWS ISO 5534:2002

Cheese and processed cheese – Determination of total solids content (reference method)

ZWS ISO 488:2008

Milk determination of fat content – Gerber butyrometers

ZWS ISO 2446:2008

Milk determination of fat content

ZWS ISO 9231:2008

Milk and milk products – Determination of benzoic and forbic acid contents

ZWS ISO 5542:2002

Milk – Determination of protein content – Amino black (dye binding method) (Routine method)

ZWS ISO 5739:2005

Caseins caseinates – Determination of scorched particles content and extraneous matter

ZWS ISO 6091:2001

Dried milk – Determination of tritatable acidity (reference method)

ZWS ISO 6610:2001

Milk and milk products – Enumeration of colony-forming units of micro-organisms – Colony count technique at 30^o C

ZWS ISO 6611:2005

Milk and milk products – Enumeration of yeast and moulds – Colony count technique

ZWS ISO 6730:2006

Milk enumeration of colony forming units of psychrotrophic microorganisms – colony – count technique of 6.5^oC

ZWS ISO 6731:2002

Milk, cream and evaporated milk – Determination of total solids content (Routine method)

ZWS ISO 6734:2005

Sweetened condensed milk – Determination of total solids content (Reference method)

ZWS ISO 6785:2005

Milk and milk products – Detection of salmonella spp

ZWS ISO 8069:2006

Dried milk – Determination of content of lactic acid and lactates

ZWS ISO 8156:2005

Dried milk and dried milk products – Determination of insolubility index

ZWS ISO 8196:2009

Milk – Definition and evaluation of the overall accuracy of alternative methods of milk analysis

ZWS ISO 1857:2007

Milk – Determination of total milk – clotting activity of Bovine Rennets

ZWS ISO 11816:2007

Milk and milk Products – Determination of Alkaline phosphatase activity

ZWS ISO 8870:2009

Milk and milk based products – Detection of thermonuclease produced by coagulase positive staphylococci

ZWS ISO 8967:2006

Dried milk and dried milk products – Determination of bulk density

ZWS ISO 9874:2009

Milk – Determination of total phosphorus content – Method using molecular absorption spectrometry

ZWS ISO 11816

Milk and milk products – Determination of alkaline phosphatase activity. Part 1:2013 Fluorimetric method for milk and milk based drinks.

ZWS ISO 11816

Milk and milk products – Determination of alkaline phosphatase activity. Part 2:2016 Fluorimetric method for cheese

ZWS ISO 11866:2006

Milk and milk products – Enumeration of presumptive *escherichia coli*

ZWS ISO 12078:2007

Anhydrous milk fat – Determination of sterol composition by gas liquid chromatography (reference method)

ZWS ISO 13366:2009

Milk – enumeration of somatic cells

ZWS ISO/TS 17758:2014

Instant dried milk – Determination of the dispersibility and wettability

ZWS ISO 19344| IDF 232:2015

Milk and milk products – Starter cultures, probiotics and fermented products – Quantification of lactic acid bacteria by flow cytometry

ZWS ISO 22160:2007

Milk and milk based drinks – Determination of alkaline phosphate activity – enzymatic photo – activated system (EPAS) method

ZWS ISO 20128:2006

Milk products – Enumeration of presumptive lactobacillus acidophilus on a selective medium – Colony count technique at 37^oC

ZWS ISO 21187:2005

Milk – Quantitative determination of bacteriological quality – Guidance for establishing and verifying a conversion relationship between routine method results and anchor method results

ZWS ISO 22935:2009

Milk and milk products – Sensory analysis – General guidance for the recruitment, selection, training and monitoring of assessors

ZWS ISO 26462:2011

Milk – Determination of lactose content – Enzymatic method using difference in pH

ZWS ISO 23058:2006

Milk and milk products – Ovine caprine rennets – Determination of total milk – clotting activity

ZWS ISO 27205:2010

Fermented milk products – Bacterial starter cultures – Standard of identity

COMESA ZWS HS 349:2004

Sweetened condensed milks

67.100.20 Butter**ZWS 798:2003**

Butter

ZWS ISO 1738:2001

Butter – Determination of salt content

ZWS ISO 3727:2005

Butter – Determination of moisture non-fat solids and fat contents

ZWS ISO 7238:2005

Butter – determination of pH of the serum potentiometric method

ZWS ISO 27205:2010

Fermented milk products – Bacterial starter cultures – Standard of identity

COMESA ZWS HS 714:2006

Use of dairy terms

67.100.30 Cheese**ZWS 800:2003**

Cheese

ZWS 802:2004

Edam Cheese

ZWS 803:2004

Parmesan cheese

ZWS 804:2003

Cottage cheese and cream

ZWS 805:2004

Hard cheese

ZWS ISO 1854:2009

Whey cheese – Determination of fat content – Gravimetric method

ZWS ISO 3432:2008

Cheese – determination of fat content butyrometer for Van Gulik method

ZWS ISO 3433:2008

Cheese – Determination of fat content – Van Gulik method

ZWS ISO 9233:2008

Cheese, cheese rind and processed cheese – Determination of natamycin content Hard cheese

ZWS ISO 1735:2002

Cheese and processed cheese products – Determination of fat content – Gravimetric method (Reference method)

ZWS ISO 5534:2002

Cheese and processed cheese – Determination of total solids content (reference method)

ZWS ISO 27871:2011

Cheese and processed cheese – Determination of the nitrogenous fractions

67.100.40 Ice cream and ice cream confectionary**ZWS 796:2003**

Ice cream and ice cream mixes

ZWS 797:2003

Cream for direct consumption

ZWS ISO 3728:2001

Ice- cream and milk ice – Determination of total solids content (Reference method)

ZWS ISO 7328:2009

Milk based ices and ice mixes – Determination of fat – Gravimetric method (Reference method)

67.100.99 Other milk products**ZWS ISO 2450:2011**

Cream – Determination of fat content – Gravimetric method (Reference Method)

ZWS ISO 5550:2006

Caseins and caseinates – Determination of moisture content

ZWS ISO 5547:2009

Caseins – Determination of fine acidity (reference method)

ZWS ISO 8381:2009

Milk – based infant foods – Determination of fat content – gravimetric method (reference method)

ZWS ISO/TS 11869:2012

Fermented milks - Determination of titratable acidity – Potentiometric method

ZWS ISO 12779:2011

Lactose – Determination of water content – Karl fischer method

67.120 Meat, meat products and other animal produce**67.120.10 Meat and meat products****ARSO ZW HS 1245:2023**

Bovine (beef) meat – Carcasses and cuts

ARSO ZW HS 1246:2023

Bovine (veal) meat – Carcasses and cuts

ARSO ZW HS 1247:2023

Caprine (goat) meat – Carcasses and cuts

ARSO ZW HS 1250:2023

Rabbit meat – Carcasses and cuts

ZWS 111:1974

Canned meat products

ZWS 265:1993

Open pack meat products

ZWS 706:2001

Canned ox tongue in gelatine and stewed steak in gravy

ZWS 720:2003

Meat and meat products – Determination of nitrates and nitrites – Xylenol method

ZWS 721:2001

Meat and meat products – Determination of nitrogen and protein – Block digestion method

ZWS ISO 1442:1998

Meat and meat products – Determination of moisture content

ZWS ISO 1443:1998

Meat and meat products – Determination of total fat content

ZWS ISO 1841:1998

Meat and meat products – Determination of chloride content

ZWS ISO 2294:1998

Meat and meat products – Determination of total phosphorus content (reference method)

ZWS ISO 5554:1998

Meat and meat products – Determination of starch content (reference method)

67.120.20 Poultry and eggs**ARSO ZW HS 1199:2023**

Edible hen eggs-in-shell

ARSO ZW HS 1200:2023

Eggs-in-shell for processing – Specification

ARSO ZW HS 1203:2023
Hen egg products — Specification

ARSO ZW HS 1205:2023
Egg powder

ARSO ZW HS 1216:2023
Chicken essence

ARSO ZW HS 1217:2023
Ante-mortem and post-mortem inspection of poultry

ARSO ZW HS 1218:2023
Handling, processing, quality evaluation, storage, and transportation of poultry and poultry products

ARSO ZW HS 1224:2023
Chicken meat – Carcasses and cuts

ARSO ZW HS 1226:2023
Duck meat – Carcasses and cuts

ARSO ZW HS 1242:2023
Goose meat – Carcasses and cuts

COMESA ZWS HS 640:2005
Processed meat and poultry products

67.120.30 Fish and fishery products

SADC ZW HS 80:2017
Farmed tilapia (bream)

SADC ZW HS 87:2017
Crackers from marine and fresh fish, crustacean and molluscan shellfish

SADC ZW HS 81:2017
Fresh and frozen whole fin fish

SADC ZW HS 83:2017
General standards for quick frozen fish fillets

SADC ZW HS 78:2017
Canned sardines and sardine –type products

ZWS 759:2001
Dried-salted fish

ZWS ARS HS 82:2017
Fresh and Chilled Fish

ZWS ARS HS 84:2017
Smoked Finfish, Smoke-Flavored Finfish and Smoke-Dried Finfish

ZWS ARS HS 86:2017
Fish Sausages

ZWS ARS HS 88:2017
Good Aquaculture Practices – Bream Farm

COMESA ZWS HS 412:2004
Quick frozen fish fillets

COMESA ZWS HS 413:2004
Quick frozen sticks (fish fingers), fish portions and fish fillets – Breaded or in batter

COMESA ZWS HS 415:2004
Quick frozen blocks of fish fillets, minced fish flesh and mixtures of fillets and minced fish flesh

COMESA ZWS HS 416:2004
Quick frozen shrimps and prawns

COMESA ZWS HS 419:2004
Canned tuna and bonito

SADC ZWS HS 911:2003
Frozen lobster and frozen lobster products

SADC ZWS HS 912:2003
Frozen shrimps (prawns) langoustines and crabs

67.140.10 Tea

ZWS ISO 3103:2003
Tea – Preparation of liquor for use in sensory tests

ZWS ISO 3720:2003
Tea – Definitions and basic requirements

ZWS ISO 1572:2003
Tea – Preparation of ground sample of unknown dry matter content

ZWS ISO 1573:2003
Tea – determination of loss in mass at 103^o C

ZWS ISO 1575:2003
Tea – Determination of total ash

ZWS ISO 1576:2003
Tea – Determination of water-soluble ash and water-insoluble ash

ZWS ISO 1577:2003
Tea – Determination of acid insoluble ash

ZWS ISO 1578:2003
Tea – Determination of alkalinity of water – soluble ash

ZWS ISO 1839:2003
Tea – Sampling

ZWS ISO 6078:2003
Black tea – vocabulary

ZWS ISO 6079:2003
Instant tea in solid form

ZWS ISO 6770:2003
Instant tea – Determination of free-flow and compacted bulk densities

ZWS ISO 7513:2003
Instant tea in solid form – Determination of moisture content (loss in mass at 103 C

ZWS ISO 7514:2003
Instant tea in solid form – Determination of total ash

ZWS ISO 7516:2003
Instant tea in solid form – Sampling

ZWS ISO 9768:2003
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ZWS ISO 10727:2003
Tea and instant tea in solid form – Determination of caffeine content – Method using high performance liquid chromatography

ZWS ISO 11286:2003
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ZWS ISO 15598:2003

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67.160.20 Non-alcoholic beverages**ZWS 1069:1994**

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67.180 Sugar, sugar products. Starch**67.180.10 Sugar and sugar products****ZWS 394:1993**

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Refined sugar – Determination of polarization by polarimetry

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67.220 Spices and condiments, food additives**ZWS 888:1972**

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67.220.10 Spices and condiments**ZWS 152:1975**

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71.040.10 Chemical laboratories, laboratory equipment

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71.100.20 Gases for industrial application

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71.100.35 Chemicals for industrial and domestic disinfection purposes

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71.100.40 Surface active agents

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ZWS 778:2001
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ZWS ISO 607:1980
Surface active agents and detergents – methods of sample division

ZWS ISO 697:1981
Surface active agents — Washing powders — Determination of apparent density — Method by measuring the mass of a given volume

ZWS ISO 862:1984
Surface active agents – vocabulary

ZWS ISO 4198:1984
Surface active agents – Detergents for washing fabrics – guide for comparative testing of performance

ZWS ISO 4312:1989
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ZWS ISO 4319:1977
Surface active agents - Detergents for washing fabrics - Guide for comparative testing of performance

ZWS ISO 6835:1981
Surface active agents – Washing Powders – Determination of total boron content – Titrimetric Method

ZWS ISO 7535:1984
Surface active agents — Detergents for domestic machine dishwashing — Guide for comparative testing of performance

ZWS ISO 8212:1986
Soaps and detergents — Techniques of sampling during Manufacture

ZWS ISO 8214:1985
Surface active agents - Washing powders - Determination of inorganic sulfates - Gravimetric method

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Surface active agents — Washing powders — Determination of total silica content — Gravimetric method

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Surface active agents — Microbiology — Microbiological test methods for liquid hand dishwashing

71.100.50 Wood processing chemicals

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71.100.70 Cosmetics

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75.120 Hydraulic fluids

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Petroleum products – Determination of colour – Lovibond tintometer method

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75.160.20 Liquid fuels

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77.040.10 Mechanical testing of metals

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77.080 Ferrous metals

77.080.01 Ferrous metals in general

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77.080.20 Steels

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77.120 Non-ferrous metals

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77.140.01 Iron and steel products in general

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77.140.15 Steels for reinforcement of concrete

COMESA ZWS HS ISO 10144:2007

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77.140.20 Stainless steels

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77.140.50 Flat steel products and semi-products

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Cold-reduced carbon steel sheet according to hardness requirements

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77.140.60 Steel bars and rods

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77.140.80 Iron and steel castings

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79.020 Wood technology processes

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Broadleaved sawn timber – nominal sizes

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Sawn timber of broadleaved species – Defects – Measurement

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Sawn timber of broadleaved species – Defects – Terms and Definitions

COMESA ZWS HS ISO 2301:2008

Sawn timber of broadleaved species – Defects – Measurement

COMESA ZWS HS ISO 3129:2008

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81.040.20 Glass in building**ZWS 423:2005**

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81.080 Refractories/ Bricks**ZWS 190:1997**

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Refractory bricks – Determination of the pyrometric cone equivalent (refractoriness)

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Shaped refractory bricks – Determination of cold crushing strength

83 Rubber and plastics industries**83.060 Rubber****ZWS ISO 188:2008**

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Plastics – determination of environmental stress cracking (ESC) – Constant-tensile-stress method

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83.160 Road vehicle tyres**ZWS 150:1975**

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SADC ZWS HS 318:2003

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Uniform provisions concerning the approval of pneumatic tyres for motor vehicles and their trailers

83.160.10 Road vehicle tyres**SADC ZW HS 979:2014**

Uniform provisions concerning the approval of retro-reflecting devices for power driven vehicles and their trailers

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Ceramic floor and wall tiles – Determination of water absorption

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85.060 Paper and board

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Paper – Determination of bursting strength

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Paper and board – Determination of thickness and apparent bulk density

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ZWS ISO 186: 1999
Paper and board – Sampling to determine average quality

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87.040 Paints and varnishes

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