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GENERAL NOTICE NO. 28

## MALAWI BUREAU OF STANDARDS ACT, 2012

(Act No. 14 of 2012)

## Malawi Bureau of Standards

## (Malawi Standards) (Declaration) Notice, 2015

IN EXERCISE of the powers conferred by section 27(1) of the Malawi Bureau of Standards Act, 2012, the Board of the Malawi Bureau of Standards declares the Standards in the Schedule to be Malawi Standards—

## SCHEDULE

Column 1 Malawi Standard Number	Column 2 Title of the standard	Column 3 Scope (Description) of the standard
MS 3:2004	Unplasticized polyvinyl chloride, (uPVC) sewer and drain pipes and pipe fittings-Specification	Covers two duties (normal and heavy) of unplasticized polyvinyl chloride (uPVC) pipes of nominal sizes 110-630 mm and one duty of uPCV pipe fittings of nominal sizes 110 mm and 160 mm, intended for underground non-pressure applications in the construction of sewers and drains where temperatures continuously in excess of 60 degrees Celsius are not encountered.
MS 4:1993	Unplasticized polyvinyl chloride (uPVC) type 1, pressure pipes and fittings (for cold water services)-Specification	Covers unplasticized polyvinyl chloride type 1 pipes and injection moulded fittings intended for cold water services under pressure at ambient temperature not below 25degrees Celsius.
MS 5:1993	Unplasticized polyvinyl chloride (uPVC) pipes and pipe fittings for use above ground in drainage installations-Specification	Covers unplasticized polyvinyl chloride (uPVC) pipes and pipe fittings intended for above-ground non-pressure applications (such as soil water, waste water and ventilating pipes) where continuous temperatures in excess of 60 degrees Celsius are not encountered. Five nominal sizes of pipes and pipe fittings, ranging from 40 mm to 160 mm, are specified, all of which may be designed for either rubber ring type or adhesive type jointing.
MS 6:1994	Burnt clay bricks-Specification	Covers bricks made from clay, brick-earth or shale, and hard ened by firing.
MS 7:1980	Unplasticized polyvinyl chloride (uPVC) pipes installation-Code practice	Presents the comparative physical, chemical, and mechanical properties of unplasticized polyvinyl chloride pipes in common use, to provide guidance in their selection for applications and to define sound practice in fabrication and installation of such pipe work.
MS 9: 2011	Plugs, socket outlets and socket outlet adaptors-Specification	Covers three-pin plugs, socket outlets and socket outlet adaptors for use at nominal statutory supply voltages to earth and for currents not exceeding 15 amperes, and intended for use in household and similar purposes.
MS 12:1981	Vinegar-Methods of test	Specifies methods of test for vinegar intended for use as condiments.
MS 18:2010	Carbonated soft drinks-Specification	Specifies requirements for carbonated soft drinks. The standard does not cover requirements for fruit juices, fruit flavoured drinks and comminuted fruit drinks.



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
MS 19:2001	Labelling of prepacked foods-General standard	Covers the general requirements for labeling of all pre-packed foods to be offered as such to the consumer. Specific requirements for different foods are contained in respective food standards.
MS 21:2002	Food and food processing units-Code of hygienic conditions	Provides a basis for establishing code of hygienic practice, which will ensure uniformity in the hygienic handling and maintaining of commodities and processing units.
MS 22:2010	Carbonated soft drinks-Methods of test	Specifies methods of test for carbonated soft drinks.
MS 23:1984	Processed fruits and vegetables-Methods of test	Prescribes the methods of sampling and test for processed fruits and vegetables.
MS 29:2001	Cement-Specification	Defines and gives the specifications of twenty seven distinct common cement products 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 six strength classes.
MS 30:2011	Fortified wheat flour	Applies to fortified wheat flour for direct human consumption prepared from common wheat, <i>Triticum aestivum</i> L, or club wheat, <i>Triticum compactum</i> Host, or mixtures thereof, which is prepackaged ready for sale to the consumer or destined for use in other food products.
MS 32:1998	Maize grain-Specification	Applies to maize grain for direct human consumption, i.e. ready for its intended use as human food, presented in package, or sold loose from the package directly to the consumer. The standard specifies the requirements for whole grain, shelled dent maize and/or shelled flint maize or their hybrids. It does not apply to processed maize.
MS 34:2011	Fortified maize flour ( <i>Ufa</i> )-Specification	Prescribes requirements and methods of sampling and analysis for fortified maize flour intended for human consumption
MS 36: 2012	Wood adhesives - Terminology and classification	Covers the definition of terms relating to adhesives for wood and the classification of adhesives for wood according to their inherent properties.
MS 37:2002	Preservative-treated timber-Specification	Specifies requirements of treated timber (other than the method of treatment) for preservative-treated timber and timber products (other than composite board products and timber products) at various levels of preservative treatment that are considered to be acceptable for a range of hazard conditions.
MS 38:1995	Unplasticized polyvinyl chloride (uPVC) rigid conduit and fittings for use in electrical installations-Methods of test	Outlines methods of test for assessing compliance of uPVC rigid conduit and fittings for electrical installations with relevant performance requirements.
MS 40:2000	Detergent skin cleansers-Specification	Covers two types of detergent skin cleansers for personal hygiene that are suitable for use in detergent dispensers.
MS 42:2003	Bathing bars - Specification	Prescribes requirements and methods of sampling and test for bathing bars.
MS 43:2003	Black tea-Definition and basic requirements	Specifies the parts of a named plant that are suitable for making black tea for consumption as a beverage and the chemical requirements for black tea that are used to indicate that the tea from that source has been produced in accordance with acceptable practice.
MS 44:2004	Timber, the preservative treatment-Code of practice	Covers the classification of timber preservatives, hazard conditions for timber, the solvents used for timber preservatives, the preparation of timber for treatment and the various treatment processes for timber. Recommendations relating to the handling and safety of preservative-treated timber are also given.



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MS 45:2001	Lubricating grease-Specification	Covers the performance requirements of four classes of lubricating grease namely, industrial non-extreme pressure, industrial high performance extreme pressure, automotive non-extreme pressure and automotive multipurpose-extreme pressure, each in four consistency grades, and all of which can contain suspended solid lubricants.
MS 46:1996	Adhesives for the laminating and finger-jointing of timber for furniture and joinery, phenolic and aminoplastic resin -Specification	Covers the chemical, physical and performance requirements for three exposure classes of resin adhesives for wood, supplied in liquid or powder form, and based on the chemical reaction with formaldehyde of melamine, urea, melamine-urea compounds, or phenolic compounds.
MS 48:2006	Carbolic soap-Specification	Specifies requirements for carbolic soap for personal hygiene, which contains additions of phenolic substances such as cresylic acid.
MS 49:2006	Toilet soap-Specification	Specifies the requirements for toilet soap for personal hygiene. It does not provide for speciality soaps, such as medicated soaps.
MS 50:1998	Beer-Specification	Prescribes the requirements for beer.
MS 51:2011	Fortified edible oils-Specification	Outlines requirements for fortified refined edible oils derived from oil seeds and oil-bearing fruits. These oils are suitable for use as cooking oils and salad oils.  The standard excludes the use of crude oils i.e. crude oils shall not be sold for human consumption.
MS 52:2000	Liquid toilet soap-Specification	Prescribes the requirements of liquid toilet soap for personal hygiene.
MS 53:2001	Chilli sauce-Specification	Prescribes requirements for chilli sauce. The chilli sauce shall be manufactured from chillies ( <i>Capsicum frutescens</i> L.) or other small fruits of the genus <i>Capsicum</i> .
MS 55:1990	Wheat grain-Specification	Specifies requirements, methods of sampling and analysis for wheat belonging to the species <i>Triticum aestivum</i> and <i>T. durum</i> , which are intended for human consumption.
MS 57:1987	Pineapple juice-Specification	Specifies requirements for pineapple juice.
MS 59:2002	Solid waste-handling, transportation and disposal-Code of practice	Prescribes the recommended procedure for the handling, transportation and disposal of solid waste to ensure safety of operatives, passers-by, animals and the rest of the environment.
MS 60:2006	Toilet and laundry soap-Methods of analysis	Describes the methods of test for soaps and detergents.
MS 65:2003	Soap powder or chips-Specification	Covers four types of soap for use in laundries. It does not cover non-soapy detergents.
MS 66:2003	Antibacterial liquid toilet soap-Specification	Covers two types of Antibacterial liquid toilet soap for medical use that are suitable for use in liquid dispensers.
MS 71:2000	Concrete building blocks-Specification	Applies to solid, hollow or cellular concrete building blocks including aerated blocks.
MS 73:1988	Raw cow's milk-Specification	Specifies the requirements for raw milk obtained from cows.
MS 106:2005	Welding helmets, shields, goggles and welding spectacles-Specification	Specifies the requirements for the materials, design and manufacture of welding helmets, hand shields, goggles and welding spectacles that are intended to be used with protective filters, filter covers and backing lenses that comply with the appropriate transmittance requirements. The standard does not cover eye protection devices for use in welding with lasers.
MS 113:2011	Above ground non-pressurized horizon-	Specifies the requirements for the manufacture and testing of



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
	tal cylindrical steel storage tanks for petroleum products-Specification	non-pressurised horizontal cylindrical steel storage tanks for petroleum products.
MS 114: 2011	Underground non-pressurized horizontal cylindrical storage tanks for petroleum products-Specification	Specifies the requirements for the manufacture and testing of non-pressurised horizontal cylindrical steel storage tanks for petroleum products.
MS 115:2002	Frozen fish-Specification	Outlines requirements for fresh, whole fish that is frozen and glazed.
MS 116:2002	Salted fish-Specification	Specifies requirements for all species of fish, which are wet salted, sold while fresh or dry.
MS 117:2002	Smoked fish-Specification	Specifies requirements for smoked fish and fishery products.
MS 118:2007	Canned fish, canned fish products and canned marine molluscs -Specification	Covers the requirements for the manufacture, production, processing, or treatment and methods of tests for canned fish, canned fish products, and canned mollusks and their methods of tests.
MS 119:2004	Small incinerators-Specification	Specifies requirements for a range of incinerators using fuel gases or electricity. The range of sizes included is based upon the number of test samples which can be destroyed in accordance with the conditions of test prescribed in the Standard.  In general, these appliances are suitable for the destruction of combustible materials such as sanitary towels, bandages, dressings and paper.
MS 121: 2011	Road tank vehicles for petroleum based flammable liquids-Specification	Covers the requirements for tank vehicles for use on public roads, for transportation, at temperatures below their boiling point, of normally stable petroleum-based flammable liquids.
MS 144:2007	Agricultural food products-Determination of crude fibre content-General method	Specifies a conventional method for determination of the crude fibre content of agricultural food products.
MS 155:2000	Solid fuel cook stove-Type I-Specification	Specifies the requirements for the solid fuel cook stoves with a pottery liner intended for cooking.
MS 159:1996	Cooler blocks - Specification	Outlines requirements for raw materials, manufacture and physical properties of cooler blocks.
MS 164:2013	Asparagus- Specification	Applies to shoots of commercial varieties of asparagus grown from <i>Asparagus officinalis</i> L, of the <i>Liliaceae</i> family, to be supplied fresh to the consumer, after preparation and packaging. Asparagus for industrial processing is excluded.
MS 167:1988	Fertilizers and soil conditioners-Vocabulary	Defines terms relating to fertilizers and soil conditioners.
MS 169:1993	Sampling of chemical products for industrial use-Safety in sampling	Gives recommendations relating to safety in the sampling of chemical products for industrial use.
MS 170:2012	Unleaded petrol-Specification	Specifies requirements for unleaded petrol retailed in the country for use as fuel in petrol engine vehicles.
MS 172-1:2011	The petroleum industry Part 1: Storage and distribution of petroleum products in above-ground bulk installations	Covers the layout and design of petroleum bulk depots, and the installation of equipment of the types 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).
MS 172-2: 2011	The petroleum industry Part 2: Electrical and other installations in the distribution and marketing sector	Covers the recommended safe practices in the design, construction, installation and maintenance of electrical, earthing and bonding systems intended to be used in flammable and combustible liquid storage, pumping, distribution and marketing facilities.
MS 172-3:2011	The petroleum industry Part 3: The installation of underground	Covers provisions for the installation of underground storage tanks of individual capacity not exceeding 85,000 litres,



<i>Column 1</i> <i>Malawi Standard</i> <i>Number</i>	<i>Column 2</i> <i>Title of the standard</i>	<i>Column 3</i> <i>Scope (Description) of the standard</i>
	storage tanks, pumps/dispensers and pipe work at service stations and consumer installations-Code of practice	pumps/dispensers and pipe work at service stations and consumer installations.
MS 173:2005	Acoustics-Noise Pollution-Tolerance limits	Prescribes maximum allowable noise limits in industrial, commercial, residential and silence zone areas. It also lays down sound level requirements for indoors of non-industrial buildings.
MS 175:1987	Burnt clay bricks-Code of practice for moulding and firing	Lays down the procedures to be followed in the selection of raw materials, moulding and firing of hand-made burnt clay bricks.
MS 177:2010	Fruit squashes-Specification	Specifies the requirements for fruit squashes.
MS 179:2010	Rice - Specification	Specifies the requirements for rice ( <i>Oryza sativa</i> L.). It is applicable to husked rice and milled rice, parboiled or not, intended for direct human consumption. It does not apply to other products derived from rice or to glutinous rice.
MS 186:1988	Ballpoint Pens-Specification	Specifies the requirements for single-cartridge ballpoint pens, replacement refills and direct-fill ballpoint pens, which have black, blue, green or red ink.
MS 187:1999	School chalk-Specification	Prescribes the requirements, methods of sampling and test for white and coloured chalks made from gypsum, calcium sulphate hemihydrate ( $\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$ ), intended for writing on chalkboards. It does not apply to calcium carbonate type of chalks.
MS 188:2008	Edible salt-Specification	Specifies the requirements and methods of test for edible salt meant for human and livestock consumption. It applies to salt used as an ingredient of food both for direct sale to the consumer and for food manufacture. It applies also to salt used as a carrier of food additives and/or nutrients.
MS 189:2009	Cheese-Specification	Applies to cheese, intended for direct consumption or further processing.
MS 192:2009	Butter-Specification	Specifies requirements and methods of sampling and test for butter intended for direct consumption or for further processing.
MS 194:2009	Dairy-Ice and dairy ice cream-Specification	Specifies the requirements, methods of sampling and test for dairy ices and dairy ice cream.
MS 198:1993	Cream-Determination of fat content	The standard describes a reference method for the determination of fat content of cream.
MS 202:2013	Fortified white sugar-Specification	Prescribes the requirements for white sugar derived from sugarcane or beet root intended for human consumption without further processing. The Standard also provides fortification requirements which only apply to white sugar sold directly to the final consumer, and are optional to white sugar used as ingredients in other food stuffs.
MS 209:2013	Fortified raw sugar-Specification	Prescribes the requirements for raw sugar derived from sugarcane or beet root intended for human consumption without further processing. The Standard also provides fortification requirements which only apply to raw sugar sold directly to the final consumer, and are optional to raw sugar used as ingredients in other food stuffs.
MS 211: 2013	Liquid carbon dioxide, industrial-Specification	Specifies two types of carbon dioxide for industrial use. Type 1 is suitable for industrial non-food applications, e.g. purging, inerting, life raft inflation. Type 2 is a higher quality grade which is also suitable for industrial food applications, e.g. beverages, gas packaging, food freezing and chilling. The



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		standard does not apply to carbon dioxide for medical use, fire fighting or welding.
MS 224:1990	Pasta products-Specification	Prescribes the requirements, methods of sampling and test for pasta products.
MS 225: 2013	Fat spreads and blended spreads-Specification	Applies to fat products, containing at least 10% and not more than 90% fat, intended primarily for use as spreads. The Standard does not apply to fat spreads derived exclusively from milk and/or milk products to which only other substances necessary for their manufacture have been added. It only includes margarine and products used for similar purposes and exclude products with a fat content of less than two thirds of the dry matter (excluding salt). Butter and dairy spreads are not covered by this Standard.
MS 227:1990	Sugar confectionery-Specification	Specifies the requirements and methods of sampling and test for high boiled sweets and low boiled toffees and caramels.
MS 228:1990	Macadamia kernels-Specification	Specifies requirements and methods of test for shelled macadamia nuts belonging to the species <i>Macadamia tetraphylla</i> and <i>Macadamia integerifolia</i> and/or their hybrids.
MS 230:1990	Tomatoes-Specification	Prescribes the requirements for tomatoes, <i>Lycopersicon esculentum</i> Mill.
MS 231:1990	Fresh pineapples-Specification	Specifies the requirements for fresh pineapples ( <i>Ananas comosus</i> L). It also stipulates requirements for handling, grading, packing and marking.
MS 234:1993	Bun-Specification	Specifies the requirements and methods of test and sampling for bun.
MS 236-1:2011	The handling, storage, distribution and maintenance of liquefied petroleum gas (LPG) in domestic, commercial, and industrial installations Part 1: Installations involving gas storage containers of individual water capacity not exceeding 500 litres and a combined water capacity not exceeding 3 000 litres per installation	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 3 000 litres.
MS 236-2:2011	The handling, storage, distribution and maintenance of liquefied petroleum gas (LPG) in domestic, commercial, and industrial installations Part 2: Installations in mobile units and small non permanent buildings	Contains recommendations for the materials and methods of construction and assembly of installations for the storage and distribution of LPG in mobile units and small non-permanent buildings. It also contains recommendations for containers, appliances, piping, fittings and other components, and the maintenance, inspection and testing of installations.
MS 236-3:2011	The handling, storage, distribution and maintenance of liquefied petroleum gas (LPG) in domestic, commercial, and industrial installations Part 3: Installations involving storage vessels of individual water capacity exceeding 500 litres	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 fittings up to the outlet of the first pressure reduction stage in the line.
MS 236-4:2011	The handling, storage, distribution and maintenance of liquefied petroleum gas (LPG) in domestic, commercial, and industrial installations Part 4: Transportation in bulk by road	Contains recommendations for the design, construction, inspection, fittings and filling ratio of tanks used in the transportation of LPG in bulk by road, the design of vehicles and ancillary equipment, and operating practice. Fire precautions are also covered.
MS 236-6:2011	The handling, storage, distribution and maintenance of liquefied petroleum gas (LPG) in domestic, commercial, and	Covers the safe use of liquefied petroleum gas and compressed natural gas as fuels for internal combustion engines and for the safe operation of equipment manufactured



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
	industrial installations Part 6: The application of liquefied petroleum and compressed natural gases as engine fuels for internal combustion engines.	for conversions.
MS 236-7:2011	The handling, storage, distribution and maintenance of liquefied petroleum gas (LPG) in domestic, commercial, and industrial installations Part 7: Storage and filling premises for refillable LPG containers of gas capacity not exceeding 9 kg and the storage of individual gas containers not exceeding 48 kg	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 9 kg, including the storage of individual gas containers 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.
MS 236-8: 2011	The handling, storage, distribution and maintenance of liquefied petroleum gas (LPG) in domestic, commercial, and industrial installations Part 8: The fuelling of fork lift trucks and other LPG operated vehicles	Covers recommendations for the equipment used in filling LP gas containers on fork lift trucks and other LP gas operated vehicles from fixed storage, and for the siting and maintenance of the equipment. It also covers safety pre-cautions and fuelling procedure and is intended to supplement MS 236: Part 6.
DMS 236-10:2011	The handling, storage, distribution and maintenance of liquefied petroleum gas (LPG) in domestic, commercial, and industrial installations Part 10: Mobile filling stations for refillable LPG containers of capacity not exceeding 9 kg	Gives recommendations in respect of the location and operation of mobile filling stations suitable for the filling of refillable liquefied petroleum gas containers. It also gives certain design features in respect of the compliance of the trailer with the requirements of the road ordinance and general safety.
MS 237:2008	Food additives-General standard	Specifies food additives permitted for use in food The Standard sets forth the conditions under which food additives may be used in all foods, whether or not they have previously been standardized by the Codex Alimentarius Commission.
MS 245:1991	Bean-Specification	Specifies requirements for shelled beans, <i>Phaseolus vulgaris</i> L. suitable for human consumption.
MS 248:1991	Orange juice-Specification	Specifies requirements for orange juice obtained from oranges ( <i>Citrus sinensis</i> (L) Osbeck).
MS 249:2012	Fertilizers-Marking-Presentations and declarations	Specifies the procedure for marking containers or labels for fertilizers, where national legislation permits. This Standard is applicable to all fertilizers in containers and is designed to make easy compliance of the fertilizer industry with MS 722.
MS 251:2002	Safety wood matches-Specification	Specifies functional requirements for safety wood matches in boxes. It defines the performance characteristics of the splints, matches head composition, match box and friction surface.
MS 252:2002	Safety wood matches-Methods of test	Describes the methods of test for safety wood matches in boxes. It does not cover book matches.
MS 253:2002	Synthetic detergent powders for household use-Specification	The Standard specifies requirements for synthetic detergent powders for household use based predominantly on the use of alkyl aryl sulphonates. It does not cover synthetic powders for use with washing machines.
MS 254:2003	Synthetic detergent powders for household use-Methods of test	Specifies the requirements for methods of tests for synthetic detergent powders for household use.
MS 255:1998	Compound fertilizers-Specification	Specifies requirements, sampling and tests methods for compound fertilizers.
MS 258:2000	Fertilizers-Ammonium. sulphate-Specification	Specifies requirements and methods of test for ammonium sulphate fertilizers, also known as sulphate of ammonia



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
MS 267:2004	Calcium carbonate (precipitated) for cosmetic industry-Specification	Prescribes the requirements, methods of sampling and tests for precipitated calcium carbonate for the cosmetic industry.
MS 272:2000	Fertilizers-Calcium ammonium nitrate-Specification	Specifies requirements and methods of test for calcium ammonium nitrate fertilizer (CAN).
MS 289-1:1991	Animal feeds and feeding stuffs	Specifies methods of sampling animal feeding stuffs, including fish feed, for quality control for commercial, technical and legal purposes.
MS 289-4:1991	Animal feeds and feeding stuffs - methods of test-microbiological method	Prescribes the microbiological methods for testing animal feeds and feeding stuffs.
MS 298:2000	Guava nectar-Specification	Prescribes requirements for guava nectar. The nectar shall be obtained from guavas ( <i>Psidium guajavas</i> ).
MS 300:2004	General guidelines for establishing a hazard analysis critical control point (HACCP) system in food establishments -Code of practice	The standard lays down the basic requirements for the implementation of the hazard analysis critical control point (HACCP) system in a food establishment to ensure food safety. It also provides general guidance for its practical operation.
MS 302:2008	Contaminants and toxins in foods-General Standard	This Standard contains the main principles and procedures which are used and recommended by the Codex Alimentarius in dealing with contaminants and toxins in foods and feeds, and lists the maximum levels of contaminants and natural toxicants in foods and feeds which are recommended by the CAC to be applied to commodities moving in international trade.
MS 307:2002	Natural latex rubber condoms-Requirements and test methods	Specifies requirements for male condoms from compounded natural rubber latex, supplied to consumers and designed for contraceptive purposes and to assist in the prevention of sexually transmitted diseases.
MS 308:2002	Reusable rubber contraceptive diaphragms-Specification	Specifies requirements and methods of test for reusable rubber diaphragms supplied in consumer packages for contraceptive use and for protection against sexually transmitted diseases. The standard does not cover other vaginal contraceptives barriers, such as those known cervical caps, vaginal sponges and vaginal sheaths.
MS 315:2003	Fabric linings for footwear-Specification	Covers the requirements for 15 types of woven cotton fabric suitable for use as linings for footwear.
MS 319:2006	Steel metal door frames-Specification	Covers sizes and general requirements for door frames (with or without fan light frames) fabricated from mild steel sheet, for walking through doors.
MS 320:2006	Windows and doors made from rolled mild steel sections-Specification	Covers windows, doors, sidelights and fanlights fabricated from rolled mild steel sections, complete with fittings and ancillary components.
MS 322:2007	Mild steel nails-Specification	Covers the requirements for wire and at mild steel nails and tacks for general use and eight nails for pneumatic gun nailers.
MS 324:2012	Fertilizers-Determination of bulk density (loose)	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. The method is not suitable for materials which contain a large proportion of particles exceeding 5 mm in diameter.
MS 325:2012	Fertilizers-Determination of bulk density (tapped)	Specifies the following two methods for the determination of the bulk density (tapped) of solid fertilizers: (a) the machine-tapping method (method 1); and (b) the hand-tapping method (method 2). These methods are applicable to dry fertilizers only. Neither



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
		method is suitable for materials which contain a large proportion of particles exceeding 5 mm in diameter. Method 2 is applicable only to spherical granules and to prills. It is not applicable to sharp-edged grains.
MS 326:2004	Incinerators-Standard performance requirements for incineration plant for the destruction of hospital waste-Specification	Specifies the standard performance requirements for incineration plant, assisted by auxiliary fuel if required, suitable for the destruction of hospital waste.
MS 328:2009	Locks, latches and associated furniture for doors (domestic type)-Specification	This specification covers the requirements for the materials, essential dimensions, finish, and performance for mortice locks and latches, and the associated lock and latch furniture.
MS 346:2005	Incinerators-Methods of specifying purchasers' requirements for incineration plant for the destruction of hospital waste	The standard details a method for specifying purchaser's requirements for incinerators for the destruction of hospital waste manufactured to specifiers' requirements. It does not cover other items of plant such as charging machines, chimneys, flues, etc.
MS 349:2002	Edible cassava flour-Specification	Applies to cassava flour intended for human consumption.
MS 351:2000	Fertilizers, urea-Specification	Specifies the requirements for urea fertilizer.
MS 353:2000	Fertilizers-ammonium nitrate-Specification	Specifies requirements for Ammonium nitrate fertilizers ( $\text{NH}_4\text{NO}_3$ ), also called nitrate of ammonia.
MS 354:2000	Fertilizers, muriate of potash	Specifies requirements for muriate of potash fertilizer, also called potassium chloride (KCl).
MS 355:2000	Fertilisers, sulphate of potash	Specifies requirements and methods of test for sulphate of potash fertilizer, also called potassium sulphate ( $\text{K}_2\text{SO}_4$ ).
MS 356:2004	Design, specification, installation and commissioning of incineration plant for the destruction of hospital waste-Code of practice	Gives guidance on the design, specification, installation and commissioning of incineration plant for the destruction of hospital waste. It also gives information on training of staff and maintenance of plant, on collection and transportation of hospital waste.
MS 357: 1998	Threads for footwear-Methods of test	Covers methods of test for threads for footwear.
MS 359:2004	Incinerators-Performance of incineration plant for the destruction of hospital waste-Methods of test and calculation	Describes tests to be carried out for the performance of the incineration plant.
MS 360:2002	Paper-Determination of bursting strength	Specifies a method for measuring bursting strength of paper submitted to increasing hydraulic pressure. It is applicable to paper having bursting strengths within the range 70 kPa to 1 400 kPa.
MS 363-1:2002	Packaging Sacks-Drop test Part 1: Paper sack	Specifies a method of vertical impact testing on a filled paper sack by dropping. It may be performed either as a single test to investigate the effects of vertical impact or as part of a sequence of tests designed to measure the ability of a sack to withstand a distribution system that includes a vertical impact hazard.
MS 363-2:2002	Packaging sacks-Drop test Part 2: Sacks made from thermoplastic flexible film	Specifies a method of vertical impact testing on a filled sack made from thermoplastic flexible film by dropping.
MS 364-1:2002	Paper and board-Determination of tensile strength Part 1: Constant rate of loading method	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 (constant rate of loading) which causes failure of the test piece in a mean time of $20 \pm 5$ s. It also specifies methods for calculating the breaking length and tensile index.
MS 364-2:2002	Paper and board-Determination of tensile strength	Specifies a method of measuring the tensile strength, stretch at break, and the tensile energy absorption of paper and board



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
	Part 2: Constant rate of elongation method	using a test instrument operating with a constant rate of elongation. It also specifies methods for calculating the tensile energy absorption index and the breaking length.
MS 366:2010	Honey-Specification	Specifies requirements for all honeys produced by honey bees and covers all styles of honey presentations, which are processed and ultimately intended for direct consumption. It also applies to honey used as an ingredient in other foods and honey, which is packed for sale in bulk containers, which may be repacked into retail packs.
MS 367:2010	Wax polish-Methods of test	This Standard covers methods of test for wax polish.
MS 374-1:2004	Black polyethylene pipes for the conveyance of liquids-Specification Part 1: Low Density Polyethylene Pressure Pipes	Covers two types of plain unthreaded, black low density polyethylene (LDPE) pipes intended for applications above and below ground for the conveyance of water under pressure when prolonged exposure to elevated temperatures (above 40 degrees Celsius) is not likely to be encountered.
MS 374-2:2004	Black polyethylene pipes for the conveyance of liquids - Specification Part 2: High Density Polyethylene Pressure Pipes	Covers two types of plain unthreaded, black high density polyethylene (HDPE) pipes intended for applications above and below ground for the conveyance of water under pressure when prolonged exposure to elevated temperatures (above 40 degrees Celsius) is not likely to be encountered.
MS 374-3:2004	Black polyethylene pipes for the conveyance of liquids-Specification Part 3: High Density Polyethylene PE 80 pressure pipes	This part of MS 374 covers plain, unthreaded, high-density black polyethylene (PE-HD) pipes (including pipes with integral fittings) that have a design stress rating of 6.3 MPa. They are intended for applications above and below ground, for the drainage and conveyance of water under pressure where temperatures of up to 40 degrees Celsius are encountered.
MS 400:1995	Pigeon peas-Specification	Specifies requirements for shelled dry peas, ( <i>Cajanus cajan</i> L) intended for human consumption.
MS 410:1994	Black tea-Methods of test	Specifies methods of test for black tea.
MS 412-1:1994	Black tea-Methods of sampling Part 1: Sampling from large containers	Applies to sampling of black tea from large containers, i.e containing more than 20 kg of loose tea, for example tea chests.
MS 412-2:1994	Black tea-Methods of sampling Part 2: Sampling from small containers	Applies to sampling of black tea from small containers, i.e those containing not more than 1 kg of loose tea.
MS 413:2008	Fruit juices-Methods of test	Prescribes the methods of test for fruit juices.
MS 414-1:2002	Masonry cement-Specification	Specifies requirements for the composition, manufacture, sampling and testing of masonry cement (without air entrainment agents).
MS 417:1995	Meat meal and meat and bone meal-Specification	Prescribes requirements and methods of sampling and test for meat meal and meat and bone meal meant for livestock feeding.
MS 422:1997	Fish meal as livestock feed-Specification	Prescribes requirements for fish meal for livestock feeding.
MS 423:1995	Bone meal as livestock feed-Specification	Prescribes requirements and methods of sampling and test for bone meal to be used as a mineral supplement in livestock feeding.
MS 424:1997	Blood meal as livestock-Specification	Prescribes requirements for blood meal as livestock feed.
MS 425:2013	Sesame seed for the manufacture of oil-Specification	Specifies the requirements, methods of grading, sampling and testing of sesame seed, intended for the manufacture of oil for human consumption.
MS 458:2002	Rubber seals-joint rings for water supply, drainage and sewerage pipelines material-Specification	Specifies requirements for materials used in vulcanized rubber seals for  (a) cold drinking-water supplies (up to 50 degrees Celsius); (b) drainage, sewerage and rainwater systems



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		(continuous flow up to 45 degrees Celsius and intermittent flow up to 95 degrees Celsius).
MS 459:1994	Black tea-vocabulary	Provides a list of terms and definitions, applicable to the techniques of processing and assessing black tea for commerce.
MS 460:2008	Black tea-Preparation of liquor for use in sensory tests	Specifies a method for the preparation of a liquor of tea for use in sensory tests, by means of infusing the leaf.
MS 461:1993	Cashew kernels-Specification (5 P)	Specifies requirements and methods of sampling and test for kernels obtained from cashew nuts ( <i>Anacardium occidentale</i> ).
MS 469:1993	Mosquito coils-Methods of test	Lays down the methods of testing mosquito coils for their physical, chemical and biological efficacy.
MS 470:1993	Hair creams-Specification	Prescribes requirements for hair creams and other oil-based emulsion preparations for the hair. These include water-in-oil and oil-in-water emulsions. It does not cover hair oils, brilliantines and pomades.
MS 471:1993	Hair oils-Specification	Prescribes the requirements for hair oils and other oil-based cosmetic preparations for the hair. This includes hair tonics and hair oil concentrates.
MS 475:1993	Hair shampoo, soap based-Specification	Prescribes the requirements for soap-based hair shampoo. It also applies to shampoo with possible medicinal effect on the skin, but excludes special shampoos that are only meant for neutralizing purposes.
MS 477:1997	Food for infants and children-Code of hygienic practice	Provides a code of hygienic practice for all pre-packed foods intended to be for special use for infants and/or children. It contains the minimum hygienic requirements for the handling (including production, processing, packaging, storage, transportation, distribution and sale) of such foods to ensure a safe, sound and wholesome product.
MS 479:1997	Avocado-Specification	Specifies requirements for fresh avocados to be supplied in export and local specified markets. The standard stipulates requirements for handling, grading and packaging of the produce up to dispatching stage.
MS 484:2008	Metallic materials-Tensile testing at ambient temperature	Specifies the method for tensile testing of metallic materials and defines the mechanical properties which can be determined at ambient temperature.
MS 488:2004	Wooden ceiling and paneling boards-Specification	Covers three grades of profiled boards (planed or planed and sanded) manufactured from hardwood or softwood timber and intended for use in ceilings or paneling.
MS 491: 2011	The manufacture of finger-jointed structural timber-Code of practice	Covers the requirements for the manufacture of finger-jointed structural timber of the species of wood and dimensional range covered by MS 499-Stress graded softwood general structural timber.
MS 492:2012	Plywood and composite board-Specification	Covers requirements for materials, construction, preservative treatment, dimensions and performance of plywood and composite board.
MS 496:2012	Softwood brandering and battens-Specification	Specifies requirements for one grade of timber suitable for use as brandering and battens intended for being fixed against beams and joists in roofs for the attachment of ceilings and for the boxing in of eaves, and for use as supports on roof trusses for the fixing of roofing slates, tiles, wooden shingles and thatch.
MS 498:2008	Illuminating paraffin-Specification	Covers a hydrocarbon fuel suitable for use in wick-fed, pressure vapourizing and other paraffin burning appliances for the purpose of illumination.
MS 502:1995	Softwood furniture timber-Specification	Covers two grades of rough-sawn timber derived from trees



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		of genera of the <i>Coniferae</i> grown in Southern Africa and intended for use in furniture manufacture.
MS 503:1995	Softwood joinery timber-Specification	Covers one grade of rough-sawn timber derived from trees of genera of the <i>Coniferae</i> grown in Malawi and intended for use in joinery work.
MS 509:2010	Galvanized iron sheets-Specification	Specifies requirements for materials, profile and dimensions of galvanised corrugated and troughed iron sheets for roofing, cladding and other general uses.
MS 510:1997	Fish meal-vocabulary	Defines terms relating to fish meal.
MS 511:2011	Animal feeding stuff-Determination of zearaleone content	Specifies a qualitative method for the determination of zearaleone in animal feeding stuffs and, in particular, in maize. This method is for screening purposes only.
MS 512:2009	Animal feeding stuffs-Determination of free and total gossypol	Specifies a method for the determination of the content of free and total gossypol and chemically related substances in animal feeding stuffs.
MS 516:2010	Coffee and its products-Vocabulary	Defines the most commonly used terms relating to coffee and its products.
MS 517:2008	Pulses-Determination of glycosidic hydrocyanic acid	Specifies a method for the determination of glycosidic hydrocyanic acid in pulses.
MS 518-1:2010	Cereals and pulses-Determination of hidden insect infestation Part 1: General Principles	Establishes the general principles of methods of determining hidden insect infestation in cereals and pulses.
MS 518-2:2010	Cereals and pulses-Determination of hidden insect infestation Part 2: Sampling	Specifies methods of sampling cereals and pulses, in bags or in bulk, for the determination of hidden insect infestation. The methods are applicable as a routine to grain in any form of store or vehicle at any level of trade from producer to consumer.
MS 518-3:2010	Cereals and pulses-Determination of hidden insect infestation Part 3: Reference method	Specifies the reference method for determining the nature and number of hidden insects in a sample of cereals or pulses. Its aim is to count all the individuals, at every stage of life, of every insect species that normally feeds and develops within cereals and pulses.
MS 518-4:2010	Cereals and pulses-Determination of hidden insect infestation Part 4: Rapid methods	Specifies five rapid methods for estimating the degree of, or detecting the presence of, hidden insect infestation in a sample of a cereals or pulses.
MS 519:2000	Thobwa powder-Specification	Covers the physical, chemical and microbiological requirements, and methods of sampling and testing for thobwa powder.
MS 520:2000	Electricity appliances for heating liquids-Specification	Specifies constructional and performance requirements for electrical appliances of rated capacity not exceeding 80 litres for heating liquids for household and similar use and intended for operation on a.c. supply voltages not exceeding 250 V to earth and at current ratings not exceeding 16A.
MS 521:2002	CO <sub>2</sub> gas cartridges (steel)-Specification	Specifies the characteristics of refillable, CO <sub>2</sub> gas cartridges (steel) of capacities up to 500 g.
MS 522:2000	Packaging sacks-Methods of sampling empty sacks for testing	Specifies a method of obtaining a representative sample of empty sacks for testing. The Standard is applicable when sampling in order to assess the average quality of a consignment of empty sacks. The method is not suitable to sampling for production.
MS 523:2000	Paper-Determination of tearing strength	Specifies a method for determining the tearing resistance of paper.
MS 524:2003	Paper and board-Determination of bursting strength after immersion in water	Specifies a method for the determination of the wet strength of paper and board by measuring its bursting strength after it has been immersed in water for a specified period.



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MS 526:1997	Vegetable-tanned outersole leather-Specification	Covers outer-sole leather tanned with vegetable tanning materials only.
MS 527:1999	Solar water heaters-Methods of test	Specifies test methods for mechanical qualification, determination of thermal performance and the long term energy output of solar water heaters.
MS 528:2000	PVC-insulated cables for electricity supply-Specification	Specifies requirements dimensions for PVC-insulated cables for operation at nominal voltages up to and including 1900 V to armour or earth and 3300 V between conductors.
MS 529-1:2005	The production of reconditioned tyres Part 1: Definitions	Defines the terms used in the production of reconditioned tyres and includes a diagram illustrating the cross-section of a typical tyre.
MS 529-3:2005	The production of reconditioned tyres Part 3: Repairs	Covers the requirements for repairs of permissible defects in tyres that are to be reconditioned in accordance with the relevant part of the specification. The method of repair, the materials, and the equipment to be used are also covered.
MS 529-4:2005	The production of reconditioned tyres Part 4: Passenger car tyres	Covers the requirements for tyres for passenger cars, station wagons and caravans that are to be reconditioned (by the use of a hot moulding process) by remoulding or retreading or top-capping, and for the methods of reconditioning and the equipment to be used.
MS 529-5:2005	The production of reconditioned tyres Part 5: Light truck cross-ply tyres	Covers the requirements for two classes of cross-ply tyres for light trucks that are to be reconditioned (by the use of a hot, or top-capping), and for the methods of reconditioning and the equipment to be used.
MS 529-6:2005	The production of reconditioned tyres Part 6: Bus and truck cross-ply tyres	Covers the requirements for five classes of cross-ply tyres for buses, trucks and trailers that are to be reconditioned (by the use of a hot moulding process) by retreading or top-capping, and for the methods of reconditioning and the equipment to be used.
MS 529-7:2005	The production of reconditioned tyres Part 7: Tyres reconditioned by the pre-cured process	Covers the reconditioning by the use of a pre-cured tread process, of tyres for passenger cars, station wagons, caravans, light trucks, trucks and buses. Requirements are laid down for the casings, the methods or reconditioning, and the equipment to be used as well as for the finished product.
MS 530:1997	Farm implements-Methods of sampling	Prescribes the recommended procedures for sampling of agricultural equipment and their components.
MS 531:2012	Agricultural liming material-Specification	Prescribes requirements and methods of sampling and test for agricultural liming material (ALM). It covers the various types (or forms) of ALM including limestone (calcitic or dolomitic), dolomite, burnt lime (quicklime), slaked lime (hydrated lime), marl and industrial by-products.
MS 532:1999	Borehole construction-Code of practice	Covers boring method, drilling diameters and depth, borehole cleaning, alignment and verticality, casing and screens for hand pumps installation and headwork's construction, testing and test methods, sampling and record of strata.
MS 534:2005	Disposal of effluents from dairy industry -Code of practice	Covers methods of treatment and disposal of effluents from dairy and allied industries. It is a compilation of sources, nature, volumes and pollution effects of the effluents, ways of waste prevention and methods of their treatment and disposal.
MS 538:2008	Diesel - Specification	Prescribes requirements and methods of sampling and test for diesel fuels suitable for various types of diesel engines.
MS 539: 2002	Industrial effluents-Tolerance limits for discharge into inland surface waters	Lays down the tolerance limits for industrial effluents discharged into inland surface waters.



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MS 541:2005	Infant formula-Specification	Applies to infant formula in liquid or powdered form intended for use, where necessary, as a substitute for human milk in meeting the normal nutritional requirements of infants. It also provides a standard for formulae intended for infants with special nutritional requirements, except for certain provisions which must be modified to meet those special requirements.
MS 542:2008	Sorghum grains-Specification	Provides requirements for sorghum grains for 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 sorghum grains.
MS 544:2010	Whole and decorticated pearl millet grains-Specification	Applies to whole and decorticated pearl millet grains destined for human consumption which is obtained from <i>Pennisetum americanum</i> L.
MS 546:2007	Poultry processing-Code of practice	This Code is concerned with all poultry, poultry carcasses, poultry parts and other edible portions thereof which have not yet been treated in any way to ensure their preservation, except that they have been chilled or frozen and are intended for human consumption, whether by direct sale as such or through further processing. The code applies to all premises in which poultry is slaughtered, packed, or otherwise handled in the course of preparation, and all premises in which poultry parts are processed, packed, or otherwise handled in the course of preparation. It also applies to conditions of transport from all such premises.
MS 549:2001	Milk powder handling-Code of practice	Recommends general hygienic and technological practices for use in the handling (including production, preparation, processing, packaging, transportation and distribution) of milk powder for human consumption to ensure safe, sound and wholesome product.
MS 552:2005	Safety of welding-Code of practice	Establishes the general principles for the protection of persons from injury and illness, and for the protection of property and equipment from damage that can arise from welding processes.
MS 554:1996	Peanut butter - Specification	Covers the requirements, methods of sampling and test for smooth and crunchy textured peanut butter.
MS 555:2004	Glycerine for cosmetic Industry- Methods of test	Lays down methods of sampling and test for glycerine. It describes methods for sampling quantities of glycerine, either crude or refined, for industrial use, in the course of filling, or already contained in drums or in transportable or fixed tanks.
MS 557:2001	Glycerine for cosmetic use-Specification	Specifies requirements for glycerine used as a cosmetic.
MS 560:2004	Natural mineral waters-Specification	Specifies description, treatment, packaging and sampling requirements for natural mineral water intended for human consumption. It does not apply to natural mineral water sold or used for other purposes.
MS 566:1998	Wax shoe polish-Specification	Covers requirements for wax shoe polish of any colour, suitable for general application to leather shoes and goods.
MS 573:2007	Ethanol-Specification	Specifies requirements for four grades of ethanol, i.e. food grade, industrial grade, analytical grade, and fuel grade ethanol. It applies to ethanol that is of agricultural origin (starch or sugar based).
MS 575:1999	Bleaching powder, stable-Specification	Specifies the requirements and methods of sampling and test for stable bleaching powder.
MS 577:2001	Benzene, cleaning-Specification	Covers a hydrocarbon solvent suitable for general cleaning purposes and for the cleaning of silver platinum contact of telecommunication systems.



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MS 588:2003	Chitenje-Specification	Specifies the requirements for chitenje.
MS 590:2002	Polyvinyl acetate dispersion adhesives for wood-Specification	Covers the chemical, physical, and performance requirements for three exposure asses of non-structural synthetic adhesives dispersed in water and based on the polymerization of vinyl acetate or on its co-polymerization.
MS 591:1996	Creosote, wood preserving (high temperature)-Specification	Covers creosote that is derived entirely from coal tar produced by the high-temperature carbonization of bituminous coal, and that is intended for use in the preservation of timber.
MS 592:1996	Creosote, wood preserving (lurgi-gasification process)-Specification	Covers creosote that is derived entirely from coal tar produced by the Lurgi-gasification processing of bituminous coal, and that is intended for use in the preservation of timber.
MS 593:2012	Wood-preserving mixtures of creosote and waxy oil-Specification	Covers two types of wood-preserving mixtures of creosote and waxy oil for use in the preservation of timber.
MS 596: 2005	Mixtures of copper-chromium-arsenic compounds for timber preservatives-	Covers the mixtures of copper-chromium-arsenic compounds Specification (in the form of a powder, a granular powder, a paste or a liquid) for timber preservation.
MS 597: 2005	Boron timber preservatives-Specification	Covers requirements for the following two types of boron timber preservatives: Type I: A sodium borate of a composition corresponding approximately to that of disodium octaborate tetrahydrate ( $\text{Na}_2\text{B}_8\text{O}_{13}4\text{H}_2\text{O}$ ). Type II: A mixture of borax and boric acid.
MS 598:2002	Safety in the wood preservation industry -Code of practice	Serves as a practical guide on safety and health aspects in and around timber treatment plants. It is applicable to any treatment process in which water borne preservatives, flames-retardants, organic solvent-based preservatives or creosote are used.
MS 599-1:2002	Fibreboard products-Specification Part 1: Uncoated fibreboards	Specifies the characteristics of uncoated fibreboard.
MS 599-2:2002	Fibreboard products-Specification Part 2: Coated fibreboards	Specifies the characteristics of coated fibreboard.
MS 600:2004	Laminated timber (glulam)-Specification	Covers the general requirements for softwood and hardwood laminated members that consist of laminations (glued or otherwise) bonded together with the general fibre direction parallel to the longitudinal or curved axis of each member.
MS 601:1997	Nutmeg-Specification	Specifies requirements for nutmeg, whole or broken, and for mace, whole or in pieces, obtained from the nutmeg tree ( <i>Myristica fragrans Houttuyn</i> ) for wholesale commercial purposes.
MS 602: 2005	Mechanical stress grading of softwood timber (flexural method)-Code of practice	Covers the code of practice for 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 <i>Pinus</i> grown in Malawi.
MS 609:1995	Cereals and pulses-Determination of the mass of 1000 grains	Specifies a method for the determination of the mass of 1000 grains of cereals and pulses. The Standard is applicable to all cereals and pulses with the exception of seed lots for sowing purposes.
MS 610:1995	Cereals and cereal products-Determination of moisture content (Routine reference method)	Specifies the basic reference method for the determination of the moisture content of cereals and cereal products.
MS 612:1997	Sorghum-Determination of tannin content	Specifies a universal method for the determination of tannin content in sorghum grains.



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MS 615:2005	Waste within health care facilities- Handling and disposal- Code of practice	Develops criteria for segregation, collection, movement, storage and on-site disposal of waste within healthcare units, biological research facilities, abattoirs and veterinary surgeries.
MS 616:2002	Glazing putty for wooden and metal window frames-Specification	Covers the following two types of putty for glazing of window frames Type I: Self-setting type for use in primed metal and wooden window frames Type II: Reaction type for use in primed metal and primed window frames.
MS 617-1:1998	Pipes and fittings made of un-plasticized polyvinyl chloride (uPVC) for water supply-Specification Part 1: General	Specifies the general aspects of pipes, joints, fittings (post-formed and moulded) and ancillaries, made of unplasticized polyvinyl chloride (uPVC), for a piping system intended to be used for buried water mains and services and for water supplies above ground, both inside and outside buildings.
MS 617-2:1998	Pipes and fittings made of un-plasticized polyvinyl chloride (uPVC) for water supply-Specification Part 2: Pipes (with or without integral sockets)	Specifies the characteristics and properties of extruded pipes made of unplasticized polyvinyl chloride (uPVC), with or without socket(s) (integral or not), and intended to be used for buried water mains and services and not for water supplies above ground, both inside and outside buildings.
MS 617-3:1998	Pipes and fittings made of un-plasticized polyvinyl chloride (uPVC) for water supply-Specification Part 3: Fittings and joints	Specifies the characteristics and properties of fittings (injection moulded and post-formed) and joints made of unplasticized polyvinyl chloride (uPVC), to be used for buried water mains and services and for water supplies above ground, both inside and outside buildings.
MS 619:2000	Fruit juices-Specification	Applies to fruit juices made from fruits of a single species.
MS 620:2003	Structured wall pipes and fittings of PVC for buried drainage and sewerage systems-Specification	Covers unplasticized polyvinyl chloride (uPVC) structured wall pipes (including pipe fittings) with an essentially smooth inside surface, of nominal diameter 110 mm up to and including 1000 mm, and intended for buried gravity drainage and sewerage pipe systems for the transportation of soil and waste discharge of domestic and industrial origin. Pipes of larger diameter are considered to be engineering products and are therefore not included in this Standard.
MS 623:1995	Mahewu-Specification	Prescribes the requirements and methods of test for mahewu.
MS 624:2001	Nutrition labelling-Guidelines	Recommends procedures for the nutrition labelling of foods.
MS 625: 2001	Nutrition claims-Guidelines	Relate to nutrition claims made for a food irrespective of whether or not a food is covered by an individual Malawi Standard.
MS 626:2002	Safety helmets for industrial use and for firemen-Specification	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 and during fire-fighting and rescue operations.
MS 627:1998	Fibre-cement sheets for roofing and cladding (corrugated and flat)- Specification	Covers straight corrugated, curved corrugated, flat and flat pressed fibre-cement sheets for roofing and cladding.
MS 629:1996	Asbestos-cement drain and sewer pipes- Specification	Applies to uncoated asbestos-cement pipes intended for underground use as drain or sewer pipes for gravity flow lines.
MS 630:2005	Roasted and ground coffee-Specification	Prescribes the requirements and methods of sampling and test for roasted and ground coffee.
MS 632:1997	Fertilizers-Determination of ammoniacal nitrogen content: Titrimetric method	Specifies titrimetric method after distillation, for the determination of the ammoniacal nitrogen content of fertilizers. The method is applicable only in the absence of urea or its derivatives, or cyanamide and of organic nitrogenous compounds.



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MS 633:2001	Milk powder-Specification	Specifies requirements and methods of sampling and test for milk powder (dried milk).
MS 639-1:1997	Retro-reflective registration plates for motor vehicles-Specification Part 1: Metal blanks	Specifies requirement for two types of blanks intended for use in the production of the embossed registration plates that are covered by Part 2 of MS 639.
MS 639-2:1997	Retro-reflective registration plates for motor vehicles-Specification Part 2: Metal registration plates	Specifies requirements for registration plates that are produced by the embossing of metal blanks with a registration mark and that are intended for use on motor vehicles (including motor cycles and motor tricycles) and trailers.
MS 639-3:1997	Retro-reflective registration plates for motor vehicles-Specification Part 3: Plastics blanks	Specifies requirements for plastics blanks intended for use in the production of the registration plates that are covered by Part 4 of MS 639.
MS 639-4:1997	Retro-reflective registration plates for motor vehicles-Specification Part 4: Plastic registration plates	Covers requirements for plastic registration plates that are produced by applying a registration mark and border to plastic blanks and that are intended for use on motor vehicles (including motor cycles and motor tricycles) and trailers.
MS 641:2002	Safety helmets for motor cyclists-Specification	Covers the requirements for the general design, construction, performance, marking, labelling, and testing of safety helmets for use by motor cyclists on the roads.
MS 642-1:1997	Lights for motor vehicles Part 1: Incandescent lamps	Covers incandescent tungsten filament lamps of the categories for use in motor vehicles and trailers: R2, H1, H2, H3, H4, P21W, P21/5W, R5W, R10W, C5W, C18W, C21W, T4W, W3W and W4W.
MS 642-2:1997	Lights for motor vehicles Part 2: Headlights	Covers the requirements for the photo metric properties of headlights emitting as asymmetrical dipped beam or main beam, or both, and used in headlight systems meeting left-hand rule-of-road requirement.
MS 642-3:1997	Lights for motor vehicles Part 3: Secondary lights	Covers the photometric characteristics of secondary lights for vehicle lights, (parking lights, reversing lights, rear registration plate lights and end-outline marker lights) and of assemblies of these.
MS 647-1:2003	Safety glass for vehicles-Specification Part 1: High penetration resistance laminated safety glass for vehicles	Covers high penetration-resistant laminated safety glass including bullet-resistant glazing materials for use in vehicles.
MS 647-2:2003	Safety glass for vehicles-Specification Part 2: Laminated safety glass for vehicles	Covers laminated safety glass (excluding windscreens) for use in vehicles.
MS 647-3:2003	Safety glass for vehicles-Specification Part 3: Toughened safety glass for vehicles	Covers toughened safety glass for use in vehicles.
MS 650:2000	Conductors in insulated cables and cords-Specification	Specifies the nominal cross-sectional areas and requirements, including numbers and sizes of wires and resistance values, for conductors in electric cables and cords of a wide range of types. These conductors include solid and stranded copper and aluminium conductors in cables for fixed installations and flexible copper conductors.
MS 651: 2011	Spades and shovels-Specification	Covers the requirements for dimensions, material, construction and strength of four types of spades and ten types of shovels.
MS 652-1:2012	Braking (motor and towed vehicles, designed for low speed or for use off public roads) Part 1: Low vehicles	Applies to the braking systems of low speed motor vehicles with a maximum design speed of between 6 km/h and 40 km/h, and motor vehicles for use off public roads.
MS 652-2:2012	Braking (motor and towed vehicles, designed for low speed or for use off	Applies to the braking systems of low speed trailers, including trailers purely for agricultural and forestry purposes, with a



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	public roads) Part 2: Low speed trailers	maximum design speed of between 6 km/h and 40 km/h
MS 653:2012	Electrical connectors for towing and towed vehicles-Specification	Covers two types of electrical connectors in the form of a socket and a plug that will permit interchangeability of electrical connections for towing vehicles having electrical equipment operating at nominal voltage of 6, 12, or 24 V.
MS 655-1:2012	Gaming equipment Part 1: Casino equipment	Specifies the constructional and operational requirements for Gaming Devices that reside on, or are operated on, the gaming floor of a casino.
MS 655-2:2012	Gaming equipment Part 2: Limited payout gaming equipment	Specifies the general hardware and software requirements and the list of significant events required by the Gaming Authority to be used in venues holding site licenses for limited payout machines.
MS 655-3:2012	Gaming equipment Part 3: Monitoring and control systems for gaming equipment	Specifies the general hardware and software requirements and the list of significant events required for a monitoring and control system for use in gaming establishment.
MS 655-4:2012	Gaming equipment Part 4: Wagering record keeping software	Specifies the general hardware and software requirements and the list of significant events required by the Malawi Gaming Authority, for record keeping software for the acceptance by licensed operators of wagers on events permitted by the Licensing Authority.
MS 655-5:2012	Gaming equipment Part 5: Local area and wide area jackpot and progressive jackpot equipment	Sets out the requirements for gaming equipment that is added to existing gaming equipment to provide a layer of prizes, additional to those already available on a game's pay table, referred to as jackpots.
MS 656:2002	Adhesives for use with ceramic tiles and mosaics-Specification	Specifies the minimum requirements for adhesives used for fixing ceramic tiles to ensure that they are suitable for their proposed application.
MS 657-1:2004	Portable rechargeable fire extinguishers-Specification Part 1: Water type extinguishers	Specifies the characteristics of stored pressure, portable rechargeable fire extinguishers of the water type, of capacity in the range 9 litres to 10 litres (inclusive) and suitable for use on class A fires only.
MS 657-2:2004	Portable rechargeable fire extinguishers-Specification Part 2: Dry powder type extinguishers	Specifies the characteristics of stored-pressure portable rechargeable fire extinguishers of the dry powder type of capacity not exceeding 12 kg and suitable for use on fire of classes A and B.
MS 657-3:2004	Portable rechargeable fire extinguishers-Specification Part 3: Foam type extinguishers	Specifies the characteristics of stored pressure, portable rechargeable fire extinguishers of the foam type, of capacity not exceeding 10 litres and suitable for use on a variety of identified classes of fire.
MS 657-4:2004	Portable rechargeable fire extinguishers-Specification Part 4: CO <sub>2</sub> type extinguishers	Specifies the characteristics of portable rechargeable fire extinguishers of the CO <sub>2</sub> type, of capacity not exceeding 9 kg and suitable for use on fires of classes B and C.
MS 658-1:2004	The classification, use and control of fire fighting equipment-Code of practice Part 1: Portable fire extinguishers	Covers the classification, selection, installation and control of portable fire extinguishers (excluding non-refillable fire extinguishers) that can be carried by one person. It also covers the conditions under which mobile fire extinguishers may be used.
MS 658-2:2004	The classification, use and control of fire fighting equipment-Code of practice Part 2: Fire hose reels	Covers the sitting and site control of fire hose reels installed in premises.
MS 659:2002	Pneumatic tyres for passenger cars and luggage trailers-Specification	Applies to new pneumatic tyres primarily designed for use on vehicles of category M1, O1, and O2. It does not apply to tyres designed for speeds exceeding 240 km/h.



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
MS 660:2002	Pneumatic tyres for commercial vehicles and trailers-Specification	Applies to new pneumatic tyres primarily designed for use on vehicles of category M2, M3, N1, N2, O3 and O4.
MS 661-1:2011	Motor vehicle tyres and rims-Dimensions and loads Part 1: General	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 tyre dimensions.
MS 661-2:2011	Motor vehicle tyres and rims-Dimensions and loads Part 2: Passenger	Specifies requirements for passenger car tyres. It does not cover motor car racing applications.
MS 661-3:2011	Motor vehicle tyres and rims-Dimensions and loads Part 3: Commercial vehicle tyres	Covers commercial vehicle tyres.
MS 663:2001	Mixed fruit juices-Specification	It prescribes the requirements for mixed fruit juice which shall be obtained from two or more species of sound, ripe fruits.
MS 665:2001	Mixed fruit nectars-Specification	Applies to mixed fruit nectars for direct consumption.
MS 666-1:2002	Components of pressure pipe systems (uPVC)-Specification Part 1: Unplasticized polyvinyl chloride (uPVC) pressure pipes	Specifies requirements for unplasticized chloride (uPVC) pipes and injection-moulded fittings that are intended for above-ground pressure applications for the conveyance of portable water in reticulation systems and for other applications in which continuous temperatures in excess of 25 degrees Celsius are not encountered.
MS 666-2:2002	Components of pressure pipe systems (uPVC)-Specification Part 2: Modified polyvinyl chloride (PVC-M) pressure pipe systems	Specifies requirements for modified unplasticized polyvinyl chloride (PVC-m) 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 potable water in reticulation systems and for other applications, in which continuous temperatures in excess of 25 degrees Celsius are not encountered.
MS 667-1:2002	Petroleum Industry-Terminology Part 1: Raw materials and products	Consists of a list of English terms in use in the petroleum industry to indicate properties of petroleum, products and test methods, together with the corresponding definitions.
MS 667-2:2002	Petroleum Industry-Terminology Part 2: Properties and tests	Consists of a list of English terms in use in the petroleum industry to indicate raw materials or petroleum products, together with the corresponding definitions.
MS 670:2011	Sodium silicate-Specification	Prescribes the requirements and the methods of sampling and test for sodium silicate in solid and liquid forms intended for use in various industries.
MS 671:2002	Toilet soap (superfatted)-Specification	Covers super fatted toilet soap that incorporates unsaponified matter that imparts beneficial in-use characteristics. The specification does not cover speciality soaps, such as soap for use by medical personnel, medicated soap, transparent soap and sea-water soap.
MS 675:2005	Safety procedures for the disposal of surplus pesticides and associated toxic waste-Code of practice	Covers the following aspects for the safe disposal of pesticides, pesticide waste and empty pesticide containers:  (a) general precautions to be taken during the use of pesticides; (b) directives for the disposal of pesticide waste; (c) directives for the decontamination and disposal of empty pesticide containers; and (d) directives for the treatment of pesticide spillages and leakage, and the action to be taken in the case of fires and freight emergencies that involve pesticides.



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
MS 678:2005	Drinking water quality-Control and surveillance of water in public supply networks	Defines the control and surveillance of water in public water supply networks, it also indicates the sample frequency and types of analysis required.
MS 682-1:2012	Water quality-Sampling Part 1: Guidance on the design of sampling programmes and sampling techniques	Sets out the general principles for, and provides guidance on, the design of sampling programmes and sampling techniques for all aspects of sampling of water (including waste waters, sludges, effluents and bottom deposits).
MS 682-3:2012	Water quality-Sampling Part 3: Guidance on preservation and handling of samples	This part of standard gives general guidelines on the precautions to be taken to preserve and transport all water samples including those for biological analyses but not those intended for microbiological analysis.
MS 682-4:2012	Water quality-Sampling Part 4: Guidance on sampling from lakes, natural and man-made	Presents detailed principles to be applied to the design of sampling programmes, to sampling techniques and the handling and preservation of samples of water from natural and man-made lakes.
MS 682-5:2012	Water quality-Sampling Part 5: Guidance on sampling drinking water from treatment works and piped distribution systems	Establishes principles to be applied to the techniques of sampling water intended for human consumption.
MS 682-6:2012	Water quality-Sampling Part 6: Guidance on sampling of rivers and streams	Sets out the principles to be applied to the design of sampling programmes, sampling techniques and the handling of water samples from rivers and streams for physical and chemical assessment.
MS 682-7:2012	Water quality-Sampling Part 7: Guidance on sampling of water and streams in boiler plants	Recommends procedures and equipment for sampling water and steam in boiler plants including examples of sampling apparatus, to provide samples for physical and chemical analysis that are representative of the main body of water or steam from which they are taken.
MS 682-8:2012	Water quality-Sampling Part 11: Guidance on sampling of wet deposition	Provides guidance on the design of sampling programmes and the choice of instrumentation and techniques for the sampling of the quality of wet deposition.
MS 682-9:2012	Water quality-Sampling Part 9: Guidance on sampling of marine waters	Provides guidance on the principles to be applied to the design of sampling programmes, sampling techniques and the handling and preservation of samples of sea water from tidal waters (for example, estuaries and tidal inlets, coastal regions and the open sea).
MS 682-11:2012	Water quality-Sampling Part 11: Guidance on sampling of ground waters	Provides guidance on the design of sampling programmes, sampling techniques and the handling of water samples taken from groundwater for physical, chemical and micro-biological assessment.
MS 682-12:2012	Water quality-Sampling Part 12: Guidance on sampling of bottom sediments	Provides guidance on the sampling of sedimentary materials from inland rivers and streams, lakes and similar standing bodies, and estuarine and harbour areas.
MS 682-13:2012	Water quality-Sampling Part 13: Guidance on sampling sludges from sewage and water treatment works	Gives guidance on the sampling of sludges from waste water treatment works, water treatment works and industrial processes. It is applicable to all types of sludge arising from these works and also to sludges of similar characteristics, for example septic tank sludges. Guidance is also given on the design of sampling programmes and techniques for the collection of samples.
MS 682-14:2012	Water quality-Sampling Part 14: Guidance on quality assurance of environmental water sampling and handling	Provides guidance on the selection and use of various quality assurance techniques relating to the manual sampling of surface, potable, waste, marine and ground waters.



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
MS 682-15:2012	Water quality-Sampling Part 15: Guidance on preservation and handling of sludge and sediment samples	Provides guidance on procedures for the preservation, handling and storage of samples of sewage and waterworks sludge, suspended matter, salt water sediments and fresh water sediments, until chemical, physical, radiochemical and/or biological examination can be undertaken in the laboratory.
MS 682-16:2012	Water quality-Sampling Part 16: Guidance on bio-testing of samples	Gives practical guidance on sampling, pre-treatment, performance and evaluation of waters in the context of bio-testing. Information is given on how to cope with the problems for bio-testing arising from the nature of the water sample and the suitability of the test design. It is intended to convey practical experience concerning precautions to be taken by describing methods successfully proven to solve or to circumvent some of the experimental problems of bio-testing of waters.
MS 682-17:2012	Water quality-Sampling Part 17: Guidance on sampling suspended sediments	Applicable to the sampling of suspended solids for the purpose of monitoring and investigating fresh water quality, and more particularly to flowing fresh water systems such as rivers and streams.
MS 682-18:2012	Water quality-Sampling Part 18: Guidance on sampling of ground water at contaminated sites	Provides guidance on the sampling of groundwater at potentially contaminated sites. It is applicable to situations where contamination of the subsurface could exist as a result of downward migration of pollutants whose source is at the surface or just below it.
MS 682-19:2012	Water quality-Sampling Part 19: Guidance on sampling of marine sediments	Provides guidance for the sampling of sediments in marine areas for analyses of their physical and chemical properties for monitoring purposes and environmental assessments.
MS 682-21:2012	Water quality-Sampling Part 21: Guidance on sampling of drinking water distributed by tankers or means other than distribution pipes	Establishes principles to be applied to the techniques of sampling water provided for drinking and for use in the manufacture of food and beverage products. The guidance given in the standard is generally confined to those circumstances where water is drawn from municipal or similar public or private abstraction, treatment or distribution systems for which prior treatment or quality assessment has resulted in the water being classified as suitable for drinking or potable process purposes.
MS 684:2003	Water taps (metallic bodies)- Specification	Covers requirements for four classes of screw-down and non-screw-down metallic water taps (including stop taps) for the supply of water at temperatures not exceeding 75 degrees Celsius. It also covers stopcocks of sizes up to and including 50 mm. It does not cover thermostatic mixer taps, single control mixer taps, metering taps, demand taps or taps of which the bodies are made entirely of a plastics material.
MS 685:2003	WC flushing cisterns-Specification	Covers 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-flush operation, a dual-flush operation or an interruptible-flush operation.
MS 686:2003	Automatic shut off flush valves for water closets for urinal-Specification	Covers the requirements for automatic shut-off flush valves for water closets and urinals that are intended for supplying a pre-set amount of water.
MS 688:2004	Unplasticized poly vinyl chloride (uPVC) soil, waste and vent pipes and pipe fittings-Specification	Covers unplasticized polyvinyl chloride (uPVC) pipes (including vent pipes) and pipe fittings of nominal sizes 40-160 mm intended for above-ground non-pressure applications for the conveyance of soil (human excrement or faeces) and waste water where continuous temperatures in excess of 60 degrees Celsius are not encountered.
MS 689:2004	The installation of polyethylene and polyvinyl chloride (uPVC) and (PVC-m)	The Standard is intended to present (in sufficient detail for general use) the comparative physical, chemical and mechanical



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
	pipes-Code of practice	properties of two types of plastics pipe in common use, to provide guidance in their selection for the conveyance of potable water (and other applications) and to define sound practice in the assembly and installation of such pipe work.
MS 691:2005	Tolerance limits for domestic sewage effluents discharged into in land surface waters-Specification	Lays down the tolerance limits for sewage effluents discharged into inland surface waters. It does not cover sewage effluents discharged on land.
MS 695:2004	Battery-based photovoltaic (PV) solar home systems-Specification	Specifies the practical minimum requirements for a battery based photovoltaic (PV) system.
MS 696:2004	Battery-based photovoltaic (PV) solar home systems-Code of practice	Specifies the guideline on how a battery based photovoltaic (PV) system should be designed for the system to continue working for a period of between three to five years without problems.
MS 697:2005	Industrial noise affecting mixed residential and industrial area-Methods of rating	Describes methods for determining, at the outside of the building:  (a) noise levels from factories, industrial premises or fixed installation and sources of an industrial nature in commercial premises; and (b) background noise level.
MS 699: 2004	Bottled drinking water other than natural mineral water-Specification	Specifies the description, treatment, testing, packaging and labelling of water that is not natural mineral water. The water may be offered as packaged non-carbonated ("still") water or as packaged carbonated ("sparkling") water, with or without permitted substances.
MS 700:2002	Social responsibility-Requirements for combating child labour	Specifies requirements of a work environment where an organization:  (a) aims to combat or eliminate child labour through the development, maintenance and enforcement of relevant policies, procedures and practices; and (b) needs to demonstrate to interested parties that policies, procedures and practices of the organization are in conformity with the requirements of this Standard.
MS 701:2005	Natural mineral water-Code of practice	Recommends general hygienic and technical practices for the use in collecting natural mineral water, its treatment, bottling and packaging, storage, transport, distribution and sale for direct consumption so as to ensure a safe, healthy and wholesome product.
MS 702:2004	Caustic soda, analytical and commercial -Specification	Prescribes the requirements, methods of test and sampling requirements for caustic soda, analytical and commercial in the solid and lye forms.
MS 704:2004	Cassava and maize starch for textile industry-Specification	Covers cassava and maize starch used in the textile industry (mainly cotton) as a textile sizing and finishing material.
MS 707:2004	Starches and derived products-Methods of test	Covers general methods of test for starches and its derived products.
MS 708:2004	Starches and starch products-Methods of sampling	Prescribes the sampling apparatus and the methods of sampling, for starches and starch products.
MS 709: 2005	Fluorescent lights for use in photovoltaic (PV) systems-Specification	Specifies the minimum requirements for fluorescent tube lights powered with direct current (DC) inverter ballasts for use in photovoltaic (PV) systems.
MS 710: 2005	Secondary cells and batteries for solar photovoltaic (PV) energy systems-General requirements and methods of test	Gives general information relating to the requirements of the secondary batteries used in photovoltaic (PV) solar energy systems and to the typical methods of test used for the verification of battery performances.



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MS 711: 2005	Crystalline silicon terrestrial photovoltaic (PV) modules-Design qualification and type approval	Lays down requirements for the design qualification and type approval of terrestrial photovoltaic (PV) modules suitable for long-term operation in general open-air climates.
MS 712-1:2005	Acoustics-Recommended practice for the design of low-noise workplaces containing machinery Part 1: Noise control strategies	Outlines strategies to be used in dealing with noise problems in existing and planned workplaces by describing basic concepts in noise control (noise reduction, noise emission, noise immission and noise exposure). It is applicable to all types of workplaces and all types of sources of sound which are met in workplaces, including human activities.
MS 712-2:2005	Acoustics-Recommended practice for the design of low-noise workplaces containing machinery Part 2: Noise control measures	Deals with the technical aspects of noise control in workplaces. The various technical measures are stated, the related acoustical quantities described, the magnitude of noise reduction discussed and the verification methods outlined.
MS 712-3:2005	Acoustics-Recommended practice for the design of low-noise workplaces containing machinery Part 3: Sound propagation and noise prediction in workrooms	In this part of MS 712, sound propagation in a room is considered together with the prediction of sound pressure levels and of noise emission at the workplace.  Details of the description of the physical phenomena involved in a noise prediction scheme are strongly dependent on the situation being considered and the way this situation is modelled (input parameters, calculation techniques). This dependency is surveyed and the methodology of noise prediction is described. Recommendations are provided concerning the use of noise prediction as an aid for noise control in workrooms.
MS 713:2005	Plastic products-Guidelines for safe management and disposal	Outlines general guidance on the identification, environmentally sound management of plastic wastes and their disposal.
MS 714:2005	Occupational safety and health management systems-Specification	Gives requirements for an occupational safety and health (OS&H) management system, to enable an organization to control its OS&H risks and improve its performance. It does not state specific OS&H performance criteria, nor does it give detailed specifications for the design of a management system.
MS 717:2005	Polypropylene grain sacks-Specification	Covers the requirements for three sizes of thermoplastic textile bags, namely 50 kg, 70 kg and 90 kg bags, made from (slip) resistant tubular woven fabric (of which polypropylene yarns are the major component) and that are suitable for use for the handling, transportation, and storage of whole grain and milled grain.
MS 719:2011	Hazardous waste-Management, classification and disposal-Code of practice	This Standard provides guidelines for classification, management, treatment and disposal of hazardous waste. Requirements for transportation are also specified.
MS 720-1: 2011	Transport of dangerous goods-Packaging and packaging for road and rail transport. Part 1-Packaging	Identifies various methods of packaging that are suitable for prescribed maximum quantities of dangerous goods that may be offered for transport by road or by rail. It describes minimum performance requirements for the packaging, the procedures to be followed to obtain approval from testing or certification authorities and gives details of the labels and marking to be displayed on the packaging.
MS 720-2: 2011	Transport of dangerous goods-Packaging and packaging for road and rail transport Part 2-Large packaging	Identifies the various types of large packaging that are suitable for the transport of dangerous goods by road and rail. It describes minimum performance requirements for the large packaging, the procedures to be followed to obtain approval from test laboratories or certification authorities and gives details of the marking and labelling to be displayed on the large packaging.



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
MS 721:2005	Wood packaging material-Guidelines for phytosanitary measures	Describes phytosanitary measures to reduce the risk of introduction and/or spread of quarantine pests associated with wood packaging material (including dunnage), made of coniferous and non-coniferous raw wood, for use in national and international trade.
MS 722:2005	Labelling, presentation and advertising of prepacked goods for ultimate consumer	Specifies requirements for providing information regarding pre-packed goods. It sets rules of a general nature applicable to all pre-packed goods put on the market.
MS 724:2006	Corrugated board containers-Specification	Covers requirements for the materials and construction of corrugated board containers.
MS 726:2009	Staples for office use-Specification	Provides requirements for pre-formed staples for use in standard-duty office stapling machines.
MS 727:2009	Office staplers-Specification	Provides requirements for two types of general purpose hand operated staplers (using size 26/6 staples) suitable for use either on a desk or held in the hand, and suitable for severe or moderate service.
MS 728:2009	Paper clips-Specification	Provides requirements for steel wire clips intended for clipping together sheets of paper.
MS 729:2009	Paper punches (desktop types)-Specification	Covers the requirements for three grades of paper punches in two-hole and four hole configuration, suitable for use on desk tops.
MS 730:2005	Solid waste disposal sites, guidelines for design-Code of practice	Prescribes guidelines for design of solid waste disposal sites taking the form of landfill, and treatment and incineration facilities.
MS 731:2005	Solid waste disposal sites. Guidelines for safe management-Code of practice	Prescribes guidelines for safe management of solid waste disposal sites in the form of landfills, land treatment facility and incinerators.
MS 732:2005	Effluent treatment plants, operating conditions-Code of practice	Covers the operating conditions for an effluent treatment plant. It does not cover to detail the design parameters of an effluent treatment plant.
MS 733:2005	Borehole and shallow well water quality -Specification	Specifies requirements for untreated or raw ground water in borehole and shallow wells suitable for human consumption and all usual domestic purposes.
MS 734:2005	Plastic carrier bags and flat bags-Specification	Specifies requirements for carrier bags and flat bags that are made from thermoplastic materials and are domestically produced or imported for use within Malawi.
MS 735:2006	Plastic-film and sheeting-Determination of average thickness length and width	Specifies a method for the determination of the gravimetric thickness of a sample of plastics film or sheeting.
MS 736: 2011	Transport of dangerous goods-Intermediate bulk containers for road and rail transport	Establishes the requirements for various types of intermediate bulk container (IBC) suitable for the transport of dangerous goods by road and rail. It describes minimum performance requirements for the IBCs, the procedures to be followed to obtain approval from testing or certification authorities and gives details of the marking and labelling to be displayed on the IBCs.
MS 737:2011	Industrial emissions-Emissions from mobile and stationary sources-Specification	Specifies maximum allowable limits for particulate matter and other common air pollutants in gaseous emissions from stationary and mobile sources. The Standard also suggests the mechanisms for reduction or removal of the pollutants.
MS 739:2005	Determination of mass concentration of carbon monoxide-Method using detector tubes for short term sampling with direct indication	Specifies a method for the determination of the mass concentration of carbon monoxide present in the air at work places in concentrations greater than 10 mg/m <sup>3</sup> using detector tubes.



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
MS 740:2005	Ambient air-Methods of sampling and test	Specifies methods of test for air pollution in ambient air.
MS 742:2005	Workplace air-Determination of particulate lead and lead compound flame or electro thermal atomic absorption spectrometric method	This Standard specifies flame and electrothermal atomic absorption spectrometric methods for the determination of the time-weighted average mass concentration of particulate lead and lead compounds in workplace air.
MS 743:2009	Canned baby foods-Specification	Specifies requirements for baby foods intended primarily for use during the normal infant's weaning period and also for the progressive adaptation of infants and children to ordinary food. They may be either in ready-to-eat form or in dry form requiring reconstitution with water or other suitable liquid.
MS 744:2007	Use of dairy terms-general standards	Applies to the use of dairy terms in relation to food to be offered to the consumer or for further processing.
MS 747:2010	Fruit flavoured drinks-Specification	Prescribes the requirements and methods of test for fruit flavoured drinks.
MS 748: 2007	Soya bean milk and drink-Specification	Specifies the requirements and methods of sampling and test for soya bean milk and drink for human consumption.
MS 749-2:2013	Storage of cereals and pulses, Part 2: Practical recommendations.	Gives guidance on the choice of a method of storage of cereals and pulses, and on the practical recommendations for good storage, according to the method chosen.
MS 750:2005	Follow-up formula-Specification	Applies to the composition and labelling of follow-up formula. It does not apply to foods covered by the Malawi Standard for Infant Formula.
MS 751:2006	Sweetened condensed milk-Specification	Applies to sweetened condensed milk, intended for direct consumption or further processing.
MS 752:2006	Evaporated milk - Specification	Applies to evaporated milks, intended for direct consumption or further processing, in conformity with the description in clause 3 of this Malawi Standard.
MS 753:2008	Raisins-Specification	Applies to dried grapes of varieties conforming to the characteristics of <i>Vitis vinifera L.</i> which have been suitably treated or processed and which are offered for direct consumption as raisins or sultanas. It also covers raisins packed in bulk containers which are intended for repacking into consumer size containers.
MS 754: 2013	Processed cereal-based foods for infants and young children-Specification	Covers processed-cereal based foods intended for feeding infants generally from the age of six months onwards as a complementary food, taking into account infants' individual nutritional requirements, and for feeding young children as part of a progressively diversified diet.
MS 755:2007	Gypsum rock for the manufacture of binders-Specification	Gives the specifications for gypsum rock used as raw materials for the manufacture of calcium sulphate binders or as an admixture in the manufacture of other kinds of binders.
MS 756:2007	Gypsum cove cornice-Specification	Covers gypsum core cornice for use buildings.
MS 757:2007	Mineral gypsum-Methods of test	Prescribes the test methods for mineral gypsum.
MS 758:2006	Domestic solar water heaters-Specification	Specifies the characteristics of domestic solar water heaters. It is not applicable to solar water heaters for swimming pools or to industrial and commercial solar water heaters.
MS 759:2006	Solar water heaters-Code of practice	Covers the construction and installation of solar water heater systems.
MS 760:2006	Domestic solar water heaters-Mechanical qualification tests	Specifies test methods for the mechanical qualification of domestic solar water heaters.
MS 761-1:2006	Domestic solar water heaters Part 1: Thermal performance using an outdoor test method	Describes an outdoor test method for the determination of the thermal performance of domestic solar water heaters.



<i>Column 1</i> <i>Malawi Standard</i> <i>Number</i>	<i>Column 2</i> <i>Title of the standard</i>	<i>Column 3</i> <i>Scope (Description) of the standard</i>
MS 761-2:2006	Domestic solar water heaters Part 2: Thermal performance using an indoor test method	Specifies an indoor test method for the determination of the thermal performance of domestic solar water heating systems for potable water and of storage capacity not exceeding 0.3m <sup>3</sup> .
MS 763:2007	Liquefied petroleum gases-Specification	Specifies requirements for the liquefied petroleum gas mixture, Commercial propane, and Commercial butane.
MS 765:2006	Paper and board-Determination of grammage	Specifies a method for determining the grammage of paper and board.
MS 767:2006	Corrugated board containers-Methods of test	Specifies a method for determining the grammage of paper and board.
MS 768:2006	Liners and fluting for corrugated board-Specification	Specifies the liners of nominal grammage in the range 120-440 g/m <sup>2</sup> and fluting of nominal grammage in the range 112-180 g/m <sup>2</sup> that are used in the manufacture of corrugated containers for packaging purposes.
MS 769:2007	Meat burgers-Specification	Prescribes the requirements and methods of sampling for meat burgers made from comminuted meat (beef, lamb and mutton, poultry, pork).
MS 770:2007	Fresh fish-Specification	Establishes quality requirements for fish and permissible temperatures and times for the handling, preparation, distribution and packaging of fresh fish..
MS 772: 2013	Olive oil and olive pomace oil	Applies to olive oils and olive pomace oils, presented in state for human consumption.
MS 773:2006	Metrological and technical requirements for non-automatic, un-denominated beam scales and balances subject to legal metrology control	Specifies the metrological and technical requirements for non-automatic, un-denominated beam scales and balances that are subject to metrological control in terms of legal metrology legislation.
MS 774:2006	Metrological and technical requirements for non-automatic, non-self or semi-self indicating, ungraduated counter scales subject to legal metrology control	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.
MS 775-1:2007	Hot-rolled steel bars Part 1: Dimensions of round bars	Specifies dimensions of metric series hot-rolled steel round bars.
MS 775-2:2007	Hot-rolled steel bars Part 2: Dimensions of square bars	Specifies dimensions of metric series hot-rolled steel square bars.
MS 775-3:2007	Hot-rolled steel bars Part 3: Dimensions of flat bars	Specifies dimensions of metric series hot-rolled steel flat bars.
MS 775-4:2007	Hot-rolled steel bars Part 4: Tolerances of round, square and flat bars-Metric series	Specifies metric dimensional tolerances applicable to hot-rolled steel bars supplied in straight lengths in the following product forms (a) round bars (for dimensions, see MS 775-1); (b) square bars (for dimensions, see MS 775-2); (c) hexagonal bars; (d) octagonal bars; and (e) flat bars (for dimensions, see MS 775-3).
MS 777:2007	Stabilised soil blocks-Specification	Specifies the requirements for cement and /or stabilized soil blocks for use in super structures.
MS 779:2007	Solar photovoltaic (PV)-wind hybrid system-Specification	Covers minimum requirements for domestic stand alone solar photovoltaic (PV)-wind hybrid systems.
MS 780:2007	Solar photovoltaic (PV) water pumping systems-Specification	Covers specifications for solar photovoltaic (PV) water pumping systems for domestic use.
MS 782-1:2011	Glass in building-Basic soda lime silicate glass products	Defines and classifies basic glass products, indicates their chemical composition, their main physical and chemical



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
	Part 1: Definitions and general physical and mechanical properties	characteristics and defines their general quality criteria.
MS 782-2:2011	Glass in building-Basic soda lime silicate glass products Part 2: Float glass	Specifies dimensional and minimum quality requirements (in respect of optical and visual faults) for float glass, as defined in MS 782-1, for use in building.
MS 782-3:2011	Glass in building-Basic soda lime silicate glass products Part 3: Polished wire glass	Specifies dimensional and minimum quality requirements (in respect of optical and visual and wire faults) for polished wire glass, as defined in MS 782-1, for use in building.
MS 782-4:2011	Glass in building-Basic soda lime silicate glass products Part 4: Drawn sheet glass	Specifies dimensional and minimum quality requirements (in respect of optical and visual and wire faults) for drawn sheet glass, as defined in MS 782-1, for use in building. This part of MS 785 applies only to drawn sheet glass supplied in rectangular panes and in stock sizes. This part of MS 785 does not apply to patterned glass in cut sizes for final use.
MS 782-5:2011	Glass in building Basic soda lime silicate glass products Part 5: Patterned glass	Specifies dimensional and minimum quality requirements (in respect of optical and visual faults) for patterned glass, as defined in MS 782-1, for use in building. This part of MS 785 applies only to drawn sheet glass supplied in rectangular panes and in stock sizes. This part of MS 785 does not apply to patterned glass in cut sizes for final use.
MS 785-1:2008	Steel for the reinforcement of concrete bars Part 1: Plain bars	This part of MS 785 specifies technical requirements for plain bars to be used as reinforcement in concrete. It covers nine steel grades not intended for welding which are B240A-P, B240B-P, B240C-P, B240D-P, B300A-P, B300B-P, B300C-P, B300D-P and B240D-P, and one steel grade intended for welding which is B420DWP.
MS 785-2:2008	Steel for the reinforcement of concrete bars Part 2: Ribbed bars (COMESA Harmonised)	Specifies technical requirements for ribbed bars to be used as reinforcement in concrete. It covers ten steel grades not intended for welding which are B300A-R, B300B-R, B300C-R, B300D-R, B400A-R, B400B-R, B400C-R, B500A-R, B500B-R and B500C-R and eleven steel grades intended for welding which are B300DWR, B350DWR, B400AWR, B400BWR, B400CWR, B400DWR, B420DWR, B500AWR, B500BWR, B500CWR, and B500DWR.
MS 785-3:2008	Steel for the reinforcement of concrete bars Part 3: Welded fabric (COMESA Harmonised)	Specifies technical requirements for factory made sheets or rolls of welded fabric, manufactured from steel wires or bars with diameters from 4 mm to 16 mm and designed for the reinforcement of concrete structures and the ordinary reinforcement of pre-stressed concrete structures.
MS 786:2008	Cigarettes-Specification	Specifies the requirements and methods of test for cigarettes processed or sold in Malawi. The tobacco blend of cigarettes is produced from leaves of the cultivated plant <i>Nicotiana tabacum</i> and <i>N. rustica</i> .
MS 787:2008	Tobacco and tobacco products-Methods of test	Prescribes the methods of test commonly used for testing of tobacco and tobacco products.
MS 788:2010	The installation of glazing in buildings-Code of practice	This part of the Malawi Standard covers requirements for the performance of safety glazing materials in buildings with regard to injuries (cutting or piercing) sustained on human impact. It does not cover performance of glazing materials under fire condition.
MS 789-1:2009	Safety and security glazing material for buildings Part 1: Safety performance under human impact	This part of the Malawi Standard covers requirements for the performance of safety glazing materials in buildings with regard to injuries (cutting or piercing) sustained on human impact. It does not cover performance of glazing materials under fire condition.



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
MS 789-2:2009	Safety and security glazing material for buildings Part 2: Safety and security glazing materials for buildings	This part of Malawi Standard covers requirements for the performance of burglar-resistant and vandal-resistant glazing materials intended for use in areas of buildings that may be subject to manual attack.
MS 789-3:2009	Safety and security glazing material for buildings Part 3: Bullet-resistant glazing material	Covers requirements for the performance of bullet resistant glazing materials intended for use in areas of buildings that may be subjected to attack by firearms. It does not cover requirements for the retention of bullet-resistant or shot resistance properties for a stated period of time.
MS 794-1: 2011	The structural use of concrete Part 1: Design-Code of practice	Establishes principles for the structural use of concrete under the following stipulations: (a) method of design: limit states classified as ultimate limit state and serviceability limit states; (b) material: ordinary concrete of normal and low density, used in reinforced, pre-stressed and precast structures or elements and in plain concrete walls; and (c) types of structures: buildings and structures in which all load-bearing elements (e.g. slabs, columns, walls, beams etc.) are of concrete.
MS 795-1:2011	Water supply and drainage in buildings Part 1: Water supply installations for buildings-General requirements	Establishes general principles for the design, installation and testing of water installations for buildings. It is not applicable to water installations related to air conditioning systems, industrial processes, specialized plants, high temperature water heating systems (exceeding 80 degrees Celsius ) water heating systems and automatic sprinkler installations.
MS 798:2008	Instant noodles-Specification	Applies to various kinds of noodles. The instant noodle may be packed with noodle seasonings, or in the form of seasoned noodle and with or without noodle garnish (s) in separate pouches, or sprayed on noodle and ready for consumption after dehydration process. This Standard does not apply to pasta.
MS 801:2010	Honey-Methods of test	Prescribes the methods of test for the analysis of honey.
MS 802:2009	Cheddar-Specification	Applies to cheddar intended for direct consumption or further processing.
MS 803:2009	Fermented milks-Specification	Applies to fermented milks, that is fermented milk including, heat treated fermented milks, concentrated fermented milks and composite milk products based on these products, for direct consumption or further processing.
MS 805:2009	Bio-diesel fuel-Specification	Specifies requirements and test methods for marketed and delivered biodiesel to be used either as automotive fuel for diesel engines at 100 % concentration, or as an extender for automotive fuel for diesel engines.
Ms 807:2011	Luncheon meat-Specification	Applies to products designated as "Luncheon meat" which have been packed in any suitable packing material
MS 808:2011	Cooked cured chopped meat-Specification	Applies to products designated as "chopped meat" which have been packed in any suitable packaging material.
MS 809:2011	UHT milk-Specification	Specifies the requirements and methods of sampling and tests for UHT milk.
MS 811:2009	Potato crisps-Specification	Specifies requirements for potato crisps made from tubers of the potato ( <i>Solanum tuberosum</i> L.).
MS 812:2012	Bottled drinking water (other than natural mineral water)-Code of practice	Recommends general techniques for collecting, processing, packaging, storing, transporting, distributing, and offering for sale a variety of drinking waters (other than natural mineral water) for direct consumption. All bottled/package drinking



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
		waters other than natural mineral water are covered by this Code. This Code does not cover recommendations collecting, processing and marketing of natural mineral waters.
MS 813:2009	Sulphuric acid for use in lead-acid starter batteries	Specifies the limit for impurities in sulphuric acid suitable for use in lead-acid batteries.
MS 815: 2010	Organic products-General standard	Provides requirements for organic agricultural products. It covers care for the environment, plant production, livestock production, bee-keeping, the collection of wild organic products and the processing and labelling and verification (inspection and certification) of the product there from. It does not apply to wild mushrooms.
MS 816:2011	Dairy fat spreads-Specification	Applies to dairy fat spreads intended for use as spreads for direct consumption or for further processing.
MS 817:2011	Driers of paints and varnishes-Specification	Specifies requirements and methods of sampling and test for solid and liquid driers for paints, varnishes and related products.
MS 820:2010	Code of practice for design loadings for buildings	The aim of this Code is to provide general structural design procedures and minimum design loads to be used in the design of buildings and their structural elements. This code does not cover dynamic loading due to plant and machinery nor loads incidental to construction methods.
MS 822:2010	Road vehicles-Inspection and testing of imported used motor vehicles	Specifies the safety related performance characteristics of used motor vehicles and their inspection and tests for road worthiness.
MS 823:2011	Driers for paints and varnishes-Methods of test	Specifies methods of test for driers for paints, varnishes and related products. Some methods of test apply to driers in solid form only while others apply to driers in liquid form only and while yet others apply to both solid driers and liquid driers.
MS 837:2013	Quick frozen fish fillets-Specification	Provides requirements for quick frozen fillets of fish as defined below and offered for direct consumption. It does not apply to products indicated as intended for further processing or for other industrial purposes.
MS 838: 2011	Concrete works-Code of practice for minor works	Covers concrete works in foundations, slabs, stairways, masonry walls, pipelines, manholes, latrines, conservancy tanks, septic tanks and the like, where the design and supervision of plain, reinforced and precast concrete are not necessarily under the direct control of appropriately qualified engineers and technologists and no special finishes to the concrete are required.
MS 839:2013	Quick frozen shrimps or prawns-Specification	Provides requirements for quick frozen raw or partially or fully cooked shrimps or prawns.
MS 840:2011	Above-ground tanks for petroleum products	Contains recommendations for the above-ground storage and handling of petroleum products at consumer installations with a total storage capacity not exceeding 200 m <sup>3</sup> .
MS 841: 2011	D-Iron bracket and ceramic insulator assembly-Characteristics and test methods	Specifies characteristics of D-iron bracket galvanized complete with bolt and nut with ceramic insulator for a.c. overhead lines assemblies.
MS 842: 2011	Aggregates from natural sources-Aggregates for concrete	Specifies requirements for fine and coarse aggregates from natural sources for use in concrete.
MS 843:2013	Code of practice for the prevention and reduction of aflatoxin contamination in groundnuts	Provides guidance for all interested parties producing and handling groundnuts for human consumption, and all other users feeding into the food chain. This Code of practice indicates the measures that should be implemented by all persons that have the responsibility for assuring that food is safe and suitable for consumption, in order to prevent or reduce aflatoxin contamination in groundnuts.



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
MS 844:2011	Coal mining and processing-Health, safety and environmental protection-Code of practice	Covers the requirements for the health and safety for the workers and the general public and the environmental protection in the mining and processing of coal.
MS 845-1: 2011	Transport of dangerous goods-Emergency information systems Part 1: Emergency information system for road transport	Covers requirements for emergency information systems, such as requirements for hazard class diamonds, placards and emergency information documents. The emergency information system as documented in this part of MS 845 is intended to assist emergency services response teams in the mitigation of an incident that involves dangerous goods.
MS 845-2: 2011	Transport of dangerous goods-Emergency information systems Part 2: Emergency Information system for rail transport	Covers the rules and procedures that govern the implementation of an emergency information system for rail transportation of dangerous goods, in quantities that exceed the exempt quantity.
MS 845-3: 2011	Transport of dangerous goods-Emergency information systems Part 3: Emergency response guides	Covers standard procedures of initial response, in the form of Emergency Response Guides (ERGs) that are to be followed by a first responder upon arrival at the scene of an incident that involves the transport of materials that are classified as dangerous goods in accordance with DMS 848. The ERGs are intended to be used by the first responder or by the emergency services until more detailed information on the properties of each material and its treatment becomes available.
MS 845-4: 2011	Transport of dangerous goods-Emergency information systems Part 4: Transport Emergency card	Covers the requirements for a transport emergency card to make the driver of a vehicle transporting dangerous goods by road aware of the dangers associated with the load, and to indicate its use as a concise and quick reference in an emergency situation.
MS 847:2011	Transport of dangerous goods-Operational requirements for road vehicles	Establishes rules and procedures for the safe operation and handling of all road vehicles that are used for the transport of dangerous goods in accordance with the load constraints. The procedures include requirements for the consignor, the consignee, the operator, the driver and the qualified person as well as en-route procedures, and cargo handling.  The Standard covers the following three operations for the transport of dangerous goods by road: (a) loading of the dangerous goods, which is the responsibility of the consignor; (b) driving of the vehicle that carries the dangerous goods to its destination, which is the responsibility of the operator and the driver; and (c) off-loading of the dangerous goods, which is the responsibility of the consignee.
MS 848:2011	The identification and classification of dangerous goods for transport	Covers the identification of dangerous goods that are capable of posing a significant risk to health and safety of persons or to property and the environment. Dangerous goods are classified in nine classes and three packing groups in accordance with the United Nations Recommendations on the Transport of Dangerous Goods. The nine classes relate to the type of hazard whereas the three packing groups relate to the degree of danger posed within the class.
MS 849:2011	Transport of dangerous goods-Design, construction, testing, approval and maintenance of road vehicles and portable tanks	Covers requirements for the design, construction, testing, approval and maintenance of road vehicles of Gross Vehicle Mass equal to or above 3,500 kg. and portable tanks used to transport dangerous goods as classified in MS 848 and as required by the relevant national legislation.
MS 850: 2011	Classification of coals	Describes a simple classification system for coals providing guidance on the selection of the appropriate standard



<i>Column 1</i> <i>Malawi Standard</i> <i>Number</i>	<i>Column 2</i> <i>Title of the standard</i>	<i>Column 3</i> <i>Scope (Description) of the standard</i>
		procedures for the analyses and testing of coals. The system is applicable to coals of all ranks. The system may be applied to a wide range of representative coal samples, provided their exact nature is stated. Such samples include bore-core seam sections and composite samples, raw (as-mined) coal, washed coal, blends of coals of similar rank and selected, specified size fractions. The system provides a broad framework within which coals can be assessed.
MS 851:2011	Coal and coke-Analysis and testing-Determination of trace elements-Guide to the determination of trace elements	Describes methods used for the determination of trace elements in coal and coal ash. The trace elements include: arsenic, beryllium, boron, cadmium, chlorine, chromium, cobalt, copper, fluorine, lead, manganese, mercury, nickel, selenium and zinc. Also included are vanadium and molybdenum.
MS 852:2011	Coal and coke-Analysis and testing-Determination of trace elements-Coal, coke and fly-ash-Determination of eleven trace elements-Flame atomic absorption spectrometric method	Sets out a method for the preparation of the ash and a flame atomic absorption spectrometric method for the determination of barium, beryllium, chromium, copper, lead, lithium, manganese, nickel, strontium, vanadium and zinc in ash prepared in the laboratory from higher rank coal, coke and fly-ash.
MS 853:2011	Coal and coke-Analysis and testing-Determination of trace element-Determination of arsenic, antimony, and selenium-Hydride generation method	Sets out a method for the determination of arsenic, antimony and selenium in higher rank coal and coke by hydride generation.
MS 854:2011	Coal and coke Analysis and testing Determination of trace elements Determination of boron content Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) method	Sets out a method for the determination of boron in higher rank coal and coke using an inductively-coupled plasma atomic emission spectrometer after ashing of the coal or coke in the presence of Eschka mixture.
MS 855:2011	Coal and coke-Analysis and testing-Higher rank coal ash and coke ash-Major and minor elements-Acid digestion/flame atomic absorption spectrometric method.	Sets out methods for the determination of silicon, aluminium, iron, calcium, magnesium, sodium, potassium, titanium and manganese in higher rank coal ash and coke ash by flame atomic absorption spectrometry after acid digestion.
MS 856:2011	Hard coal-Determination of caking power-Roga test	Specifies a method for determining the caking power of hard coal by the Roga test.
MS 857:2011	Coal-burning appliances (Reduced smoke emission type)	Covers the constructional and performance requirements for coal-burning appliances of three types that are free-standing and that operate with minimum smoke emission.
MS 858:2011	Wood charcoal briquettes for households use-Specification	Specifies requirements for charcoal briquettes that is derived entirely from wood, in lump or briquettes form and that is intended for household use.
MS 859:2011	Coal-Determination of moisture content of samples intended for general analysis (vacuum-oven method)	Specifies the vacuum-oven method for the determination of the moisture content of coal samples intended for general analysis.
MS 860:2011	Coal-Determination of moisture content of samples intended for general analysis (air-oven method)	Specifies a method for the determination of the moisture content of coal samples intended for general analysis (air-oven method).
MS 861:2011	Coal-Determination of carbon dioxide content (Titrimetric method)	Specifies a volumetric method for the determination of the carbon dioxide content of coal.
MS 862:2011	Coal-Determination of coking properties (Ruhr dilatometer test)	Specifies a method for the determination of the coking properties of coal using the Ruhr dilatometer.
MS 867:2011	Coal-Determination of yields of tar, water, gas, and coke residue from coal by low temperature distillation	Outlines the method for determining the yields of tar, water, gas, and coke residues from coal by low temperature distillation.



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MS 868:2011	Coal-Guide to the systematic evaluation of coal resources	Provides a detailed framework for reporting on coal resources and coal reserves as required by the ministry responsible for minerals in Malawi.
MS 870:2011	Coal-Determination of forms of sulphur	Specifies methods of determining the sulfate and pyritic sulfur contents of coals, including brown coals and lignites, and of calculating the amount of organic sulfur present.
MS 871:2011	Hard Coal-Determination of moisture holding capacity	Specifies methods of determining the moisture holding capacity of hard coals.
MS 872:2011	Hard Coal-Determination of crucible swelling number	Specifies a method for determining the swelling properties of hard coal when heated in a covered crucible.
MS 873:2011	Hard Coal-Determination of total moisture	Specifies two methods for determination of the total moisture content of hard coals, a two-stage method and a single-stage method.
MS 874:2011	Coal-Determination of plastic properties -Constant torque-Giesler plastometer	Specifies a method for obtaining a relative measure of the method plastic behaviour of coal when heated under prescribed conditions. The method may be used to obtain values of the plastic properties of coals and blends used in carbonization and in other situations where determination of plastic behaviour of coals is of practical importance.
MS 875:2011	Building environment design-energy efficiency-General principles.	Establishes the general principles of building environment design taking into account healthy indoor environment for the occupants, and protecting the environment for future generations. This Standard promotes an approach in which the various parties involved in building environmental design collaborate with one another to provide a sustainable building environment.
MS 876:2011	Building environment design-Guidelines to assess energy efficiency of new buildings	Gives guidelines related to energy efficiency in buildings. The objectives of the Standard are to assist designers and practitioners when collecting and providing useful data that are required at different stages of the design process and to fulfil the definitions of the building as prepared by building designers. It applies to new buildings and is applicable to space air-conditioning equipment and the heating plant in new buildings.
MS 877:2011	Energy management-Specification	Specifies requirements for an energy management system, to enable an organization to address the present and future energy consumption systematically and to be able to maintain the systematic approach. The Standard lays down requirements for continual improvement in the form of a more efficient use of energy, irrespective of the type of energy. The standard does not itself state specific performance criteria with respect to energy.
MS 878:2011	Hard coal and coke-Determination of volatile matter	Specifies a method of determining the volatile matter of hard coal and of coke. It is not applicable to brown coals and lignites.
MS 882:2012	Self ballasted light emitting diodes lamps for general lighting purposes-Performance requirements	Specifies the performance requirements for self-ballasted Light Emitting Diode (LED) lamps with a supply voltage up to 250 V, together with the test methods and conditions required, intended for domestic and similar general lighting purposes.
MS 883:2012	Self ballasted lamps for general lighting purposes-Safety requirements	Specifies the safety and interchangeability requirements together with the test methods and conditions required to show compliance of tubular fluorescent and other gas-discharge lamps with integrated means for controlling starting and stable operation (self-ballasted lamps) intended for domestic and similar general lighting purposes.



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MS 884:2012	Self ballasted fluorescent lamps for general purposes-Performance requirements	Specifies the performance requirements together with the test methods and conditions required to show compliance of tubular fluorescent and other gas-discharge lamps with integrated means for controlling starting and stable operation (self-ballasted lamps) intended for domestic and similar general lighting purposes.
MS 885:2012	Self-ballasted emitting diode lamps for general lighting purposes-Safety specification	Specifies the safety and interchangeability requirements, together with the test methods and conditions required to show compliance of LED-lamps with integrated means for stable operation (self-ballasted LED-lamps), intended for domestic and similar general lighting purposes.
MS 886:2012	Self-ballasted compact fluorescent lamps for general lighting purposes-Specification	Provides requirements for compact fluorescent lamps intended for domestic and general lighting purposes and applies exclusively to self-ballasted compact fluorescent lamps (CFLs)-with or without any cover, and without any reflector element. These lamps have an integrated means for controlling starting and stable operation and are intended for general lighting purposes.
MS 887:2012	Self-ballasted compact fluorescent lamps for general lighting purposes-Methods of measuring the performance	Specifies the test methods and conditions required for electronic self-ballasted, compact fluorescent lamps (CFLs), with integrated means for starting, controlling and stable operation.
MS 888:2011	Jatropha straight vegetable oil-Specification	Specifies requirements and test methods for marketed and delivered straight vegetable oil extracted from <i>Jatropha carcus</i> to be used at an agreed and approved percentage either as diesel or illuminating paraffin blend.
MS 889-1:2011	Recommendations for small renewable energy and hybrid systems for rural electrification Part 1: General introduction to rural electrification	Provides a general introduction to rural electrification covered in the MS 889 series of standard. The series of the Standard intends to provide to different players involved in rural electrification, projects (such as project developers, project implementers, installers e.t.c.) documents for the setting up of renewable energy and hybrid systems with AC voltage below 500V, DC voltage below 50V and power below 50 KVA. These Standards are recommendations: (a) to choose the right system for the right place; (b) to design the system; (c) to operate and maintain the system; (d) these Standards are focused only on rural electrification ; and (e) concentrating on but not specific to developing countries they must not be considered as all inclusive to rural electrification. The documents try to promote the use of renewable energies in rural electrification.
MS 889-2:2011	Recommendations for small renewable energy and hybrid systems for rural electrification Part 2: From requirements to a range of electrification systems	Proposes a methodological approach for the setting up and carrying out of socio-economic studies as part of the framework of decentralized rural electrification projects. It is addressed to project teams and in particular to experts in charge of socio-economic studies in international projects. It also provides some structures as technical solutions that could be recommended depending on the qualitative and quantitative energy demands, consistent with the needs and financial situation of the customers.
MS 889-3:2011	Recommendations for small renewable energy and hybrid systems for rural electrification Part 3: Project development and management	Provides information on the responsibilities involved in the implementation of rural power systems. Presents contractual relationships to be built between the different participants to a project. Throughout the project, responsibilities are to be clearly defined and contractual commitments controlled.



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MS 889-4:2011	Recommendations for small renewable energy and hybrid systems for rural electrification Part 4: System selection and design	Provides a method for describing the results to be achieved by the electrification system independently of the technical solutions that could be implemented. In relation to the needs of the different participants to the project, functional requirements that shall be achieved by the production and distribution subsystems are listed.
MS 889-5:2011	Recommendations for small renewable energy and hybrid systems for rural electrification Part 5: Protection against electrical hazards	The purpose of this Standard is to specify the general requirements for the protection of persons and equipment against electrical hazards to be applied in decentralized rural electrification systems. These general requirements are to be applied to all the identified categories of decentralized rural electrification systems (DRES).
MS 889-6:2011	Recommendations for small renewable energy and hybrid systems for rural electrification Part 6: Acceptance, operation, maintenance and replacement.	Is intended to describe the various rules to be applied for acceptance, operation, maintenance and replacement (AOMR) of decentralized rural electrification systems (DRES) which are designed to supply electric power for sites which are not connected to a large interconnected system, or on national grid, in order to meet basic needs.
MS 889-7:2011	Recommendations for small renewable energy and hybrid systems for rural electrification Part 7:-Generators	Specifies the general requirements for generators (maximum power = 100 kVA) in decentralized rural electrification systems. The aim is to point out the main items that must be considered when selecting, sizing, installing, operating and maintaining this equipment.
MS 889-7-1:2011	Recommendations for small renewable energy and hybrid systems for rural electrification Part 7-1: Generators-Photovoltaic arrays	Specifies the general requirements for erection and operation of PV arrays in decentralized rural electrification systems.
MS 889-7-3:2011	Recommendations for small renewable energy and hybrid systems for rural electrification Part 7-3: Generator set-Selection of generator sets for rural electrification systems.	Specifies the general requirements for the selection, sizing, erection and operation of generator sets in decentralized rural electrification systems. It applies to all low voltage combustion engine electricity generator sets with a rated power up to 100 kVA, and designed for supplying electrical power to isolated sites used in systems as described in IEC/TS 62257-2.
MS 889-8-1:2011	Recommendations for small renewable energy and hybrid systems for rural electrification Part 8-1 Selection of batteries and battery management systems for stand-alone electrification systems-Specific case of automotive flooded lead-acid batteries available in developing countries	Proposes simple, cheap, comparative tests in order to discriminate easily, in a panel of automotive flooded lead-acid batteries the most acceptable model for PV Individual Electrification Systems. Also provides regulations and installation conditions to be complied with in order to ensure the life and proper operation of the installations as well as the safety of people living in proximity to the installation.
MS 889-9-1:2011	Recommendations for small renewable energy and hybrid systems for rural electrification Part 9-1: Micropower systems.	Provides general requirements for the design, erection and operation of micropower plants and general requirements to ensure the safety of persons and property. The micropower plants covered by this specification are low-voltage a.c., three-phase or single-phase, with rated capacity less than, or equal to, 100kVA. They do not include voltage transformation.
MS 889-9-2:2011	Recommendations for small renewable energy and hybrid systems for rural electrification Part 9-2: Microgrids.	Specifies the general requirements for the design and the implementation of microgrids used in decentralized rural electrification to ensure the safety of persons and property and their satisfactory operation according to the scheduled use.
MS 889-9-3:2011	Recommendations for small renewable energy and hybrid systems for rural electrification Part 9-3: Integrated system-User interface	Specifies the general requirements for the design and the implementation of the interface equipment within the user's installation which connects to a microgrid or the generating part of a standalone system.



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MS 889-9-4:2011	Recommendations for small renewable energy and hybrid systems for rural electrification Part 9-4: Integrated system-User installation	Specifies the general requirements for the design and the implementation of a user's installation for small renewable energy and hybrid systems for rural electrification. It applies to single-phase user's electrical installations with maximum power of 500 VA, in decentralized rural electrification systems.
MS 889-9-5:2012	Recommendations for small renewable energy and hybrid systems for rural electrification Part 9-5: Integrated system-selection of portable PV lanterns for rural electrification projects	Applies to portable solar photovoltaic (PV) lanterns and is independent of the technology used to provide the light. It also provides regulations and installation conditions to be complied with in order to ensure the life and proper operation of the selected lantern as well as the safety of people living in proximity to the installation.
MS 889-9-6:2011	Recommendations for small renewable energy and hybrid systems for rural electrification Part 9-6: Integrated system-selection of Photovoltaic Individual Electrification Systems (PV-IES)	Proposes simple selection procedure and cheap, comparative tests which can be performed in laboratories of developing countries, in order to identify the most suitable model of small photovoltaic individual electrification systems (PV-IES) up to 500 Wp for a particular rural electrification project from a number of products submitted for test.
MS 889-12-1:2011	Recommendations for small renewable energy and hybrid systems for rural electrification Part 12-1: Selection of self-ballasted lamps (CFL) for rural electrification systems and recommendations for household lighting equipment.	This specification deals with integral compact fluorescent technology lamps:  Power less than 60 W With an Edison screw E27 or bayonet B22 cap; With nominal voltage from 100V to 250V a.c.  It specifies performance requirements together with the test methods and conditions required to show compliance of tubular fluorescent and other gas-discharge lamps with integrated means for controlling starting and stable operation (self-ballasted lamps) intended for domestic and similar general lighting purpose. This specification must be considered as reference for the manufacturers.
MS-ISO 4949:2003	Steel names based on symbols	This Technical Specification sets out rules for the designation of internationally standardized steel grades by means of symbolic letters and numbers to express application and principal characteristics (e.g. mechanical, physical, chemical) so as to provide an abbreviated identification of steel grades.
MS-ISO 5725-1:1994	Accuracy (trueness and precision) of measurements methods and results- Part 1: General principles	Outlines the general principles to be understood when assessing accuracy (trueness and precision) of measurement methods and results, and in applications, and to establish practical estimations of the various measures by experiment (ISO 5725-1).
MS-ISO 9000:2005	Quality management systems- Fundamentals and vocabulary	Describes fundamentals of quality management systems, which form the subject of the ISO 9000 family, and defines related terms.
MS-ISO 9001:2008	Quality management systems- Requirements	Specifies requirements for a quality management system where an organization needs to demonstrate its ability to consistently provide product that meets customer and applicable regulatory requirements, and aims to enhance customer satisfaction through the effective application of the system, including processes for continued improvement of the system and assurance or conformity to customer and applicable regulatory requirements.
MS-ISO 9004:2009	Managing for the sustained success of an organization-A quality management approach (Third edition)	Provides guidance to organisations to support the achievement of sustained success by a quality management approach. It is applicable to any organisation, regardless of size, type and



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		activity. The Standard is not intended for certification, regulatory or contractual use.
MS-ISO 10002:2004	Quality management-Customer satisfaction-Guidelines for complaints handling in organizations	Provides guidance on the process of complaints handling related to products within an organization, including planning, design, operation, maintenance and improvement. The complaints handling process described is suitable for use as one of the processes of an overall quality management system.
MS-ISO 10005:2005	Quality management systems-Guidelines for quality plans	Provides guidelines for the development, review, acceptance, application and revision of quality plans.
MS-ISO 10006:2003	Quality management systems Guidelines for quality management in projects	Gives guidance on the application of quality management in projects.
MS-ISO/TR 10013:2001	Guidelines for quality management system documentation	Provides guidelines for the development and maintenance of the documentation necessary to ensure an effective quality management system, tailored to the specific needs of the organization. The use of these guidelines will aid in establishing a documented system as required by the applicable quality management system standard.
MS-ISO 10015:1999	Quality management-Guidelines for training	These guidelines cover the development, implementation, maintenance, and improvement of strategies and systems for training that affect the quality of the products supplied by an organization.
MS-ISO 10144:2008	Certification Scheme for steel bars and wires for reinforcement of concrete structures	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 requirements specified in product standards such as ISO 6935-1 and ISO 6935-2.
MS-ISO 10544:1992	Cold reduced steel wire for the reinforcement of concrete and manufacture of welded fabric	Specifies technical requirements for cold-reduced steel wire designed for the reinforcement of concrete or for use in welded fabric.
MS-ISO 11082:1992	Certification Scheme for weld fabric for the reinforcement of concrete structures	Specifies rules for a certification scheme for continuous production of welded fabric for ordinary reinforcement of concrete structures, in Order to verify the conformity with requirements specified in product Standards such as ISO 6935-3.
MS-ISO 14001:2004	Environmental management systems-Requirements with guidance for use	Specifies requirements for an environmental management system to enable an organization to develop and implement a policy and objectives which take into account legal requirements and other requirements to which the organization subscribes, and information about significant environmental aspects. It applies to those environmental aspects that the organization identifies as those which it can control and those which it can influence. It does not itself state specific environmental performance criteria.
MS-ISO 14004:2004	Environmental management systems-General guidelines on principles, systems and support techniques	Provides guidance on the establishment, implementation, maintenance and improvement of an environmental management system and its coordination with other management systems.
MS- ISO 14010:1996	Guidelines for environmental auditing-general principles	Provides the general principles of environment auditing that are applicable to all types of environmental audits.
MS ISO 14011:1996	Guidelines for environmental auditing-Audit procedures	Establishes audit procedures that provide for the planning and conduct of an audit of an EMS to determine conformance with EMS audit criteria.
MS ISO 14012:1996	Guidelines for environmental auditing-Qualification criteria for environmental auditors	Provides guidance on qualification criteria for environmental auditors and lead auditors and is applicable to both internal and external auditors.



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
MS-ISO-14015:2004	Environmental management systems-Environment assessment of sites and organizations (EASO)	Provides guidance on how to conduct an EASO through a systematic process of identifying environmental aspects and environmental issues and determining, if appropriate, their business consequences.
MS-ISO 14020:2000	Environmental labels and declarations-General principles	Establishes guiding principles for the development and use of environmental labels and declarations. It is intended that other applicable standards in the MS-ISO 14020 series can be used in conjunction with this Standard.
MS-ISO 14031:1999	Environmental management -Environmental performance evaluation-Guidelines	<p>Gives guidance on the design and use of environmental performance evaluation within an organization. It is applicable to all organizations, regardless of type, size, location and complexity.</p> <p>The Standard does not establish environmental performance levels. It is not intended for use as a specification standard for certification or registration purposes or for the establishment of any other environmental management system conformance requirements.</p>
MS-ISO/TR 14032:1999	Environmental management -Examples of environmental performance evaluation (EPE).	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; nongovernmental organizations; government agencies; small, medium and large enterprises; organizations with and without certified environmental management systems) and geographic locations.
MS-ISO 14040:1997	Environmental management-Examples of environmental performance evaluation (EPE).	Specifies the general framework, principles and requirements for conducting and reporting life cycle assessment studies. This Standard does not describe the life cycle assessment technique in detail.
MS-ISO 14041:1998	Environmental management -Life cycle assessment-Goal and scope, definition and inventory analysis	Specifies the requirements and the procedures necessary for the compilation and preparation of the definition of goal and scope for a Life Cycle Assessment (LCA), and for performing, interpreting and reporting a Life Cycle Inventory analysis (LCI).
MS-ISO 14042:2000	Environmental management -Life cycle assessment-Life cycle impact assessment	Describes and gives guidance on a general framework for the life cycle impact assessment (LCIA) phase of life cycle assessment (LCA), and the key features and inherent limitations of LCIA. It specifies requirements for conducting the LCIA phase and the relationship of LCIA to the other LCA phases.
MS-ISO 14043:2000	Environmental management-Life cycle assessment-Life cycle interpretation.	This Standard provides requirements and recommendations for conducting the life cycle interpretation in LCA or LCI studies. It does not describe specific methodologies for the life cycle interpretation phase of LCA and LCI studies.
MS-ISO 14044:2000	Environmental management -Life cycle assessment-Requirements and guidelines	Specifies the requirements and the procedures necessary for life cycle assessment (LCA). The Standard covers life cycle assessment (LCA) studies and life cycle inventory (LCI) studies. The intended application of LCA or LCI results is considered during the goal and scope definition, but the application is outside the scope of this Standard.
MS-ISO/TS 14048:2002	Environmental management-Life cycle assessment-Data documentation format	This technical specification 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.



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
MS-ISO 14050:2002	Environmental management-Vocabulary	This standard contains definitions of fundamental concepts related to environmental management, published in the MS-ISO 14000 series of Malawi Standards.
MS ISO 15161:2001	Guidelines on the application of MS ISO 9001:2000 for the food and drink industry	Gives guidance to organizations in applying the requirements of MS-ISO 9001 during the development and implementation of a quality management system in the food and drink industry. It gives information on the possible interactions of the ISO 9000 series of standards and the hazard analysis and critical control point (HACCP) system for food safety requirement.
MS-ISO 15189:2003	Medical laboratories-Particular requirements for quality and competence	Specifies requirements for quality and competence particular to medical laboratories.
MS-ISO/IEC 17021:2011	Conformity assessment-Requirements for bodies providing audit and certification of management systems	Contains principles and requirements for the competence, consistency and impartiality of the audit and certification of management systems of all types (e.g. quality management systems or environmental management systems) for bodies providing these activities. Certification bodies operating to this International Standard need not offer all types of management system certification.
MS-ISO/IEC-TS 17021-2: 2012	Conformity assessment-Requirements for bodies providing audit and certification of management systems Part 2: Competence requirements for auditing and certification of environmental management systems	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.
MS-ISO/IEC 17025:2005	General requirements for the competence of testing and calibration laboratories	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.
MS-ISO/IEC 17025:2005	General requirements for the for the competence of testing and calibration laboratories	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.
MS-ISO/IEC 17065: 2012	Conformity assessment-Requirements for bodies certifying products, processes and services	Contains requirements for the competence, consistent operation and impartiality of product, process and service certification bodies.
MS-ISO 19011:2011	Guidelines for quality and/or environmental management systems auditing	Provides guidance on the principles of auditing, managing audit programmes, conducting quality management system audits and environmental management system audits, as well as guidance on the competence of quality and environment system auditors.
MS-ISO 21569:2005	Foodstuffs-Methods of analysis for the detection of genetically modified organisms and derived products ? Qualitative nucleic acid based methods.	Describes the procedure to qualitatively detect genetically modified organisms (GMOs) and derived products by analysing the nucleic acids extracted from the sample under study. The main focus is on polymerase chain reaction (PCR) based amplification methods.
MS-ISO 21570:2005	Foodstuffs-Methods of analysis for the detection of genetically modified organisms and derived product-Quantitative nucleic acid based methods	Provides the overall framework of quantitative methods for the detection of genetically modified organisms (GMOs) in foodstuffs, using the polymerase chain reaction (PCR).
MS-ISO 21571:1994	Foodstuffs-Methods of analysis for the detection of genetically modified organisms and derived products-Nucleic acid extraction	Provides general requirements and specific methods for DNA extraction/purification and quantitation. These methods are described in Annexes A and B. It has been established for food matrices, but could also be applicable to other matrices, such as grains and feed.



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
MS-ISO 21572:2004	Food stuffs-Methods of analysis for the detection of genetically modified organisms and derived products-Protein based methods	Provides general guidelines and performance criteria for methods for the detection and/or quantitation of specific proteins derived from genetically modified (GM) plant material in a specified matrix.
MS-ISO 22000:2005	Food safety management systems-Requirements for any organization in the food chain	Specifies requirements for a food safety management system where an organization in the food chain needs to demonstrate its ability to control food safety hazards in order to ensure that food is safe at the time of human consumption.
MS-ISO 22002-1:2009	Prerequisite programmes on food safety Part 1: Food manufacturing	Specifies requirements for establishing, implementing and maintaining pre-requisite programmes (PRP) to assist in controlling food safety hazards.
MS-ISO/TS 22002-3:2011	Prerequisites programmes on food safety ,Part 3: Farming	Specifies requirements and guidelines for the design, implementation, and documentation of pre-requisite programmes (PRPs) that maintain a hygienic environment and assist in controlling food safety hazards in the food chain. This part of MS-ISO 22002 is applicable to all organizations (including individual farms or groups of farms), regardless of size or complexity, which are involved in farming steps of the food chain and wish to implement PRPs in accordance with MS-ISO 22000:2005.
MS-ISO 22004:2005	Food safety management systems-Guidance on the application of MS 22000:2005	Provides generic guidance that can be applied in the use of MS-ISO 22000.
MS-ISO 24276:2006	Food stuffs-Methods of analysis for the detection of genetically modified organisms and derived products-General requirements and definitions.	Specifies how to use the standards for sampling strategies (EN/TS 21568), nucleic acid extraction (ISO 21571), qualitative nucleic acid analysis (ISO 21569), quantitative nucleic acid analysis (ISO 21570) and protein-based methods (ISO 21572), and explains their relationship in the analysis of genetically modified organisms in foodstuffs.
MS-ISO 26000:2010	Guidance on social responsibility	<p>This Standard provides guidance to all types of organizations, regardless of their size or location on:</p> <ul style="list-style-type: none"> <li>(a) concepts, terms and definitions related to social responsibility;</li> <li>(b) the background, trends and characteristics of social responsibility;</li> <li>(c) principles and practices related to social responsibility;</li> <li>(d) the core subjects and issues of social responsibility;</li> <li>(e) integrating, implementing and promoting socially responsible behaviour throughout the organisation, through its policies and practices within its sphere of influence;</li> <li>(f) identifying and engaging with stakeholders; and</li> <li>(g) communicating commitments, performance and other information related to social responsibility.</li> </ul> <p>This Standard is intended to assist organizations in contributing to sustainable development. It is intended to encourage them to go beyond legal compliance, recognizing that compliance with law is a fundamental duty of any organization and an essential part of their social responsibility. It is intended to promote common understanding in the field of social responsibility, and to complement other instruments and initiatives for social responsibility, not to replace them.</p>
MS-IEC 60044-1:2003	Instrument transformers-Part 2: Inductive voltage transformers	Applies to new inductive voltage transformers for use with electrical measuring instruments and electrical protective



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
		devices at frequencies from 15 to 100 Hz. This Standard relates basically to transformers with separate windings, but also to autotransformers. It replaces IEC 60186 (1987) plus amendments 1 and 2 only for inductive voltage transformers. IEC 60186 remains in force for capacitive voltage transformers.
MS-IEC 60044-2:2003	Instrument transformers-Part 2: Inductive voltage transformers	Applies to new inductive voltage transformers for use with electrical measuring instruments and electrical protective devices at frequencies from 15 to 100 Hz. This Standard relates basically to transformers with separate windings, but also to autotransformers. It replaces IEC 60186 (1987) plus amendments 1 and 2 only for inductive voltage transformers. IEC 60186 remains in force for capacitive voltage transformers.
MS-IEC 60044-7:1999	Instrument transformers-Part 7: Electronic voltage transformers	Applies to newly manufactured electronic voltage transformers with analogue output, for use with electrical measuring instruments and electrical protective devices at frequencies from 15 Hz to 100 Hz. The Standard covers optical arrangements with electronic components. Three phase voltage transformers are not included, but some of the requirements apply.
MS-IEC 60050-415:1999	International Electrotechnical Vocabulary -Part 415: Wind turbine generator	Provides terms and definitions for wind turbine generators.
MS-IEC 60050-461:1984	International Electrotechnical Vocabulary. Chapter 461: Electric cables	Provides terms and definitions for electric cables.
MS-IEC 60050-466:1990	International Electrotechnical Vocabulary Chapter 466: Overhead	Provides terms and definitions for overhead.
MS-IEC 60050-482:2004	International Electrotechnical Vocabulary -Part 482: Primary and secondary cells and batteries	Gives the general terminology used in the field of primary and secondary cells and batteries, and reflects the technology, design, construction, performance and application employed.
MS-IEC 60050-826:1982	International Electrotechnical Vocabulary -Part 826: Electrical installation	Provides terms and definitions to promote international standardization in electrical installation.
MS-IEC 60050-845:1987	International Electrotechnical Vocabulary Lighting	Comprises some 950 terms and definitions to promote international standardization in the use of quantities, units, symbols and terminology in the field of lighting.
MS-IEC 60050-851:1991	International Electrotechnical Vocabulary Chapter 851: Electric welding	Provides terms and definitions to promote international standardization in electric welding.
MS-IEC 60055-1:1991	Paper-insulated metal-sheathed cables for rated voltages up to 18/30 Kv (with copper or aluminium conductors and excluding gas-pressure and oil-filled cables)-Part 1: Tests on cables and their accessories	Gives conditions, categories and frequency of tests, routine tests, special tests, type tests and tests after installation.
MS-IEC 60055-2:1981	Paper-insulated metal-sheathed cables for rated voltages up to 18/30 Kv (with copper or aluminium conductors and excluding gas-pressure and oil-filled cables)-Part 2: General and construction requirements	Specifies general and construction requirements for impregnated paper-insulated load-sheathed cables with copper or aluminium conductors from 0.6/1 kV. Tables for twenty one different types cable construction are given.
MS-IEC 60061-DB-1:2006	Lamp caps and holders together with gauges for the control of interchangeability and safety Part 1: Lamp caps	Provides requirements for lamp caps.
MS-IEC 60061-DB-2:2006	Lamp caps and holders together with gauges for the control of interchangeability and safety Part 2: Lamp holders	Provides requirements for lamp holders.



<i>Column 1</i> <i>Malawi Standard</i> <i>Number</i>	<i>Column 2</i> <i>Title of the standard</i>	<i>Column 3</i> <i>Scope (Description) of the standard</i>
MS-IEC 60061-DB-3:2006	Lamp caps and holders together with gauges for the control of interchangeability and safety Part 3: Gauges	Provides requirements for gauges.
MS-IEC 60061-DB-4:2006	Lamp caps and holders together with gauges for the control of interchangeability and safety Part 4: Guidelines and general information	Provides guidelines and general information for lamp caps and holders together with gauges for the control of interchangeability and safety.
MS-IEC 60064:2005	Tungsten filament lamps for domestic and similar general lighting purposes- Performance requirements	Applies to tungsten filament incandescent lamps for general lighting services (GLS) which comply with the safety requirements in IEC 60432-1.1.
MS-IEC 60076- SER-1:2000	Power transformers-Part 1: General	Applies to three phase and single phase transformers including autotransformers. Defines the rating and connection symbols. Gives certain specifications for transformers having a tapped winding. Defines information which shall be marked on the rating plate and the tests to be conducted.
MS-IEC 60076- SER-4:2002	Power transformers-Part 4: Guide to the lightning impulse and switching impulse testing -Power transformers and reactors	Gives guidance and explanatory comments on the existing procedures for lightning and switching impulse testing of power transformers to supplement the requirements of IEC 60076-3. It is also generally applicable to the testing of reactors (see IEC 60289), modifications to power transformer procedures being indicated where required.
MS-IEC 60076- SER-5:2000	Power transformers-Part 5: Ability to withstand short circuit	Specifies the design and construction of transformers to withstand the thermal and dynamic effects of external short circuits under specified conditions. Includes tests to demonstrate the ability to withstand short circuit. Applies to transformers as defined in the scope of IEC 60076-1.
MS-IEC 60076- SER-11:2004	Power transformers-Part 11: Dry-type transformers	Provides requirements for dry-type transformers.
MS-IEC 60083:2006	Plugs and socket-outlets for domestic and similar general use standardized in member countries of IEC	The object of this technical report is to give general information about the systems of plugs and socket-outlets for households and similar purposes which are used in the IEC countries. The report only contains National System which are commonly used in homes and offices. It is therefore limited to systems for a.c. with a rated voltage above 50 V but not exceeding 440 V, intended for household and similar purposes, either indoors or outdoors.
MS-IEC 60086-1:2000	Primary batteries-Part 1: General	Provides general information for primary batteries.
MS-IEC 60086-2:2001	Primary batteries-Part 2: Physical and electrical specifications	Applicable to primary batteries based on standardized electrochemical systems. It specifies the physical dimensions, discharge test conditions, and the discharge performance requirements.
MS-IEC 60086-3:1995	Primary batteries-Part 3: Watch batteries	Specifies dimensions, designation, methods of tests and requirements for primary batteries for watches. In several cases, a menu of test methods is given. When presenting battery electrical characteristics and/or performance data, the manufacturer specifies the test method used.
MS-IEC 60086-4:2000	Primary batteries-Part 4: Safety of lithium batteries	Specifies tests and requirements for primary lithium batteries to ensure their safe operation under intended use or reasonably foreseeable misuse.
MS-IEC 60086-5:2005	Primary batteries-Part 5: Safety of batteries with aqueous electrolyte	Specifies tests and requirements for primary batteries with aqueous electrolyte to ensure their safe operation under normal use and reasonably foreseeable misuse.



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
MS-IEC 60095-1:2000	Lead-Acid Starter Batteries-Part 1: General requirements and methods of test	This part of IEC 60095 is applicable to lead-acid batteries with a nominal voltage of 12 V, used primarily as a power source for the starting and igniting of internal combustion engines, lighting and for auxiliary equipment or internal combustion engine vehicles. These batteries are commonly called "starter batteries".
MS-IEC 60095-2:1984	Lead-Acid Starter Batteries Part 2: Dimensions of batteries and dimensions and marking of terminal	Applies to lead-acid batteries used for starting, lighting and ignition of passenger automobiles and light commercial vehicles with a nominal voltage of 12 V fastened to the vehicles by means of ledges on the long sides of the battery case.
MS-IEC 60095-4:1989	Lead-Acid Starter Batteries-Part 4 Dimensions of batteries for heavy trucks	Applies to lead-acid batteries for starting, lighting and igniting of heavy trucks.
MS-IEC 60096-0-1:2000	Radio-frequency cables. Part 0-1: Guide to the design of detail specification-Coaxial cables	Gives recommendations for design parameters, including nominal characteristic impedances and diameter over dielectric, and guidance for the design of radio-frequency coaxial cables with braid, metallic tapes or tubular outer conductors.
MS-IEC 60096-1:1986	Radio-frequency cables. Part 1: General requirements and measuring methods	Relates to flexible or semi-flexible radio-frequency cables of coaxial or twin conductor types designed for use in radio-communication equipment and in electronic devices employing similar techniques.
MS-IEC 60096-2:1961	Radio-frequency cables Part 2: Relevant cable specifications (Consolidated edition)	Provides requirements for radio-frequency cables.
MS-IEC 60096-3:1982	Radio-frequency cables Part 3: General requirements and tests for single-unit coaxial cables for use in cabled distribution systems	Specifies the general requirements and tests applicable to single-unit coaxial cables for use in cabled distribution systems.
MS-IEC 60096-4-1:1990	Radio-frequency cables. Part 4: Specification for superscreened cables-Section One: General requirements and test methods	Covers the requirements of superscreened cables.
MS-IEC 60107-1:1997	Methods of measurement on receivers for television broadcast transmissions Part 1: General considerations-Measurements at radio and video frequencies	Deals with the standard conditions and methods of measurements on television receivers that conform to the terrestrial broadcast television standards specified by the ITU-R. Such receivers may be used for direct off-air reception, reception via cabled networks or as a monitor for pre-recorded video home movies and games among other applications. This part does not include the measurements specific to the sound channels which are dealt with by other parts.
MS-IEC 60155:1993	Glow-starters for fluorescent lamps	Specifies interchangeable starters used with pre-heat tubular fluorescent lamps and should be used in conjunction with corresponding publications for fluorescent lamps and their ballasts.
MS-IEC 60167:1964	Methods of test for determination of the insulation resistance of solid insulating materials	Describes procedures for rapidly determining the values of the insulation resistance of solid insulating materials in order to give a general indication of quality when great accuracy is not required.
MS-IEC 60173:1964	Colours of the cores of flexible cables and cords	Lays down a standard colour identification for the earthing core in flexible cables and cords with not more than five cores.
MS-IEC 60183:1984	Guide to the selection of high-voltage cables	Applicable to high voltage cables. It is intended to give guidance in the selection of the conductor size, insulation level and construction of cable to be used on three phase alternating current systems operating at voltages exceeding 1kV. It also summarizes the information which is necessary to enable the appropriate selection to be made.



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
MS-IEC 60189-2:1989	Low-frequency cables and wires with PVC insulation and PVC sheath. Part 2: Cables in pairs, triples, quads and quintuples for inside installations	Deals with cables construction and dimensions, mechanical requirements, thermal stability and electrical requirements.
MS-IEC 60215:1987	Safety requirements for radio transmitting equipment	Applies to radio transmitting equipment operating under the responsibility of skilled personnel and deals with protection against electric shock, skin burns, high temperature and fire, implosion and explosion, harmful radiation and miscellaneous hazards. Includes design and construction requirements and test methods to ensure safety of personnel, when the equipment is operating under conditions of normal use and certain fault conditions, when carrying out adjustments, during fault finding, and repair of the equipment : prevention of fire and its spread.
MS-IEC 60244-1:1999	Methods of measurement for radio transmitters Part 1: General characteristics for broadcast transmitters	Defines the conditions and methods of measurement to be used to ascertain the performance of a radio transmitter and to make possible the comparison of the results of measurement made by different observers.
MS-IEC 60227-1:1998	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V Part 1: General requirements	Gives definitions and specifies marking, core identification and general requirements for the construction of cables. Appendix describes code designation of cables.
MS-IEC 60227-2:1997	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V Part 2: Test methods	Provides test methods of carrying out the tests specified in all parts of IEC 60227.
MS-IEC 60227-3:1997	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V Part 3: Non-sheathed cables for fixed wiring	Specifies requirements for polyvinyl chloride insulated single-core non-sheathed cables for fixed wiring of rated voltages up to and including 450/750 V. This is a consolidated version of IEC 60227-3 (1993) and its Amendment 1 (1997).
MS-IEC 60227-4:1997	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V Part 4: Sheathed cables for fixed wiring	Details the particular specification for light polyvinyl chloride sheathed cables of rated voltage of 300/500 V.
MS-IEC 60227-5:1998	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V Part 5: Flexible cables (cords)	Details the particular specifications for polyvinyl chloride insulated flexible cables (cord), of rated voltages up to and including 300/500 V.
MS-IEC 60227-6:2001	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V Part 6: Lift cables and cables for flexible connections	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.
MS-IEC 60227-7:1995	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V Part 7: Flexible cables screened and unscreened with two or more conductors	This part of IEC 60227 details the particular specifications for polyvinyl chloride insulated screened and unscreened control cables of rated voltages up to and including 300/500 V.  All cables comply with the appropriate requirements given in IEC 60227-1 and each individual type of cable complies with the particular requirements of this part.
MS-IEC 60228:1978	Conductors of insulated cables	Specifies standardized nominal cross-section areas from 0.5 mm <sup>2</sup> to 2 000 mm <sup>2</sup> , numbers and diameters of wires and resistance values of conductors in electric cables and flexible cords.



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
MS-IEC 60245-1:2003	Rubber insulated cables-Rated voltages up to and including 450/750 V Part 1: General requirements	Gives definitions and specifies marking, core identification and general requirements for the construction of cables.
MS-IEC 60245-2:1998	Rubber insulated cables-Rated voltages up to and including 450/750 V Part 2: Test methods	Gives the test methods specified in all IEC 60245.
MS-IEC 60245-3:1994	Rubber insulated cables-Rated voltages up to and including 450/750 V Part 3: Heat resistant silicone insulated cables	Details the particular specifications for silicone rubber insulated cables of rated voltage of 300/500 V.
MS-IEC 60245-4:2004	Rubber insulated cables-Rated voltages up to and including 450/750 V Part 4: Cords and flexible cables	Details the particular specifications for rubber insulated and braided cords and for rubber insulated and rubber or poly-chloroprene or other equivalent synthetic elastomer sheathed cords and flexible cables of rated voltages up to and including 450/750V.
MS-IEC 60245-5:1994	Rubber insulated cables-Rated voltages up to and including 450/750 V Part 5: Lift cables	Details the particular specifications for rubber insulated lift cables of rated voltage of 300/500V.
MS-IEC 60245-6:1994	Rubber insulated cables-Rated voltages up to and including 450/750 V Part 6: Arc welding electrode cables	Details the particular specifications for rubber insulated lift arc welding electrode cables.
MS-IEC 60245-8:2004	Rubber insulated cables-Rated voltages up to and including 450/750 V - part 8: Cords for applications requiring high flexibility	Details the particular specifications for rubber or cross-linked polyvinyl chloride insulated and rubber or cross-linked polyvinyl chloride sheathed cords of rated voltage 300/300V, for use in applications where high flexibility is required for example iron cords.
MS-IEC 60254-1:1997	Lead-acid traction batteries Part 1: General requirements and methods of tests	Applicable to lead-acid traction batteries used as power sources for electric propulsion.
MS-IEC 60254-2:2000	Lead-acid traction batteries Part 2: Dimensions of cells and terminal and marking or polarity on cells	Applicable to lead-acid traction batteries used as power sources for electric propulsion.
MS-IEC 60269-1:1998	Low-voltage fuses Part 1: General requirements	Applicable to fuses incorporating enclosed current-limiting fuse-links with rated breaking capacities of not less than 6KkA, intended for protecting power-frequency a.c. circuits of nominal voltages not exceeding 1000 V or d.c. circuits of nominal voltages not exceeding 1500V.
MS-IEC 60269-2:1986	Low-voltage fuses Part 2: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial applications)	Establishes the characteristics of fuses or parts of fuses (fuse -base, fuse carrier, fuse-link) in such a way that they can be replaced by other fuses or parts of fuses having the same characteristics provided that their dimensions are identical. This publication supersedes IEC 60066 (1953) and IEC 60088 (1957).
MS-IEC 60269-2-1:2004	Low voltage fuses Part 2-1:Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial applications) -Section I to V : Examples of types of standardized fuses	This Standard deals with fuses with fuse-links with blade for use by authorized persons.
MS-IEC 60269-3:2003	Low-voltage fuses Part 3: Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household and similar applications)	Applies to fuses for use by unskilled persons for domestic and similar applications with rated currents not exceeding 100A and rated voltages not exceeding 500V a.c.



<i>Column 1</i> <i>Malawi Standard</i> <i>Number</i>	<i>Column 2</i> <i>Title of the standard</i>	<i>Column 3</i> <i>Scope (Description) of the standard</i>
MS-IEC 60269-3-1:2004	Low-voltage fuses Part 3-1: Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household and similar applications)-Sections I to IV	Additional requirements apply to D-type fuses. These fuses have rated currents up to and including 100A and rated volta- ges of up to and including 500 V a.c and 500 V d.c.
MS-IEC 60287-1-1:2001	Electric cables-Calculation of the current rating Part 1-1: Current rating equations (100% load factor) and calculation of losses- General	Applicable to the conditions of steady-state operation of cables at all alternating voltages, as well as in direct voltages up to 5Kv, buried directly in the ground, in ducts, in troughs or in steel pipes, both with and without partial drying-out of the soil, as well as cables in air.
MS-IEC 60287-2-1:2001	Electric cables-Calculation of the curren- t rating Part 2-1: Thermal resistance-Calculation of thermal resistance	Applicable to the conditions of steady-state operation of cables at all alternating voltages, as well as in direct voltages up to 5Kv, buried directly in the ground, in ducts, in troughs or in steel pipes both with and without partial drying-out of the soil, as well as cables in air.
MS-IEC 60287-2-2:1995	Electric cables-Calculation of the current rating Part 2: Thermal resistance-Section 2: A method for calculating reduction factors for groups of cables in free air, protected from solar radiation	Applicable to any type of cable and group running horizontally provided that the cables are of equal diameter and emit equal losses.
MS-IEC 60287-3-1:1999	Electric cables-Calculation of the current rating Part 3-1: Sections on operating conditio- ns-Reference operating conditions and selection of cable type	Applicable to the conditions of steady-state operation of cables at all alternating voltages, and direct voltages up to 5KV, buried in the ground, in ducts, troughs or in steel pipes, both with and without partial drying-out of the soil, as well as cables in air.
MS-IEC 60287-3-2:1995	Electric cables-Calculation of the current rating Part 3: Sections on operating conditions- Section 2: Economic optimization of power cable size	Deals solely with the economic choice of conductor size based on joule losses. Voltage dependant losses have not been considered.
MS-IEC 60296:2003	Fluids electro technical applications- Unused mineral insulating oils for trans- formers and switchgear	Specifies requirements and test methods for unused mineral insulating oils. It applies to oil delivered to the agreed point and time of delivery, intended for use in transformers, switchgear and similar electrical equipment.
MS-IEC 60304:1982	Standard colours for insulation for low- frequency cable and wires	Applies to thermoplastic insulation to be used with low- frequency cables and wires.
MS-IEC 60305:1995	Insulators for overhead lines with a nominal voltage above 1000 V-Ceramic or glass insulator units for a.c. systems- Characteristics of insulator units of the cap and pin type	Applies to string insulator units of the cap and pin type with insulating parts of ceramic material or glass, intended for a.c overhead lines with a nominal voltage greater than 1000 V and a frequency not greater than 100Hz and to insulators of similar design used in substations.
MS-IEC 60309-1:2005	Plugs, socket-outlets and couples for industrial purposes-Part 1: General requirements	Applies to plugs and socket-outlets, cable couplers and applia- nce 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 250A, primarily intended for industrial use, either indoors or outdoors.
MS-IEC 60311:2006	Electric irons for household or similar use-Methods for measuring performance	State and define the principal performance characteristics of electric irons for household or similar use which are of interest to the user and to describe the standard methods for measuring these characteristics.
MS-IEC 60335-1:2004	Household and similar electrical applia- nces-Safety Part 1: General requirements	Deals with the safety of electrical appliances for households and similar purposes. It deals with the common hazards prese- nted by appliances that are encountered by all persons in and around the home. It also covers appliances used by



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		laymen in shops, in light industry and on farms (such as equipment, and industrial and commercial cleaning catering appliances).
MS-IEC 60335-2-15:2005	Household and similar electrical appliances-Safety Part 2-15: Particular requirements for appliances for heating liquids	Deals with the safety of electrical appliances of heating liquids for household and similar purposes, their rated voltage being not more than 250V.
MS-IEC 60335-2-21:2004	Household and similar electrical appliances-Safety Part 2-21: Particular requirements for storage water heaters	Deals with the safety of electric storage water heaters for household and similar purposed and intended for heating water below boiling temperature, their rated voltage being not more than 250 V for single phase appliances and 480V for other appliances.
MS-IEC 60335-2-29:2004	Household and similar electrical appliances-safety Part 2-29: Particular requirements for battery chargers	Deals with the safety of electric battery chargers for house hold and similar use having an output at safety extra-low voltage, their rated voltage being not more than 250V.
MS-IEC 60335-2-3::2005	Household and similar electrical appliances-safety Part 2-3: Particular requirements for electric irons	Deals with safety of electric dry irons and steam irons, including those with a separate water reservoir or boiler having a capacity not exceeding 5 litres, for household and similar purposes, their rated voltage being not more than 250V.
MS-IEC 60335-2-39:2004	Household and similar electrical appliances-safety Part 2-39: Particular requirements for commercial electric multi-purpose cooking pans	Deals with the safety of electrically operated commercial multipurpose cooking pans not intended 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.
MS-IEC 60335-2-45:2002	Household and similar electrical appliances-safety Part 2-45: Particular requirements for portable heating tools and similar appliances	Deals with the safety of portable electric heating tools and similar appliances, their rated voltage being not more than 250V.
MS-IEC 60335-2-47:2002	Household and similar electrical appliances-Safety Part 2-47: Particular requirements for commercial electric boiling pans	Deals with the safety of electrically operated commercial boiling pans not intended 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.
MS-IEC 60335-2-59:2006	Household and similar electrical appliances-Safety Part 2-59: Particular requirements for insect killers	Deals with the safety of electric insect killers for household and similar purposes, their rated voltage being not more than 250V.
MS-IEC 60335-2-71:2002	Household and similar electrical appliances-Safety Part 2-71: Particular requirements for electrical heating appliances for breeding and rearing animals	Deals with the safety of all kinds of electrical heating appliances used for livestock rearing and breeding such as heat-radiating appliances, electrical sting-hens, incubators, chicken breeding units and heating plates for animals, the rated voltage of the appliances being not more than 250V for single phase appliances and 480V for other appliances.
MS-IEC 60344:1980	Guide to the calculation of resistance of plain and coated copper conductors of low-frequency cables and wires	Applies to low-frequency cables and wires for telecommunications and give a general method of calculating the resistance of copper conductors.
MS-IEC 60357:2002	Tungsten halogen lamps (non vehicle)	Specifies the performance requirements for single capped and double capped tungsten halogen lamps having rated voltages of up to 250V.
MS-IEC 60364-1:2005	Electrical installations of buildings- Part 1: Fundamental principles.	Gives the rules of the design, erection, and verification of electrical installations. The rules are intended to provide for



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	assessment of general characteristics, definitions	the safety of persons, livestock and property against dangers and damage which may arise in the reasonable use of electrical installations and to provide for the proper functioning of those installations.
MS-IEC 60364-4-41:2005	Electrical installations of buildings - Part 4-41: Protection for safety- Protection for safety-Protection against electric shock	Specifies essential requirements regarding protection against electric shock, including basic protection (protection against direct contact) and fault protection (protection against indirect contact) of persons and livestock. It deals also with the application and co-ordination of these requirements in relation to external influences.
MS-IEC 60364-4-42:2001	Electrical installations of buildings- Part 4-42: Protection for safety- Protection against thermal effects	Describes protective measures intended to ensure the safety of persons from electric shock both in normal service and in case of fault. Also includes particular requirements applicable to TN, TT and IT system earthing.
MS-IEC 60364-4-43:2001	Electrical installations of buildings- Part 4-43: Protection for safety- Protection against overcurrent	Describes how live conductors are protected by one of more devices for automatic interruption of the supply in the event of overload and short-circuit except in cases where the over current is limited in accordance with clause 436 or by the conditions described.
MS-IEC 60364-5-51:2005	Electrical installations of buildings- Part 5-51: Selection and erection of elec trical equipment-Common rules	Deals with the selection of equipment and its erection. It provides common rules for compliance with measures of protection for safety, requirements for proper functioning for intended use of the installation, and requirements appropriate to the external influences foreseen.
MS-IEC 60364-5-52:2001	Electrical installations of buildings- Part 5-52: Selection and erection of electrical equipment-Wiring systems	Deals with selection and erection of wiring systems.
MS-IEC 60364-5-53:2002	Electrical installations of buildings- Part 5-53: Selection and erection of electrical equipment-Isolation, switching and control	Deals with general requirements for isolation, switching and control and with the requirements for selection and erection of the devices provided to fulfill such functions.
MS-IEC 60364-5-54:2002	Electrical installations of buildings- Part 5-54: Selection and erection of electrical equipment-Earthing arrange ments, protective conductors and protective bonding conductors	Requires that the performance of the earthing arrangements shall satisfy and functional requirements of the electrical installations. Comprises sections of connections to earth; protective conductors; earthing arrangements for protective purposes, functional purposes, combined protective and functional purposes and equip-potential bonding conductors.
MS-IEC 60364-5-55:2002	Electrical installations of buildings- Part 5-55: Selection and erection of electrical equipment-Other equipment	Covers requirements for low-voltage generating sets. Particular requirements for supplies for safety services are given in clause 556 while clause 559 applies to the selection and erection of luminaries and lighting installations intended to be part of the fixed installation.
MS-IEC 60364-6:2006	Electrical installations of buildings- Part 6-61:Verification - Initial	Every installation shall, during erection and/or on completion before being put into service by the user, be visually inspected and tested to verify, as far as practicable, that the requirements of this Standard have been met.
MS-IEC 60364-7-705:1984	Electrical installations of buildings. Part 7: Requirements for special installa tions or locations. Section 705: Electrical installations of agricultural and horticultural premises	Requirements of this section apply to all parts of fixed installations of agricultural and horticultural premises out-doors and indoors and to locations where livestock are kept (such as stables, chicken-houses, piggeries, feed processing locations, lofts and storages for hay, straw and fertilizers).
MS-IEC 60364-7-714:1996	Electrical installations of buildings- Part 7: Requirements for special installations or locations - Section 714: External lighting installations	Deals with fixed external lighting installations. The require- ments apply particularly to lighting installations e.g. for roads, parks, gardens, public places, sporting areas, illumination or monuments and flood lighting, and other equipment incorpo-



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		rating lighting such as telephone kiosks, bus shelters, advertising panels, town maps, road signs.
MS-IEC 60383-1:1993	Insulators for overhead lines with a nominal voltage above 1000 V Part 1: Ceramic or glass insulator units for a.c. systems-Definitions, test methods and acceptance criteria	Applies to insulators of ceramic material or glass for use on a.c. overhead power lines with a nominal voltage greater than 1000 V and a frequency not greater than 100 Hz. Also applies to insulators for use on d.c. overhead electric traction lines and applies to string insulator units, rigid overhead line insulators and to insulators of similar design when used in substations.
MS-IEC 60383-2:1993	Insulators for overhead lines with a nominal voltage above 1000 V Part 2: Insulator strings and insulator sets for a.c. systems-Definitions, test methods and acceptance criteria	Applies to insulator strings and insulator sets comprising string insulator units of ceramic material, or glass for use on a.c. overhead power lines with a nominal voltage greater than 1000 V and a frequency not greater than 100 Hz.
MS-IEC 60410:1973	Sampling plans and procedures for inspection by attributes	Establishes sampling plans and procedures for inspection by to inspection of end items, components and raw materials, attributes. These sampling plans are applicable, but not limited operations, materials in process, supplies in storage, maintenance operations, data or records and administrative procedures.
MS-IEC 60423:1993	Electrical installations of buildings-Part 4-43: Protection for safety-Protection against overcurrent	Specifies outside diameters for conduits used in electrical installations and the dimensional requirements for threads. It also specifies the dimensional requirements for threads used in associated fittings.
MS-IEC 60432-1:2005	Electrical installations of buildings-Part 5-51: Selection and erection of electrical equipment-Common rules	Specifies the safety and interchangeability requirements of tungsten filament incandescent lamps for general lighting service having-rated wattage up to and including 200 W.
MS-IEC 60432-2:2005	Electrical installations of buildings-Part 5-52: Selection and erection of electrical equipment-Wiring systems	Specifies the safety and the related interchangeability requirements of tungsten halogen lamps for general lighting service. It covers those tungsten halogen lamps that are used as direct replacements for conventional tungsten filament lamps as well as new tungsten halogen lamps which have no correspondence in IEC 60432-1, but which the safety and interchangeability requirements are treated by this Standard in conjunction with IEC 60432-1.
MS-IEC 60433:1998	Insulators for overhead lines with a nominal voltage above 1 000 V-Ceramic insulators for a.c. systems-Characteristics of insulators units of the long rod type	Prescribes specified values for the electrical and mechanical characteristics and for the principal dimensions of string insulators units of the long rod type with insulating parts of ceramic material intended for a.c. overhead lines with a nominal voltage greater than 1000 V and a frequency not greater than 1000 Hz.
MS-IEC 60530:1975	Methods for measuring the performance of electric kettles and jugs for household and similar use	Applies to electric kettles and jugs with a capacity of up to 2.5 litres. States and defines the principal performance characteristics which are of interest to the user and describes the standard methods for measuring these characteristics.
MS-IEC 60567:2005	Oil-filled electrical equipment-Sampling of gases and of oil for analysis of free and dissolved gases-Guidance	Deals with the techniques for sampling free gases from gas collecting relays and for sampling oil from filled equipment such as power and instrument transformers, reactors, bushings, oil-filled cables and oil-filled tank-type capacitors. Three methods of sampling free gases and three methods of sampling oil are described. The choice between the methods often depends on the apparatus available and on the quantity of oil needed for analysis.
MS-IEC 60598-1:2003	Luminaires-Part 1: General requirements and tests	Covers general requirements for the classification and marking of luminaires and for their mechanical and electrical construction, together with related tests. Is applicable to luminaires for use with tungsten filaments, tabular fluorescent



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		and other discharge lamps on supply voltages not exceeding 1000 V.
MS-IEC 60598-2-3:2000	Luminaries-Part 2-3: Particular requirements-Luminaries for road and street lighting	Specifies requirements for luminaries for road, street lighting and other public outdoor lighting applications; tunnel lighting; column-integrated luminaries with a minimum total height above normal ground level of 2.5 m and for use with electrical lighting sources on supply voltages not exceeding 1000 V.
MS-IEC 60598-2-5:1992	Luminaries-Part 2-5: Particular requirements-Flood lights	Specifies requirements for floodlight for use with tungsten filament, tubular fluorescent and other discharge lamps on supply voltages not exceeding 250V.
MS-IEC 60614-1:1994	Conduits for electrical installations-Specification-Part 1: General requirements	Specifies requirements for conduits of circular cross-section for the protection of the conductors and/or cables in electrical installations.
MS-IEC 60614-2-1:1993	Specification for conduits for electrical installations. Part 2: Particular specifications for conduits. Section one: Metal conduits	Specifies requirements for threadable and non-threadable plain rigid metal conduits.
MS-IEC 60614-2-2:1980	Specification for conduits for electrical installations. Part 2: Particular specifications for rigid-plain conduits of insulating materials	Specifies requirements for rigid non-flame-propagating plain conduits of insulating materials.
MS-IEC 60614-2-5:1992	Specifications for conduits for electrical installations Part 2: Particular specifications for conduits-section 5: Flexible conduits	Specifies requirements for flexible conduits of metal, insulating or composite materials for the protection of conductors and cables in electrical installations. It does not cover requirements for conduit fittings.
MS-IEC 60614-2-6:1992	Specifications for conduits for electrical installations Part 2: Particular specifications for conduits-section 6: Pliable conduits of metal or composite materials	Specifies requirements for pliable conduits of metal or composite materials for the protection of conductors and cables in electric installations. It does not cover requirements for conduit fittings.
MS-IEC 60649:1979	Calculation of maximum external diameter of cables for indoor installations	Specifies the method of calculation for maximum external diameter of low frequency cables for indoor installations. Gives an example of calculation of diameter over assembly for cable with screened elements. Has the status of a technical report.
MS-IEC 60652:2002	Loading tests on overhead line structures	Applicable to the testing of supports and structures of overhead lines for voltages above 45Kv; it can also serve as reference to the testing of lower voltage supports.
MS-IEC 60665:1980	A.C electric ventilating fans and regulators for household and similar purposes	Specifies the performance and the corresponding methods of test of ventilating fans for household and similar purposes intended for air forcing and exhaust, not exceeding 0.5 m in size, driven by single-phase a.c motors having a power consumption not exceeding 500W (including any associated regulators), for use on single-phase a.c circuits not exceeding 250V.
MS-IEC 60669-1:2000	Switches for household and similar fixed-electrical installations Part 1: General requirements	Applies manually operated general purpose switches, for a.c. only with a rated voltage not exceeding 440 V and a rated current not exceeding 63A, intended for household and similar fixed-electrical installations, either indoors or outdoors.
MS-IEC 60672-1:1995	Ceramic and glass insulating materials Part 1: Definitions and classification	Applicable to ceramic, glass-ceramic, glass-mica and glass materials for electrical insulating purposes. This part of IEC 672 gives definitions of terms used, and provides tables classifying the various material types into groups according to composition type, property attributes and applications.



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MS-IEC 60672-2:1999	Ceramic and glass insulating materials- Part 2: Methods of test	Applicable to ceramic, glass ceramic, glass-mica and glass materials for electrical insulating purposes giving a classification of materials and typical numerical values for the major characteristics.
MS-IEC 60672-3:1997	Ceramic and glass insulating materials- Part 3: Specifications for individual materials	Applicable to ceramic, glass-ceramic, glass-mica and glass materials for electrical insulating purposes. It provides, for guidance, a classification of materials for general electrical insulating purposes, and indicates typical numerical values for the characteristics relevant to each subgroup or type of material as determined by the test methods defined in IEC 60672-2.
MS-IEC 60811-1-1:2001	Common test methods for insulating and sheathing materials of electric cables- Part 1-1: Methods for general application-Measurement of thickness and overall dimensions-Tests for determining the mechanical properties	Specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric cables for power distribution and telecommunication including cables used on ships, and in offshore applications.
MS-IEC 60811-1-2:1985	Common test methods for insulating and sheathing materials of electric cables- Part 1: Methods for general application- Section 2: Thermal ageing methods	Specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric cables for power distribution and telecommunications including cables used on ships.
MS-IEC 60826:1985	Design criteria of overhead transmission lines	Applies to overhead lines of nominal voltage above 45kV. It may also be applied to lines with a lower nominal voltage.
MS-IEC 60865-1:1993	Short-circuit currents-Calculation of effects Part 1: Definitions and calculation methods	Applicable to the mechanical and thermal effects of short circuits currents. It contains standardized procedures for the calculations of the effects of the short-circuit currents in tow sections as follows.
MS-IEC 60865-2:1994	Short-circuit currents-Calculation of effects Part 2: Examples of calculation	Application of procedures for the calculation of mechanical and thermal effects due to short circuits as presented in IEC 865-1.
MS-IEC 60884-1:1987	Plugs, socket-outlets and couples for household and similar purposes Part 1: General requirements	Applies to plugs and fixed or portable socket outlets for a.c only, with and without earthing contact, with a rated voltage above 50V but not exceeding 440 V and a rated current not exceeding 32A, intended for household and similar proposes, either, indoors or outdoors.
MS-IEC 60884-2-1:1987	Plugs and socket-outlets for household and similar purposes. Part 2: Particular requirements for fused plugs	Applies to where fuses are primarily intended to protect the flexible cable or cord.
MS-IEC 60884-2-2:1987	Plugs and sockets-outlets outlets for household and similar purposes Part 2: Particular requirements for socket-outlets for appliances	Applies to socket-outlets integrated or intended to be incorporated in or fixed to appliances (hereinafter referred to as "socket-outlets for appliances").
MS-IEC 60885-1:1995	Electrical test methods for electric cables. Part 1: Electrical tests for cables, cords and wires for voltages up to and including 450/750 V	Guidance to be followed for testing wires, cords and cables in case the relevant cable standard does not prescribe a different electrical test method.
MS-IEC 60888:1987	Zinc-coated steel wires for stranded conductors	Applies to zinc-coated steel wires used in the construction and/or reinforcement of conductors for overhead power transmission purposes.
MS-IEC 60889:1987	Hard-drawn aluminium wire for overhead line conductors	Applicable to hard-drawn aluminum wires for the manufacture of stranded conductors for overhead power transmission purpose. It specifies the mechanical and electrical properties of wires in the diameter range 1.25mm to 5.00 mm.



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MS-IEC 60896-11:2002	Stationary lead-acid batteries Part 11: Vented types-General requirements and methods of tests	Applicable to lead-acid cells and batteries which are designed for service in fixed locations (i.e. not habitually to be moved from place to place) and which are permanently connected to the load and to the d.c power supply.
MS-IEC 60896-21:2004	Stationary lead-acid batteries Part 21: Valve regulated types-Methods of test	Applies to all stationary lead-acid cells and monobloc batteries of the valve regulated type for float charge applications, (i.e. permanently connected to a load and to a D.C. power supply), in a static location (i.e. not generally intended to be moved from place to place) and incorporated into stationery or installed in battery rooms for use in telecom, uninterruptible power supply, utility switching, emergency power or similar applications.
MS-IEC 60904-1:1987	Photovoltaic devices. Part 1: Measurement of photovoltaic current-voltage characteristics	Describes measurement procedures for current voltage characteristics of crystalline silicon photovoltaic devices in natural or simulated sunlight. These procedures are applicable to a single solar cell, a sub-assembly of solar cells, or a flat module.
MS-IEC 60904-2:1984	Photovoltaic devices. Part 2: Requirements for reference solar cells	Gives requirements for the classification, selection, packaging, marking, calibration and care of crystalline silicon reference solar cells.
MS-IEC 60904-3:1989	Photovoltaic devices. Part 3: Measurement principles for terrestrial photovoltaic (PV) solar devices with reference spectral irradiance data	Applies to the following crystalline silicon photovoltaic devices for terrestrial applications; single solar cells with or without protective cover, subassemblies at solar cells and flat modules.
MS-IEC 60906-1:1989	IEC system of plugs and socket-outlets for household and similar purposes - Part 1: Plugs and socket-outlets 16A 250 V a.c.	Applies to IEC system of plugs and socket outlets rated 16A 250 V a.c for household and similar purposes for the connection of equipment to distribution systems having nominal voltages between 200V and 250V a.c in so far as dimensional requirements are concerned.
MS-IEC 60921:2004	Ballasts for tubular fluorescent lamps-performance requirements	Performance requirements for ballasts, excluding resistance types, for use on a.c supplies up to 1000 V at 50Hz or 60Hz, associated with tubular fluorescent lamps with preheated cathodes operated with or without a starter or starting device and having rated wattages, dimensions and characteristics as specified in IEC 60081 and 60901. It applies to complete ballasts and their component parts such as resistors, transformers and capacitors.
MS-IEC 60923:2005	Auxiliaries for lamps-Ballasts for discharge lamps (excluding tubular fluorescent lamps)-Performance requirements	Specifies performance requirements of ballasts for discharge lamps such as high-pressure mercury vapour, low pressure sodium vapour, high pressure sodium vapour and metal halide lamps.
MS-IEC 60925:2001	DC supplied electronic ballasts for tubular fluorescent lamps-performance requirements	Specifies general performance requirements for electronic ballasts for use on d.c supplies having rated voltages not exceeding 250 V, associated with fluorescent lamps complying with IEC 60081. It shall be read in conjunction with IEC 60924.
MS-IEC 60927:2004	Auxiliaries for lamps - Starting devices (Other than glow starters)-Performance requirements	Specifies requirements for starting devices (starters and ignitors) for tubular fluorescent and other discharge lamps for use in a.c supplies up to 1000 v at 50Hz or 60Hz, which produce starting pulses not greater than 5 kV. It should be read in conjunction with IEC 60926.
MS-IEC 60974-11:2004	Arc welding equipment Part 11: Electrode holders	Applicable to electrode holders for manual metal arc welding with electrodes up to 10mm in diameter.
MS-IEC 60974-12:2005	Arc welding equipment Part 12: coupling device for welding	Applies to coupling devices for cables for welding and allied processes designed for connection and disconnection without using tools.



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MS-IEC 61035-1:1990	Specification for conduit fittings for electrical installations Part 1: General requirements	Specifies requirements for conduit fittings for use with conduits for the protection of conductors and/or cables, and type tests for the quality of joints of conduits fittings to conduit.
MS-IEC 61035-2-1:1993	Specification for conduit fittings for electrical installations Part 2: Particular specifications-Section 1: Metal conduit fittings	Gives the particular requirements for metal conduit fittings and is to be used in conjunction with IEC 61035-1.
MS-IEC 61035-2-2:1993	Specification for conduit fittings for electrical installation Part 2: Particular specifications-Section 2: Conduit fittings of insulating material.	Gives the particular requirements for conduit fittings of insulating material and is to be used in conjunction with IEC 61035-1.
MS-IEC 61039:1990	General classification of insulating liquids	Defines the details classification of family N (insulating liquids) which belongs to class L (lubricants, industrial oils and related products) in accordance with ISO 8681 and ISO 6743-0.
MS-IEC 61058-1:2001	Switches for appliances Part 1: General requirements	Applies to switches for appliances actuated by hand, by foot or by other human activity for use in, on or with appliances and other equipment for household and similar purposes, with a rated voltage not exceeding 440V and a related current not exceeding 63A.
MS-IEC 61058-2-1:1992	Switches appliances Part 2-1: Particular requirement for cord switches	Applies to cord switches for appliances actuated by hand, by foot or by other human activity for use in, on or with appliances and other equipment for household and similar purposes, with a rated voltage not exceeding 250V and a rated current not exceeding 16A.
MS-IEC 61084-1:1991	Cable trunking and ducting systems for electrical installations Part 1: General requirements	Specifies requirements for cable trunking and cable ducting systems intended for the accommodation, and where necessary for the segregation of conductors, cables of cords and other electrical equipment in electrical installations.
MS-IEC 61084-2-1:1996	Cable trunking and ducting systems for electrical installations Part 2: Particular requirements-Section 1: Cable trunking and ducting systems intended for mounting on walls or ceilings	Specifies requirements for cable trunking and ducting systems intended for mounting on walls or ceilings.
MS-IEC 61084-2-4:1996	Cable trunking and ducting systems for electrical installations Part 2: Particular requirements-Service poles	Specifies requirements for service poles intended for the accommodation, and where necessary for the segregation of conductors, cables or cords and/or other electrical equipment in electrical installations.
MS-IEC 61089:1991	Round wire concentric lay overhead electrical stranded conductors	Specifies the electrical and mechanical characteristics of round wire concentric lay overhead electrical stranded conductors made of combinations of any of the following metal wires: (a) hard-drawn aluminium; (b) aluminium alloy type B; (c) aluminium alloy type A; (d) regular strength steel; (e) high strength steel; and (f) extra high strength steel.
MS-IEC 61109:1992	Composite insulators for a.c. overhead lines with a nominal voltage greater than 1000 V-Definitions, test methods and acceptance criteria	Applicable to composite insulators for use as suspension/tension line insulators, but is to be noted that these insulators can occasionally be subjected to compression or bending, for example when used as phase-spacers.
MS-IEC	Cables for portable earthing and short-	Applies to flexible cables with covering based on ethylene



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61138:1994	circuiting equipment	propylene rubber (EPR) or on polyvinyl chloride (PVC) for portable earthing and short-circuiting equipment.
MS-IEC 61140:2004	Protection against electric shock- Common aspects for installation and equipment	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.
MS-IEC 61156-1:2004	Multi-core and symmetrical pair/quad cable for digital communications Part 1- Generic specification	Is a guide to indoor cables which specifies the definitions and requirements of multi-core, symmetrical pair and quad cables used in digital communication systems such as ISDN, local area networks and data communication systems.
MS-IEC 61156-1-1:2001	Multi-core and symmetrical pair/quad cable for digital communications- Part 1-1: Capability approval-Generic specification	Applies to Capability approval requirements for multicore and symmetrical pair/quad cables for digital communications as specified in IEC 61156-1 series.
MS-IEC 61173:1992	Over voltage protection for photovoltaic (PV) power generating	Gives guidance on the protection of overvoltage issues for both stand-alone and grid-connected photovoltaic power generating systems. It is intended to identify sources of over-voltage hazards (including lightning) to define the types of protection such as grounding, shielding, stroke interception and protective devices.
MS-IEC 61194:1992	Characteristic parameters of stand-alone photovoltaic (PV) systems	Defines the major electrical, mechanical and environmental parameters for the description and performance analysis of stand-alone photovoltaic systems.
MS-IEC 61215:2005	Crystalline silicon terrestrial photovoltaic (PV) modules Design qualification and type approval	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. It applies only to crystalline silicon modules types.
MS-IEC 61293:1994	Marking of electrical equipment with ratings related to electrical supply-Safety requirements	Establishes minimum requirements and general rules on marking electrical equipment with ratings and other characteristics to enable the proper and safe selection and installation of electrical equipment related to any supply of electricity.
MS-IEC 61325:1995	Insulators for overhead lines with a nominal voltage above 1000 V-Ceramic or glass insulator units for d.c. systems- Definitions, test methods and acceptance criteria	Applicable to string insulator units of ceramic material or glass for use on d.c. overhead power lines with a nominal voltage greater than 1000 V.
MS-IEC 61364:1999	Nomenclature for hydroelectric power plant machinery	Provides a basic nomenclature for hydraulic machinery used in hydroelectric power stations and defines their components
MS-IEC 61386-1:1996	Conduit systems for electrical installa- tions-Part 1: General requirements	Specifies requirements and tests for conduit systems, including conduits and conduit fittings, for the protection and management of insulated conductors and/or cables in electrical installation or in communication systems up to 1000 V a.c and/or 15000V d.c.
MS-IEC 61394:1997	Overhead lines-characteristics of greases for aluminium, aluminium alloy and steel bare conductors	Applies to products designed for corrosion protection of bare electrical overhead conductors in any combination of wires of aluminium and aluminium alloy.
MS-IEC 61400-SER-1:2005	Wind turbine generator systems- Part 1: Safety requirements	Deals with safety aspects, quality assurance and engineering integrity and specifies safety requirements for design, installation and operation of wind turbine generator systems.
MS-IEC 61400-SER-2:2006	Wind turbine generator systems Part 2: Safety of small wind turbines	Deals with safety philosophy, quality assurance, engineering integrity and specifies requirements for the safety of wind turbines having a swept areas smaller than 40m <sup>2</sup> and generating at a voltage below 1000 V a.c or 1500 V d.c.



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
MS-IEC 61400-SER-12-1:2005	Wind turbine generator systems- Part 12-1: Wind turbine power performance testing	Specifies a procedure for measuring the power performance characteristics of a single wind turbine generator system (WTGS) and applies to the testing of WTGS of all types and sizes connected to the electrical network.
MS-IEC 61400-SER-13:2001	Wind turbine generator systems Part 13: Measurement of mechanical loads	Acts as a guide for carrying out measurements used for verification of codes and for direct determination of the structural loading. Focuses mainly on large electricity generating horizontal axis with turbines.
MS-IEC 61400-SER-23:2001	Wind turbine generator systems Part 23: Full scale structural testing of rotor blades	Provides guidelines for the full scale structural testing of wind turbine blades and for the interpretation or evaluation of results, as a possible part of a design verification of the integrity of the blade.
MS-IEC 61427:2005	Secondary cells and batteries for photo-voltaic energy systems (PVES)-General requirements and methods of test	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.
MS-IEC 61429:1995	Marking of secondary cells and batteries with the international recycling symbol ISO 7000-1135	Defines the conditions of utilization of the recycling symbol of the International Organization for Standardization (ISO) associated with the chemical symbols indicating the electro-chemical system of the battery. This Standard applies to lead-acid batteries (Pb) and nickel-cadmium batteries (Ni-cd).
MS-IEC 61442:2005	Test methods for accessories for power cables with rated voltage from 6 kV (Um = 36 kV)	Specifies the test methods to be used for type testing accessories for power cables with rated voltage from 3.6/6 (7.2) kV up to 18/30 (36) kV.
MS-IEC 61479:2002	Live working-Flexible conductor covers (line hoses) of insulating material	Applicable to flexible insulating covers (line hoses) for the protection of workers from accidental contact with live or earthed electrical conductors and for avoidance of short circuits during live working.
MS-IEC 61558-1:2005	Safety of power transformers, power supplies, reactors and similar products Part 1: General requirements and tests	Deals with safety aspects of power transformers, power supplies, reactors and similar products such as electrical, thermal and mechanical safety.
MS-IEC 61597:1995	Overhead electrical conductors- Calculation for strand bare conductors	Provides information with regards to conductors specified in IEC 61089. Such information includes properties of conductors and useful methods of calculations. It does not discuss all theories and available methods for calculating properties, but provides users with simple methods that provide acceptable accuracies.
MS-IEC 61660-1:1997	Short-circuit currents in d.c. auxiliary installations in power plants and substations-Part 1: Calculation of short-circuit currents	Describes method of calculating short-circuit current in d.c. auxiliary systems in power plants and substations which can be equipped with the following equipment, acting as short-circuit current sources.
MS-IEC 61663-2:2001	Lighting protection-Telecommunication lines Part 2: Lines using metallic conductors	Deals with protection against lighting of outdoor telecommunication lines using metallic conductors (for example, access networks, lines between buildings).
MS-IEC 61672-1:2001	Electro acoustics-Sound level meters Part 1: Specifications	Gives electro-acoustical performance specifications for three kinds of sound measuring instruments: -a conventional sound level meter that measures exponential time-weighted sound level; -an integrating-averaging sound level meter that measures time-average sound level; and -an integrating sound level meter that measures sound exposure level.
MS-IEC 61672-2:2003	Elect-acoustics - Sound level meters- Part 2: Pattern evaluation tests	Provides details of the tests necessary to verify conformance to all mandatory specifications given in IEC 61672-1:2002 for



<i>Column 1 Malawi Standard Number</i>	<i>Column 2 Title of the standard</i>	<i>Column 3 Scope (Description) of the standard</i>
		conventional sound level meters, integrating-averaging sound level meters and integrating sound level meters.
MS-IEC 61683:1999	Photovoltaic systems-Power conditioners -Procedure for measuring efficiency	Describes guidelines for measuring the efficiency of power conditioners used in stand-alone and utility interactive photovoltaic systems, where the output of the power condition is a stable a.c. voltage of constant frequency or a stable d.c voltage.
MS-IEC 61701:1995	Salt mist corrosion testing of photovoltaic (PV) pumping systems	Determines the resistance of the module to corrosion from salt mist.
MS-IEC 61702:1995	Rating of direct coupled photovoltaic (PV) pumping systems	Defines predicted short-term characteristics (instantaneous and for typical daily period) of direct coupled photovoltaic (PV) water pumping systems.
MS-IEC 61721:1995	Susceptibility of a photovoltaic (PV) module to accidental impact damage (resistance to impact test)	Determines the susceptibility of a module to accidental impact damage.
MS-IEC 61724:1998	Photovoltaic system performance monitoring-Guidelines for measurement, data exchange and analysis	Recommends procedures for the monitoring of energy-related photovoltaic (PV) system characteristics, and for the exchange and analysis of monitored data.
MS-IEC 61725:1997	Analytical expression for daily solar profiles	Provides a normative equation for analytically deriving a set of data points or a curve of irradiance versus time of day for a synthetic solar day.
MS-IEC 61727:1995	Photovoltaic (PV) systems-Characteristics of the utility interface	Addresses the interface requirements between the PV systems and the utility and provides technical recommendations.
MS-IEC 61773:1996	Overhead lines-Testing of foundations for structures	Is applicable to the testing procedures for foundations of overhead line structures.
MS-IEC 61836:1997	Solar photovoltaic energy systems-Terms and symbols	Complies the terms and symbols from IEC standards published in the field of solar photovoltaic energy systems. Is a technical report of type 2.
MS-IEC 61951-1:2006	Secondary cells and batteries containing alkaline or other non-acid electrolytes-Portable sealed rechargeable single cells Part 1: Nickel-cadmium	Specifies marking, designation, dimensions, tests and requirements for portable sealed nickel-cadmium small prismatic, cylindrical and button rechargeable single cells suitable for use in any orientation.
MS-IEC 62019:2003	Electrical accessories-Circuit-breakers and similar equipment for household use -Auxiliary contact units	Applies to auxiliary electromechanically contact units associated (or intended to be associated) with circuit-breakers for over current protection and with residual current operated circuit-breakers with or without integral over current protection for household and similar installations, having a related voltage not exceeding 440V a.c and 250V d.c and a rated current not exceeding 10A.
MS-IEC 62060:2001	Secondary cells and batteries-Monitoring of lead acid stationary batteries-User guide	Is applicable to lead-acid vented and valve regulated batteries, for use in stationary battery applications.
MS-IEC 62081:1999	Arc welding equipment-Installation and use	Describes the general conditions for the installation and use of arc welding equipment that comply with IEC 60974-1. Gives particular information for operations.
MS-IEC 62133:2002	Secondary cells and batteries containing alkaline or other non-acid electrolytes-Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications	Specifies requirements and tests for the safe operation of portable sealed secondary cells and batteries (other than button) containing alkaline or other non-acid electrolyte, under intended use and reasonably foreseeable misuse.
MS-IEC 62305-1:2006	Protection against lightning Part 1: General principles	Provide the general principles to be followed in the protection against lightning of -structures including their installations and contents as well



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		as persons, -services connected to a structure.
MS-IEC 62305-3:2006	Protection against lightning Part 3: Physical damage to structures and life hazard	Provides the requirements for protection of a structure against physical damage by means of a lightning protection system (LPS), and for protection against injury to living beings due to touch and step voltages in the vicinity of an LPS (see IEC 62305-1).
MS-IEC PAS 62111:1999	Specification for the use of renewable energies in rural decentralized electrification	Is a Publicly Available Specification (PAS) giving guidance for the use of renewable energies in rural decentralized electrification. Describes the functional specifications on which the design, implementation, and exploitation of the constituent parts of these electrification systems should be based. Establishes common standards for use as a reference in assessing the quality of such systems.

Made this 14th day of October, 2014.

(FILE NO. BS 4/1)

MUSSA CHIWAULA  
*Chairperson of the Board*

GENERAL NOTICE No. 39

### MALAWI BUREAU OF STANDARDS ACT, 2012

(ACT NO. 14 OF 2012)

### MALAWI BUREAU OF STANDARDS (MALAWI STANDARDS) (REPLACEMENT) NOTICE, 2015

IN EXERCISE of the powers conferred by section 27(1) of the Malawi Bureau of Standards Act, 2012, the Board of the Malawi Bureau of Standards hereby publishes that the mandatory Malawi Standards in column 1 of the Schedule to this Notice have either been withdrawn and replaced by the mandatory Malawi Standards in column 3 of the Schedule, or have been withdrawn without being replaced as indicated in column 3 of the Schedule—

### SCHEDULE

#### REPLACEMENT OF THE OF MALAWI STANDARDS

<i>Column 1 Malawi Standard</i>	<i>Column 2 Title of the Standard</i>	<i>Column 3 Status</i>
MBS 3:1976	Unplasticized polyvinyl chloride(PVC) sewer and drain pipes and pipe fittings-Specification	Replaced by MS 3:2004
MBS 4:1976	uPVC type 1 pressure pipes and fittings-Specification	Replaced by MS 4:1993
MBS 5:1976	uPVC pipes and pipe fittings for use above ground drainage installations-Specification	Replaced by MS 5:1993
MBS 9:1980	Plugs, socket outlets and socket outlet adaptors-Specification	Replaced by MS 9:2011
MBS 18:1992	Carbonated soft drinks-Specification	Replaced by MS 18: 2010
MSB 19:1982	Labelling of pre-packed foods-General Standard	Replaced by MS 19:2001
MBS 21:1984	Food and food processing units-Code of hygienic conditions	Replaced by MS 21:2002
MBS 29:1984	Ordinary and rapid hardening Portland cement-Specification	Replaced by MS 29:2001
MBS 30: 1985	Wheat flour-Specification	Replaced by MS 30:2011
MBS 32: 1985	Maize grain-Specification	Replaced by MS 32:1998
MBS 34:1985	Maize flour (Ufa)-Specification	Replaced by MS 34:2011
MBS 37:1995	Preservative treated timber- Specification	Replaced by MS 37:2002
MBS 43:1982	Black tea-Specification	Replaced by MS 43:2008



<i>Column 1 Malawi Standard</i>	<i>Column 2 Title of the Standard</i>	<i>Column 3 Status</i>
MBS 44:1996	Phenolic and amino plastic resin adhesive for timber laminating and jointing	Replaced by MS 44:2004
MBS 48:1986	Carbolic soap-Specification	Replaced by MS 48:2003
MBS 49:1986	Toilet soap	Replaced by MS 49:2006
MBS 51:1985	Edible oils and fats	Replaced MS 51:2011
MBS 52:1986	Liquid toilet soap-Specification	Replaced by MS 52:2000
MBS 84:1986	Wax floor polish-Specification	Replaced by MS 84:1991
MBS 164:1988	Pineapple juice-Specification	Withdrawn
MBS 170:1999	Unleaded petrol-Specification	Replaced by MS 170:2012
MBS 177:1988	Fruit squashes-Specification	Replaced by MS 177:2010
MBS 179:1988	Rice-Specification	Replaced by MS 179:2010
MBS 187:1993	School chalk-Specification	Replaced by MS 187:1999
MBS 188:1988	Salt-Specification	Replaced by MS 188:2008
MBS 214:1990	Drinking water-Specification	Replaced by 214:2005
MBS 251:1991	Safety wood matches-Specification	Replaced by MS 251:2002
MBS 253:1991	Synthetic detergent powder for household use-Specification	Replaced by MS 253:2002
MBS 255:1991	Compound fertilizers-Specification	Replaced by MS 255:1998
MBS 258:1991	Ammonium sulphate fertilizer-Specification	Replaced by MS 258:2000
MBS 267:1991	Calcium carbonate precipitate for cosmetic industry-Specification	Replaced by MS 267:2004
MBS 272:1991	Calcium ammonium nitrate (CAN) fertilizers-Specification	Replaced by MS 272:2000
MBS 298:1991	Guava juice-Specification	Replaced by MS 298:2000
MBS 299:1991	Orange juice-Specification	Withdrawn
MBS 300:1991	Baking powder-Specification	Withdrawn
MBS 302:1991	Contaminants	Replaced by 302:2008
MBS 307:1991	Pre-cast concrete building blocks-Specification	Withdrawn
MBS 308:1991	Burnt clay building bricks and blocks-Specification	Withdrawn
MBS 315:1991	Fabric lining for footwear-Specification	Replaced by MS 315:2003
MBS 319:1991	Steel for wire fences-Specification	Withdrawn
MBS 320:1991	Fencing wire stranded-Specification	Withdrawn
MBS 346:1991	Urea, fertilizer grade-Specification	Withdrawn
MBS 374-1:1992	Black polyethylene pipes for the conveyance of liquids Part 1-Low density polyethylene pressure pipes	Replaced by MS 374-1:2004
MBS 374-2:1992	Black polyethylene pipes for the conveyance of liquids Part 2-High density polyethylene pressure pipes	Replaced by MS 374-2:2004
MBS 375:1992	Methyl-bromide insecticidal fumigant-Specification	Withdrawn
MBS 414:1992	Masonry cement (without air entrainment agents)-Specification	Replaced by MS 414-1:2002
MBS 498:2001	Illuminating paraffin-Specification	Replaced by MS 498:2008
MBS 509:1995	Galvanized iron sheets-Specification	Replaced by MS 509:2010
MBS 538:1999	Diesel-Specification	Replaced by MS 538:2008



<i>Column 1 Malawi Standard</i>	<i>Column 2 Title of the Standard</i>	<i>Column 3 Status</i>
MS 655-1:1998	Gaming equipment Part 1: Casino equipment	Replaced by MS 655-1:2012
MS 655-2:1998	Gaming equipment Part 2: Limited payout gaming equipment	Replaced by MS 655-2:2012
MS 655-3:1998	Gaming equipment Part 3: Monitoring and control systems for gaming equipment	Replaced by MS 655-3:2012
MS 655-4:1998	Gaming equipment Part 4: Wagering record keeping software	Replaced by MS 655-4:2012
MS 655-5:1998	Gaming equipment, Part 5: Local area and wide area jackpot and progressive jackpot equipment	Replaced by MS 655-5:2012

Made this 14th day of October, 2014.

(FILE NO. BS 4/1)

MUSSA CHIWAULA  
*Chairperson of the Board*

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