

GOVERNMENT OF ZAMBIA

STATUTORY INSTRUMENT NO. 56 of 2021

The Metrology Act, 2017

(Act No. 6 of 2017)

**The Metrology
(Pre-packaged Commodities) Regulations, 2021**

ARRANGEMENT OF REGULATIONS

PART I

PRELIMINARY

Regulation

1. Title
2. Interpretation

PART II

LABELLING REQUIREMENTS FOR PRE-PACKED COMMODITIES AND
GENERAL REQUIREMENTS FOR THE SALE OF COMMODITIES

3. Identity of commodity
4. Content of label of pre-packaged commodity
5. Declared net quantity of pre-packaged commodity
6. Presentation of information.
7. Prescribed quantities
8. Misleading practices
9. Exemptions

PART III

TOLERANCES FOR PREPACKAGED COMMODITIES

10. General requirements
11. General measurements and measurements of commodities
at time of sale

12. Pre-packages made up for sale on trade premises
13. Suitability of instruments
14. Pre-packages other than those made up for sale using suitable instrument on trade premises
15. Pre-packaged foodstuffs with drained mass
16. Tolerable deficiencies
17. Standard reference temperatures for pre-packaged liquid commodities
18. Frozen or glazed commodities
19. Inspection Procedures
20. Notice of conformity
21. Notice of non-conformity
22. Accuracy of measurement
23. Characteristics of inspection lots and sampling plans
24. Inspections

PART I

PRELIMINARY PROVISIONS

IN EXERCISE of the powers contained in section 59 of the Metrology Act, the following Regulations are made:

- | | | |
|----|---|----------------|
| 1. | These Regulations may be cited as the Metrology (Pre-Packaged Commodities) Regulations, 2021. | Title |
| 2. | In these Regulations, unless the context otherwise requires— | Interpretation |
- “aerosol container” means a dispenser that holds a substance under pressure and that may be released as a fine spray;
- “complaint based inspection” means inspection activities undertaken to respond to complaints of the public as it relate to products regulated under these Regulations;
- “consumer package” means a package that is customarily produced or distributed for sale to final purchasers through a retail sales agency or other means;
- “importer” means, in relation to a package or outer container, a person by whom, or on whose behalf, the package or outer container is brought into the Republic;
- “inadequate pre package” means a pre package with an individual pre package quantity less than the nominal quantity and includes—
- (a) a pre package that contains an actual quantity less than the nominal quantity minus the applicable tolerable deficiency (T) but not less than twice the applicable tolerable deficiency (2T) for the nominal quantity, considered to have a T1 error; and
- (b) a pre package that contain an actual quantity less than the nominal quantity minus twice the applicable tolerable deficiency (T) for the nominal quantity considered to have a T2 error;
- “individual pre package error” means the difference between the actual quantity of product in a pre package and its nominal quantity;
- “in service maximum permissible error” means the maximum permissible error allowed by an instrument when in service and used for measurements regulated by the Agency;

“inspection” means an act of examining a prepackaged commodity to ascertain compliance of that commodity to the metrological requirements;

“inspection lot” also referred to as a “batch” means a definite quantity of a pre package produced at a specified time under conditions that are presumed uniform and from which a sample is drawn and inspected to determine conformity with a specified criteria for acceptance or rejection of the inspection lot;

“label” means any written, printed, or graphic matter affixed to, applied or attached to, blown, formed or moulded into, embossed, or appearing on a pre-package containing any product for purposes of branding, identifying, or giving any information with respect to the product or to the contents of the pre-package, except that an inspector’s tag or other non promotional text affixed to or appearing on a product shall be excluded;

“liquid medium” means a commodity in a mixture whether frozen or quick frozen, except that the liquid is merely an adjunct to the essential elements of that preparation and is thus not a decisive factor for the purposes of purchase;

“negative error” means the quantity by which the contents of a pre-package is less than the nominal quantity;

“nominal quantity” means the quantity of product in a pre package declared on the label;

“non automatic instrument” means an instrument that requires the intervention of the operator during the measurement process to determine the measurement result or to decide what is acceptable and includes—

- (a) an electronic or a mechanical instrument or a combination of the two, as applicable;
- (b) a graduated or non graduated instrument; and
- (c) a self indicating, semi self indicating or non self indicating instrument;

“non consumer package” means any pre-package intended solely for industrial or institutional use or for wholesale distribution, but excludes use for retail;

“outer container” means a container which contains two or more items, at least one of which is a pre-package to which these Regulations apply, except that items:

(a) are placed in the container without the purchaser being present; and

(b) cannot be removed from the container without the container being opened or undergoing a noticeable modification;

“packer” means a person who places a product in a pre-package or the pre-package in an outer container;

“packing material” also referred to as “tare”, “packaging” or “packaging material” means material of a pre package left over after consumption or treatment or use of the product, except for items naturally in the product;

“pre package” means combination of a product and any packing material;

“pre-packaged commodity” has the meaning assigned to the words in the Act;

“principal display panel” means the part of a package to be displayed, presented, shown or examined under normal and customary conditions of display;

“random inspection” inspection activities randomly undertaken by the Agency;

“random sampling” means a sample pre package which is chosen randomly, and has the same probability for inclusion in the sample;

“risk based inspection” a criteria for management of inspection activities on a product based on the compliance history of the product, manufacturer, importer or seller;

“sample size (n)” means the required number of pre packages taken from an inspection lot and used to provide information required to determine the commodity conformance of the inspection lot with these Regulations;

“tolerable deficiency (T)” also referred to as the “tolerable negative error” means the deficiency in quantity of product permitted in a pre package; and

“valid verification status” means the status of a measuring instrument that conforms to the legal metrology requirements for initial and or subsequent verification.

PART II

LABELLING REQUIREMENTS FOR PRE-PACKAGED COMMODITY AND
GENERAL REQUIREMENTS FOR SALE OF GOODSIdentity of
the
commodity

3. (1) A pre-packaged commodity shall be identified by the—
- (a) principal display panel on a pre-package bearing a description of the identity of the product unless the wrapper is transparent for ease of identity;
 - (b) panel of a type size that is easy to read and understand;
 - (c) identity of the commodity in any one or more of the following designations in the order of preference listed:
 - (i) name specified in accordance with any relevant written law or Regulations;
 - (ii) common or usual name of the product; and
 - (iii) generic name or other appropriate specification which includes a statement of function.

(2) The requirements in subregulation (1) shall not apply to a consumer pre-package which is packed on the retail premises at which the pre-package is being sold, except that the consumer pre-package is displayed in a manner that provides the purchaser self service and there is a sign clearly displayed in close proximity to the pre-package which identifies the commodity in accordance with subregulation (1).

Contents of
label of pre-
packaged
commodity

4. (1) A label of a pre packaged commodity shall specify conspicuously the name and address of business of the person responsible for—
- (a) manufacture;
 - (b) package;
 - (c) distribution; or
 - (d) import or retail of the product.

(2) Where a commodity is not manufactured or packaged by the person whose name appears on the label, the name may be qualified by a phrase that reveals the connection that person has with the product.

(3) A statement of the name and address of business shall under subregulation (1) include a complete physical address and may include an address of a head office, except that the responsible person at that head office is able to identify the address of the packaging plant.

(4) A manufacturer shall, where a code is used to identify a packaging plant, on the request of a metrologist disclose the meaning of the code.

(5) The requirements in subregulations (1), (2), (3) and (4) do not apply to a consumer pre-package that is packed at a retail premise at which the consumer pre-package is being sold.

5. (1) A label of a pre packaged commodity, except a label on a surface clearly intended as a base, shall bear a declaration of the net quantity of the commodity in a unit of measurement and according to the requirements set out in the First Schedule or by number, as applicable.

Declared net
quantity of
pre packaged
commodity

(2) A consumer pre packaged commodity shall not bear a declaration of the pre-packaged commodity gross mass which includes the mass of wrappers or any other material packaged with the commodity.

(3) A net quantity of a pre-package shall be marked on the pre package at the initial place of packaging or at importation, except that a—

- (a) consumer pre-package may be marked at the place of retail sale if there is a written agreement between a packer or importer and the seller for the pre-package to be marked by the seller;
- (b) pre package contained in a correctly marked outer container which is likely to be opened in the retail of the pre package, shall each be marked with a quantity indication according to this requirement unless exempted;
- (c) consumer pre-package required to bear a quantity declaration, which is packed on the retail premises at which the consumer package is being sold, shall not be marked when the consumer package is displayed for sale in close proximity to a conspicuous notice clearly identifying the article and stating its quantity.

(4) A suitable verified weighing and measuring instrument shall be made available to a consumer at the retail premises for purposes of checking the quantity of that unmarked package.

(5) Where a pre-package contains a number of items, which are pre-packed in accordance with requirements of these Regulations, the outer container shall—

- (a) indicate the number of items and individual quantity; and
- (b) comply with the requirements for commodity identification and details of the final packer.

(6) A non consumer pre-package may be sold unmarked, except that a total quantity shall be marked on the outer packaging or disclosed on an invoice or delivery note.

(7) The net quantity of a pre-package shall be expressed in terms of the largest whole unit of mass, volume, length, area, or a combination of the units as set out in the First Schedule, except that where the quantity is indicated on a label printed by a measuring instrument approved for trade use, the quantity may be expressed as a decimal fraction of a measuring unit.

(8) The net quantity statement for a specific commodity shall be expressed in the most appropriate measuring unit subject to the following rules unless otherwise set out in the Fifth Schedule:

(a) where the commodity is liquid or viscous in its normal state of use at a temperature of 20°C—

(i) when packed in a consumer pre-package, a commodity sold by volume, which requires chilling to maintain consistency or composition in which the commodity is normally used, shall be marked with the volume at the temperature at which the commodity is required to be kept;

(ii) where a reference temperature is specified in requirements for determining net content, the reference temperature shall not appear on the label;

(b) for mass, where the commodity is solid, semi solid or viscous or a mixture of solid and liquid, or the solid part of a mixture of a solid and liquid; and

(c) length in micrometres if the thickness is less than 1 mm.

(9) In the case of a product packed in a container designed to deliver the product under pressure—

(a) the statement shall declare the net quantity in mass or volume to be expelled when the instructions for use are followed;

(b) where the propellant is expelled with the product, the net quantity shall be included in the statement.

(10) The statement of size expressed in measuring units of length or area or in respect of any manufactured commodity shall make known the finished dimensions.

(11) Where cylinders are used for the sale of liquefied or gaseous commodities by mass—

(a) the cylinders shall be marked with the maximum filling mass unless a label attached to the cylinder clearly indicates the net mass of the contents; and

(b) subject to paragraph (a) the maximum filling mass shall be marked on a cylinder and where the net mass is not specified on a label, the mass shall be deemed to be the net mass of the contents of a prepacked cylinder.

(12) Subregulation (12) does not apply to cylinders filled at the time of retail sale where the purchaser is present and the actual mass of product filled into the cylinder is paid for.

(13) A responsible person shall for the purposes of sale of liquified or gaseous commodities, ensure that a verified weighing and measuring instrument is available at all times.

(14) A pre package may contain, as an integral part of the contents, a free quantity of the same type of product provided that the following conditions are fulfilled:

(a) the quantity excluding the free quantity, and the total quantity contained in the package shall each be declared on the package according to the requirements in these regulations;

(b) the quantities declared in paragraph (a) shall be in the same measuring unit and multiples or submultiples;

(c) the total quantity contained in the package as declared in paragraph (a) shall conform to applicable requirements for accuracy of measurement; and

(d) where specific quantities are specified for a product as set out in the Fifth Schedule, the quantity excluding the free quantity shall be the specified quantity.

(15) A statement of quantity on a package to which a free quantity of goods is attached as a separate component shall make known the quantity of that package exclusive of that free quantity.

(16) A statement of a quantity in terms of count shall be expressed in whole numbers.

(17) An exemption from or relating to special requirements indicating the quantity on a pre-package under subregulation (7) shall be as set out in the Third and Fourth Schedules.

-
- Presentation of information
6. (1) A statement of the net quantity shall appear in easily legible boldface type or print that contrasts conspicuously with the background and with other information on a package.
- (2) Subregulation (1) does not apply to a pre-package where the value of the net quantity is blown, embossed, or moulded on the surface of the pre-package, except that other required label information is provided conspicuously on the surface or label.
- (3) A statement of net quantity shall be in letters and numerals in a minimum type size determined according to the requirements as set out in the Second Schedule.
- Prescribed quantities
7. (1) A commodity shall when contained in a consumer package be packed in the sizes as set out in the Fifth Schedule.
- (2) A responsible person shall not pack a consumer package that has been packed on the retail premises at which it is sold, in the quantity set out in the Fifth Schedule, except that the responsible person shall ensure that a verified weighing and measuring instrument is available at all times.
- Misleading practices
8. (1) A package of a commodity shall be manufactured, constructed or displayed in a manner that a purchaser may not reasonably be misled with respect to the quantity or identity of the commodity contained therein.
- (2) A package of a commodity shall be filled in a manner that a purchaser may not reasonably be misled with respect to the quantity or identity of the commodity.
- (3) Where a consumer cannot fully view the commodity in a pre package, it shall be considered to be filled, and shall be misleading if it contains non functional slack fill.
- (4) A pre package shall not have a false bottom, sidewalls, lid or covering, or be otherwise so constructed or filled, wholly or partially so as to deceive the consumer.
- (5) Where a pre packaged commodity is labelled on more than one location of its package, the quantity information on all labels shall be equivalent and in accordance with the requirements of these Regulations.
- (6) A pre packaged commodity which is permitted to be sold other than by reference to a measuring unit or number shall not bear direct or indirect reference alluding to quantity in terms of any measuring unit by number or numbers which might be construed by reference, except where the indication conforms to these Regulations.

(7) An aerosol container filled with a commodity packaged by mass or volume —

(a) shall where the aerosol container in which a propellant is expelled with the commodity, be filled to at least sixty percent of its available capacity, with a propellant and a commodity in liquid phase;

(b) if bi compartmental and the propellant is separated from the commodity, be filled to at least fifty percent of the available capacity with a commodity.

(8) A meat commodity shall not be injected with any liquid or substance for the purpose of increasing the mass of the commodity.

9. The exemptions specified in the Fourth Schedule apply to matters set out in that Schedule. Exemptions

PART III

TOLERANCES FOR PRE-PACKAGED COMMODITIES

10. Metrological requirements for sale of a pre packaged Commodity in accordance with these Regulations are that— General requirements

(a) all commodities shall be sold by net quantity excluding the quantity of any packaging material unless an exemption is given for a specific type of commodity in these Regulations or any other relevant written law; and

(b) all quantities marked on a pre package in accordance with any written law prescribing requirements for the labelling of a pre package or otherwise indicated at the time of measurement including any supplementary statements of quantity unless appropriately qualified.

11. A general measurement and measurements of a commodity at the time of sale shall be as follows: General measurements and measurements of commodities at time of sale

(a) a suitable instrument shall be used for any measurement of quantities regulated under these Regulations including quantities of commodities when taken from bulk and measured at the time of sale; and

(b) the quantities referred to in paragraph (a) shall not be deficient of the quantity represented, indicated or marked unless that deficiency is due to an error on the instrument used and is within the permitted maximum error for that instrument at the point of measurement.

Pre-package
made up for
sale on retail
premises

12. (1) The net quantity of the commodity in a pre-package, made up for sale on the retail premises from which a pre-package is sold by individually measuring each

package, shall be determined by means of a suitable measuring instrument conforming to the requirements of regulation 13, unless the requirements of subregulation (2) apply.

(2) Where the instrument used for pre packaging is not available to a consumer, a suitable measuring instrument shall be made available to the consumer for checking the quantity of that pre package.

Suitability of
instruments

13. (1) The following conditions shall apply for an instrument used for measurements under regulations 11 and 12 and the checking of quantity of a pre-package under regulation 12.

(a) the instrument shall be type approved by the Agency; and

(b) the instrument shall have a valid verification status issued by the Agency.

(2) The permitted in service maximum permissible error for the instrument shall not exceed the applicable tolerable deficiency (T) of the commodity as set out in the Sixth Schedule.

(3) An instrument for measuring commodities shall not be used below any minimum quantity permitted to be measured as specified in type approval documentation or any other written law.

Pre-packages
other than
those made
up for sale
using suitable
instrument
on retail
premises

14. (1) A pre-package, other than those referred to in regulation 12, including pre-packages made up on a retail premises for which the requirements apply, shall meet the applicable requirements of these Regulations at any level of distribution including at the point of pack, import, distribution, wholesale transactions and retail sale.

(2) Subject to sub-regulation (1), a packer shall make allowance for a possible shrinkage or loss of quantity after packing.

(3) An average requirement for a pre-package with a constant nominal quantity shall have the average actual quantity of the commodity in an inspection lot not less than the nominal quantity.

(4) For a pre-package with a random nominal quantity the total actual quantity of the commodity in a pre package in an inspection lot shall be at least equal to a total nominal quantity.

(5) For individual pre-package requirements, the actual quantity of a commodity in a pre-package shall accurately reflect the nominal quantity except, where deviations shall not exceed the prescribed permissible errors as set out in the Sixth Schedule.

(6) A pre-package commodity for which tolerable deficiencies are prescribed shall conform to the following requirements:

- (a) not more than 2.5% of the pre-packaged commodity shall have a negative error greater than the tolerable deficiency as set out in the Sixth Schedule;
- (b) where the actual quantity of a pre-packaged commodity is estimated by sampling of an inspection lot according to the requirements of Regulation 24, the relevant criteria for acceptance of the inspection lot is as set out in the First Schedule; and
- (c) a pre-package shall not have a negative error greater than twice the tolerable deficiency as set out in the Sixth Schedule.

15. (1) Where a solid foodstuff is packed in a liquid medium, the drained net mass of the foodstuff shall be indicated on the label in addition to the total net mass and the drained net mass shall conform to the requirements in regulation 14.

Pre-packaged
foodstuffs
with drained
mass

(2) The method of determining the drained mass shall be as set out in the Eighth Schedule.

16. The tolerable deficiency on a pre package shall be as set out in Sixth Schedule.

Tolerable
deficiencies

17. A liquid pre-packaged commodity packed in accordance with the requirements of these Regulations and marked with a quantity by volume shall comply with applicable requirements at a specified temperature in these Regulations.

Standard
reference
temperatures
for pre-
packaged
liquid
commodity

18. (1) Where a pre-packaged commodity is frozen with added water or glazed to preserve the quality, any excess ice or the glaze shall be regarded as packing material when determining the net quantity of the pre packaged commodity.

Frozen or
glazed
commodities

(2) The method of determining the net quantity of a pre-packaged commodity in which the pre-packaged commodity is frozen or glazed is set out in the Ninth Schedule.

(3) The actual moisture loss between the frozen and unfrozen pre-packaged commodity up to the maximum specified limit, shall be taken into consideration when the error on that pre packaged commodity is determined.

(4) Subregulation (3) applies in cases where the commodity is pre-packaged according to the requirements specified in the Ninth Schedule before inspection.

(5) Where water is not added at the time of freezing for frozen commodity, the net mass shall be determined in the frozen state exclusive of the packing material.

Inspection
Procedures

19. (1) A test set out in the Seventh, Eighth, Ninth and Tenth Schedules shall be performed in accordance with quality acceptance inspection by sampling pre-packages at any level of distribution including at the point of pack, import, distribution, wholesale and retail sale.

(2) Subject to sub-regulation (1), the relevant test procedures as set out in the Seventh, Eighth, Ninth and Tenth Schedules and these Regulations do not preclude a metrologist from conducting any other test at any level of distribution for the purpose of verifying pre packaged commodity that meets the requirements of these Regulations.

Notice of
conformity

20. A metrologist shall, after inspecting and testing a pre-packaged commodity and on determining that the pre-packaged commodity complies with the requirements of these Regulations, issue a notice of conformity.

Notice of
non-
conformity

21. A metrologist shall, after inspecting and testing a pre-packaged commodity and on determining that the pre-packaged commodity does not comply with the requirements of these Regulations, issue a notice of non-conformity.

Accuracy of
measurement

22. (1) An inspection measuring instrument shall have a resolution of not more than one-tenth of the tolerable deficiency of a pre-packaged commodity being measured in the case of instruments with digital indication and not more than one-fifth of the tolerable deficiency of the pre-packaged commodity being measured for instruments with analogue indication that permits interpolation between discreet divisions.

(2) Any error on the measuring instrument shall be taken into consideration when measurements are made.

(3) Subject to sub-regulation (2), irrespective of the method used the uncertainty of measurement when measuring the actual content of a pre-packaged commodity shall not exceed one-fifth of the tolerable deficiency of the pre packaged commodity being measured.

(4) When inspecting measurements under Regulation 11 or a pre-packaged commodity made up in compliance with regulation 12, the errors on the instruments used for the respective measurements shall be taken into consideration.

(5) Subject to sub-regulation (4), where an instrument comply with the requirement of regulation 13, the instrument shall be used to measure a commodity being inspected, where practicable.

23. (1) Where compliance of a pre-packaged commodity is determined by means of sampling an inspection lot, the following criteria shall be used to determine the characteristics of the inspection lot:

Characteristics
of inspection
lots and
sampling
plans

(a) the sample size;

(b) sample correction factor; and

(c) number of pre-packaged commodity permitted to have tolerable deficiency errors.

(2) The criteria for determining the characteristics in subregulation (1) for inspection conducted at the premises other than the manufacturer shall be as set out in the First Schedule.

(3) Where a sample of a pre-packaged commodity is—

(a) collected from the production line, the size of the inspection lot shall be equal to the maximum hourly output of the production line without any restriction as to the inspection lot size; or

(b) not collected from the production line at the premises of the packer, and where the production line output—

(i) exceeds 10000 pre-packaged commodities per hour, the size of the inspection lot shall be equal to the maximum hourly output of the production line without any restriction as to the inspection lot size; or

(ii) where the production line output is less than or equal to 10000 pre packaged commodities per hour, the size of the inspection lot shall not exceed 10000 pre packaged commodities.

(4) A sample of a pre-packaged commodity shall be collected after the point of final checking by the packer.

- Inspections
24. (1) In undertaking compliance inspection activities for commodities regulated, the Agency may conduct -
- (a) risk based inspection;
 - (b) complaint based inspection; and
 - (c) random inspections inspection
- (2) The frequency of inspection of pre-packaged commodities shall be based on the risk profile of that commodity.
- (3) The Agency shall develop and maintain from time to time a risk profile for all products regulated under these regulations.
- (4) The Agency may where necessary engage other regulatory Agencies and other authorities to undertake inspection activities on its

**FIRST SCHEDULE**

(Regulations 5 (1) and (7)), 14 ((6) and 23 (2)))

The Metrology (Pre-packaged Commodities) Regulations, 2021**Table A1 Units of measurement**

<i>Unit</i>	<i>Symbol</i>
milligram	mg
gram	g
kilogram	Kg
tonne	t
hectolitre	hl or hL
Litre	L, or l
centilitre	cL or cl
millilitre	mL or ml
micrometre	µm
millimetre	mm
centimetre	cm
decimetre	dm
metre	M
square millimetre	mm ²
square centimetre	cm ²
square metre	m ²
cubic centimetre	cm ³
cubic decimetre	dm ³
cubic metre	m ³

A.2 Neither a period (full stop) nor the letter “s” shall be used after any of the symbols.

A.3 A single space shall be used to separate the number from the unit of measurement.

A.4 Appropriate phrases such as “net”, “net mass”, “net content”, “net weight”, “content”, “quantity”, “mass” or “net quantity” may be used in connection with the net quantity declaration. Such phrases may appear either before or after the net quantity declaration.

- A.5 The words “approximately”, “standard” and “when packed” shall not be used in the declaration of the net quantity unless specifically permitted for certain products.
- A.6 The unit used depends on the type of measure and net quantity of product. Table A2 indicates the correct unit to use for a variety of measures and quantities subject to the provisions of Regulation 5(8).
- A.7 The decimal indicator shall be either the comma or a dot on the line.
- A.8 A pre-packaged commodity may be marked with an equivalent quantity statement in a non-SI unit except that the equivalent statement may not be more prominent or appear more times than the required metric statement.

Table A2 Choice of units

<i>Type of measure</i>	<i>Net quantity of product (q)</i>	<i>Units</i>
Volume (liquids)	$q < 1000 \text{ mL}$ $1000 \text{ mL} \leq q < 100 \text{ L}$ $100 \text{ L} \leq q$	mL (ml) or cL (cl) L (l) L (l) or hL (hl)
Volume – Cubic (Solids)	$q \leq 1000 \text{ cm}^3 (1 \text{ dm}^3)$ $1 \text{ dm}^3 < q < 1000 \text{ dm}^3$ $1000 \text{ dm}^3 \leq q$	cm^3 , mL (ml) dm^3 , L (l) m^3
Mass	$q < 1 \text{ g}$ $1 \text{ g} \leq q < 1000 \text{ g} (1 \text{ kg})$ $1 \text{ kg} \leq q < 1000 \text{ kg}$ $1000 \text{ kg} \leq q$	Mg G Kg kg or t
Length	$q < 1 \text{ mm}$ $1 \text{ mm} \leq q < 1000 \text{ mm} (100 \text{ cm})$ $100 \text{ cm} \leq q$	μm or mm mm or cm M
Area	$q \leq 100 \text{ cm}^2 (1 \text{ dm}^2)$ $1 \text{ dm}^2 < q < 100 \text{ dm}^2 (1 \text{ m}^2)$ $1 \text{ m}^2 \leq q$	mm^2 or cm^2 dm^2 m^2

Table A3
Sampling Plan for non-destructive testing

<i>Column 1</i>	<i>Column 2</i>	Column 3	Column 4
<i>Inspection lot Size</i>	<i>Sample Size</i>	<i>Sample Correction Factor</i> Sample Correction Factor X Standard Deviation of the sample (s) = Sample error limit (See 5.3.6)	<i>No. of Pre-packages in a sample allowed to have TI errors</i>
100 to 500	50	0.379	3
501 to 3200	80	0.295	5
More than 3 200	125	0.234	7

Table A4
Sampling Plan for destructive testing

<i>Column 1</i>	<i>Column 2</i>	<i>Column 3</i>	<i>Column 4</i>
Inspection lot Size	Sample Size	<i>Sample Correction Factor</i> Sample Correction Factor X Standard Deviation of the sample (s)= Sample error limit (See 5.3.6)	Number of pre- packages in asample allowed tohave TI errors
100 and above	20	0.640	1



SECOND SCHEDULE

(Regulation 6 (3))

TYPE SIZE OF LETTERS AND NUMERALS FOR STATEMENTS OF NET
QUANTITY ON CONSUMER PACKAGES

Table B1
Minimum height of numbers and letters

Net contents (C)	Minimum height of numbers and letters in millimeters
$C \leq 50$ g or mL	2
50 g or mL $< C \leq 200$ g or mL	3
200 g or mL $< C \leq 1$ kg or L	4
1 kg or L $< C$	6

- B.2 Where the net content appears on a stick on label printed for a measuring instrument approved for use in trade, the height of the indication shall not be less than or exceed 2 mm irrespective of the quantity of the contents. If the label also bears a price description that description shall not exceed twice the height of the net quantity indication.
- B.3 For pre-packaged commodities bearing a net quantity indication in units other than those in Table B1, the minimum height of the letters and numerals used in the net quantity indication shall be based on the longest dimension of the pre-package, either diameter, height, length or width, according to Table B2, except if regulation B.4 applies.

Table B2
Minimum height of numbers and letters

Maximum package dimension (D) in millimeters	Minimum height of numbers and letters in millimeters
$D \leq 200$	3
200 $< D \leq 300$	5
300 $< D \leq 500$	10
500 $< D$	20

- B.4 Where the net content appears on a stick on label printed for a measuring instrument approved for use in trade the height of the indication shall not be less than or exceed 2 mm irrespective of the size of the package. If the label also bears a price description such description shall not exceed twice the height of the net quantity indication.



THIRD SCHEDULE
(Regulation 5 (7))

SPECIAL REQUIREMENTS FOR CERTAIN PRODUCTS

- C.1** Net quantity indications requiring supplementation
- Where significant in order to make the net content indication meaningful and informative to the purchaser a product shall bear supplementary indications that comply with these requirements. These indications include but are not limited to length, width, thickness, bore and diameter.
- C.2** Alternative positioning of markings
- C.2.1** Where a label or ticket is attached to a product which bears no other information or markings on the packaging, such label or ticket is regarded as the principal display panel and should it have more than one surface area containing information, the identity of the product, if required by regulation 3(a), shall be placed on the surface most likely to be displayed. When in the form of a sticker, the label shall be placed on any surface of the package except any surface clearly intended as the base.
- C.2.2** Barrels or drums with a volume not less than 100 L may have their net quantity indication marked on the head irrespective of where the other required information is marked except that the quantity marking is legible and conspicuous.
- C.3** Products on which the drained mass shall be marked
- C.3.1** When a solid foodstuff is packed in a liquid medium the drained net mass of the foodstuff shall be indicated on the label in addition to the total net mass.
- C.3.2** The drained mass shall be indicated in close proximity to the total net mass in the same character size as the total net mass and must be clearly visible and legible.
- C.3.3** Requirements for the determination of the drained mass of specified products are contained in the requirements for determining the net content of pre-packages.

FOURTH SCHEDULE
(Regulation 5 (7) and 9)

PRE-PACKAGED COMMODITIES EXEMPTED FROM QUANTITY INDICATION

1. A quantity of goods in pre-packaged form, being a free sample, except that either the words "free sample" or the words "not for sale" are prominently marked on the package.
2. The under-mentioned solid or liquid goods pre-packaged in quantities less than those specified;

(a) General merchandise not otherwise specified	10 g or mL;
(b) Medicines and drugs	5 g or mL;
(c) Cosmetics and toiletries	5 g or mL;
(d) Seeds excepting tobacco seed when sold by mass	20 g;
(e) Tobacco seed	5 g;
(f) Ice Cream and similar frozen goods	200 mL;
(g) Sugar or chocolate confectionery when sold by mass	50 g;
(h) Potable spirits including liqueurs, cream liqueurs and spirit cocktails	5 mL.
3. A transparent package, being a combined pack, containing units of goods of the same kind and of the same quantity: Except that-
 - (a) the number of those units in a combined pack does not exceed 12 and are all clearly visible; and
 - (b) where those units should bear a quantity statement, that statement is marked as specified with the relevant requirements of these Regulations and is clearly visible on at least one such unit.
4. A transparent package, being a combined pack, containing units of goods of different kinds and/or different quantities, except that-
 - (a) the number of those units in a combined pack does not exceed 12 and all are clearly visible; and
 - (b) where those units should bear a quantity statement, that statement is marked as specified with the relevant requirements of these Regulations and is clearly visible on each such unit.
5. Eggs in the shell when packed in a quantity not exceeding 12.
6. Sugar or chocolate confectionery being easter eggs, figurines or novelty shapes if the number of those articles in a package is clearly visible and does not exceed 12 units.
7. Flour confectionery and yeast-raised goods not exceeding 200 g per unit, other than biscuits and bread, including sausage rolls and pies when cooked and made up for sale in the retail trade in a transparent package through which all items are clearly visible and which contains not more than 12 units.
8. Fresh fruit, vegetables and other agricultural produce when packed in packaging through which all items are clearly visible and containing not more than 12 units or when exempted in terms of Fifth Schedule.

-
9. Bread of a mass not exceeding 100g and when in whole units including when sliced and wrapped with quantities as specified in the Fifth Schedule.
10. Cheese when kept or displayed in the **retail to be** portioned out and weighed at the time of sale.
11. Milk or cream sold by the producer to a factory, dairy or cream or milk depot.
12. Split or log firewood, when sold other than by mass in bags or bundles.
13. Coal, anthracite, coke or charcoal;
- (a) Coal, anthracite, coke or charcoal; When sold in bags or like containers holding 40 kg, 50 kg, 70 kg or 90 kg in the case of coal or anthracite, and 20 kg, 40 kg or 50 kg in the case of coke or charcoal.
- (b) Coal or anthracite when sold in the retail trade in open tins of a nominal volume of 20 L or 25 L filled to the brim.
- (c) Coal, anthracite, coke or charcoal delivered to an end-user in quantities of 10 or more bags holding quantities other than the respective masses prescribed in (a) or (b), except that such goods are accompanied on delivery by a delivery note in which the total number of bags and the net mass of the total consignment are clearly indicated.
14. Bolts, nuts, nails, screws, tacks when sold other than by mass and packed in a transparent package through which all items are clearly visible and which contains not more than 12 units.
15. Any goods not mentioned in this part, that are permitted to be sold by number, and which are packed in packaging through which all items are clearly visible and containing not more than 12 units.
16. Containers used for keeping goods in bulk for retail sale.
17. (a) A quantity of a potable spirituous liquor, liqueur or a wine, excluding beer, when served from a bulk container for consumption on the premises.
- (b) Where served from a bulk container, spirituous liquor shall be measured using a verified instrument at the time of sale and beer, if not measured by a verified instrument shall be served in a container filled to a datum line and marked with the quantity represented by such datum line.
18. Any quantity of milk or other liquid, other than intoxicating liquor, when served as a refreshment and when made up on retail catering premises where it is consumed or from where it is served.
19. (a) A quantity of foodstuff prepared as a meal or part of a meal ready for human consumption without further cooking, heating or other preparation when made or served from a catering premises.
- (b) A quantity of raw meat when sold at a catering premises for cooking by the purchaser shall be marked with the net mass if not weighed at the time of sale.
20. Meat and Fish products;
- (a) A pre-packaged bulk quantity of a processed or manufactured meat product when kept or displayed in the retail to be portioned out and weighed at the time of sale.
- (b) Dressed or undressed carcasses of beef, calf, lamb, sheep, goat, pork or venison intended to be weighed at the time of sale except where kept or exposed for sale with a price marked or displayed thereon.

- (c) Packages of meat or fish when prepared for delivery or when being delivered to a purchaser, except that—
- (a) the net mass of each separate kind or cut contained in a package shall be shown separately on the delivery note accompanying that meat or fish when being delivered; and
 - (b) only the total net mass of the whole package of meat or fish need be shown on the delivery note in cases where the purchaser was present during the measuring of the mass of the separate kinds or cuts of meat or fish.
- (d) Whole units of salami and similar items known in the trade as Continental products which are subject to ageing and loss of moisture and single pieces of dried meat and dried sausage of random size and mass intended to be measured at the time of sale except where kept or exposed for sale with a price marked or displayed thereon.
- (e) Dressed poultry kept or displayed in the retail to be weighed at the time of sale except where kept or exposed for sale with a price marked thereon and dressed poultry displayed for sale at a fixed price, irrespective of mass, when displayed for sale in close proximity to a conspicuous notice clearly indicating the fixed price and the minimum mass of the poultry offered for sale at that price and the unit price calculated at the fixed price and minimum mass.
- (f) Freshly caught fish sold to purchasers other than fish factories.

21 Fresh fruit and vegetables when sold loose or in open receptacles, bunches or groups which form a unit or when chosen and placed in a receptacle by the purchaser.

22 Laundry soap in bars or tablets when removed from its original packaging by a retail dealer except that individual bars or tablets met the requirements for accuracy of quantity when originally packed.

23 Single candles, which in their original pre-packaged condition met all requirements, when sold in the retail or ornamental candles in the form of figurines or with fancy or novelty shapes.

FIFTH SCHEDULE

(Regulation 5 (9))

MANNER OF EXPRESSING THE QUANTITY AND PRESCRIBED QUANTITIES FOR
CERTAIN PRE-PACKAGED COMMODITIES

Subject to the requirements of *regulation 5(8)* and *regulation 7* the quantity of the products in column 2 shall be expressed as prescribed in column 3 and, when packed in consumer packages, they shall be packed in the quantities prescribed in column 4. If no quantity is prescribed in column 4 they may be packed in any quantity. Any product that is required to bear a quantity statement but is not specified in the Fifth Schedule shall bear a quantity statement expressed by number or in the measuring unit most suitable to inform a purchaser of its value or fitness for purpose. Products which are not packed and which are measured at the time of sale shall be sold in the manner prescribed in column 3.

The products specified in the Table shall be sold in a manner prescribed in column 3 and be packed in the quantities prescribed in column 4.

1 <i>Item</i>	2 <i>Product</i>	3 <i>Quantity to be Expressed By</i>	4 <i>Prescribed Quantities</i>
1	Adhesives and sealants. (a) Liquids, pastes or Gels (b) Solids	Mass or volume Mass	- -
2	Aerosol	Mass or Volume	-
3	Baby foods	Mass when in the form of solids Volume when in the form of pastes or semi solids	- -
4	Biscuits	Mass, except that when packed in transparent packaging containing twelve or less biscuits and non-consumer packages containing biscuits intended to be sold individually in the retail, the package may be marked with the quantity by number.	-
5	Breakfast foods (excluding baby foods) manufactured from cereals and grains including muesli	Mass	-
6	Butter, margarine, emulsified or non-animal and vegetable fats (low fat spreads), dripping, lard and animal or vegetable cooking fats	Mass	any quantity less than 10 g, then in integral multiples of 5 g from 10 g up to and including 100 g, then 125 g, 150 g, 200 g, 250 g, 300 g, 400 g, 500 g, 1 kg and integral multiples of 0.5 kg above 1 kg
7	Cakes and similar confectionery items excluding Biscuits, bread sweets, waffles, wafers and food snacks	Mass or number	-

8	<p>Candles</p> <p>(a) All excluding candles mentioned in (b);</p> <p>(b) Ornamental candles in the form of figurines or with fancy or novelty shapes</p>	<p>Mass except that the number in a pre-package is also marked and except further when packages of candles are broken open in the retail, individual candles may be sold by number (Fourth Schedule)</p> <p>Mass or Number</p> <p>(Fourth Schedule)</p>	<p>-</p> <p>-</p>
9	<p>Construction Materials</p> <p>(a) Cement, tile, liquid adhesive, tile grout, rhino lite, aluminum products, steel products and other related products</p>	<p>Mass</p>	<p>1 kg, 2 kg, 5 kg, 10 kg, 20 kg, 25 kg and 50 kg</p>
10	<p>Cleaning Materials</p> <p>(a) Solids, powder, liquid or paste format being: washing powder (including soap flakes) laundry detergents, household cleaners including for dishwashing, fabric softener, industrial detergents, germicidal detergents, window cleaners, scouring powders, bleaches, hand cleaning pastes and disinfectants but excluding polishes, toilet soaps and the items in (b) and (c) below.</p>	<p>Mass when in the form of solids and powders</p> <p>Volume when in the form of liquids and pastes</p>	<p>any quantity less than 10 g, then in integral multiples of 5 g from 10 g up to and including 100 g, then 150 g, 200 g, 250 g, 300 g, 350 g, 400 g, 450 g, 500 g, 750 g, 800 g, 1 kg, 1.25 kg, 1.5 kg, 2 kg, 2.5 kg, 3 kg, 3.5 kg, 4 kg, 4.5 kg, 5 kg and integral multiples of 1 kg above 5 kg</p> <p>any quantity less than 10 mL, then in integral multiples of 5 mL from 10 mL up to and including 100 mL, then 125 mL, 150 mL, 175 mL, 200 mL, 250 mL, 300 mL, 350 mL, 375 mL, 400 mL, 450 mL, 500 mL, 750 mL, 800 mL 1 L, 1.25 L, 1.5 L, 2 L, 2.5 L, 3 L, 3.5 L, 4 L, 4.5 L, 5 L and integral multiples of 1 L above 5 L</p>

		<p>Mass</p> <p>Number, except that a statement of net quantity by mass in the case of solids and powders, or by volume in the case of liquids and pastes, is also indicated on each unit or on an outer container which contains several such units, according to relevant requirements</p>	<p>1 L above 5 L</p> <p>any quantity less than 10 g, then in integral multiples of 5 g from 10 g up to and including 50 g, then 75 g, 100 g, 125 g, 150 g, 200 g, 250 g, 300 g, 350 g, 375 g, 500 g, 1 kg, and integral multiples of 1 kg above 1 kg</p> <p>-</p>
11	coffee and chicory - beans or ground, pure, mixtures and instant	Mass	any quantity up to and including 100g, then 125g, 150g, then in integral multiples of 50g above 150g up to and including 1kg and integral multiples of 0.25kg above 1kg
12	Compost, potting soil and similar products for garden use excluding fertilizer	Mass or Volume in cubic measure	-
13	Condiment, seasoning, relish and flavouring liquids, sauces and pastes with or without solid components including mayonnaise, chutney, mustard and ketchup	Mass or Volume	-
14	<p>Cosmetics and Toiletries</p> <p>(a) In the form of pastes, cremes and viscous or other Liquids</p> <p>(b) In the form of solids Or powders</p> <p>(c) Deodorant sticks</p>	<p>Fourth Schedule Part I, clause 2</p> <p>Volume</p> <p>Mass</p> <p>Mass or volume</p>	<p>-</p> <p>-</p> <p>-</p>
15	Cotton wool and pads used for surgical, medical, first aid and toilet purposes	Mass except that when made up in regular shapes for single application excluding cotton balls these may be sold by number. Articles such as pads used for facial, first aid or medical purposes shall also be marked with a supplementary indication of finished size	-

16	Dried beans, dried peas, pea flour, lentils, pearl barley and similar pulses	Mass	any quantity less than 10 g, then in integral multiples of 5 g from 10 g up to and including 100 g, then 125 g, 200 g, 250 g, 300 g, 400 g, 500 g, 1 kg, 2 kg, 2.5 kg, 3 kg, 4 kg, 5 kg, 10 kg and integral multiples of 1 kg above 10 kg
17	Edible Oil	Volume	any quantity less than 10 mL, then in integral multiples of 5 mL from 10 mL up to and including 100 mL, then in integral multiples of 25 mL above 100 mL up to and including 1 L and integral multiples of 250 mL above 1 L
18	Eggs	Grade and number Note: Mass requirements for the size of eggs, for example "Large", and mass tolerance per size, may be prescribed in other relevant national legislation (See Fourth, Part 1, Clause 5)	-
19	Flour confectionery including meat pies and sausage rolls but excluding biscuits, bread and cakes	Mass except that single units of less than 200g may be sold by number. (See Fourth, Part 1, Clause 7).	-
20	Honey, Jams, Syrups including Jellies (Jam type), grape syrup and treacle	Mass	-
21	Ice Cream	Mass or volume (See Fourth, Part 1, Clause 2)	-
22	Knitting, Crocheting and similar yarns	Mass or length, except that the unstretched length is indicated in the case of quantity indication by length.	-
23	Liquid Petroleum Gas (LPG)	Mass when packed in cylinders Volume or mass when sold other than in portable cylinders	- -
24	Pasta products	Mass	any quantity less than 10g, then in integral multiples of 5g from 10g up to and including 100g, then in integral multiples of 50g from 150g up to and including 1kg and integral multiples of 0.5kg above 1kg

25	Meat including when processed or enhanced in any manner	Mass (See Fourth Schedule, Part 2, Clause 5).	-
26	Milk		
	(a) Fresh milk including long life milk but excluding flavoured milk and cream align	Volume except that wholesale quantities may be sold by mass (See Fourth, Part 1, Clause 11 and Part 2, Clause 3).	any quantity less than 10 mL then 100 mL, 125 mL, 200 mL, 250 mL, 350 mL, 500 mL, 750 mL, 1L, 1.5 L, 2 L and integral multiples of 1L above 2L any quantity less than 10g, then in integral multiples of 5 g from 10 g up to and including 100 g, then 125 g, 150 g, then in integral multiples of 50 g from 150 g up to and including 1 kg, 1.8 kg, 2 kg and any quantity above 2 kg.
	(b) Powdered milk	Mass	
	(c) Condensed milk	Mass	-
27	Paint		
	(a) Liquid	Volume	-
	(b) Aerosol	Mass or volume	-
	(c) Powder	Mass	-
	(d) Paste	Mass or volume	-
28	Peanut butter	Mass	-
29	Polishes in paste, wax or liquid form	Mass or Volume	any quantity less than 10 g or mL, then in integral multiples of 5 g or mL from 10 g or mL up to and including 100 g or mL, then in integral multiples of 25 g or mL above 100 g or mL up to and including 1 kg or L and integral multiples of 250 g or mL above 1 kg or L
30	Polyolefin compounds in the form of coloured membrane for damp-proofing, water-proofing or agricultural use and similar polyolefin based products which have the appearance of such membranes excluding made up articles produced from such membrane	Length: except that the width, minimum thickness and net mass shall also be indicated and except further that no point on the surface of them embrane shall be thinner than the minimum thickness indicated	-
31	Poultry including when processed or enhanced in any manner	Mass except that whole birds may be packed in mass bands and marked with the lowest mass of each band. Bands shall be as follows: - Below 1.1 kg in 50 g bands starting with either 100 g or 50 g for example birds marked 900 g shall weigh between 900 g and 949 g - 1.1 kg and above in 100 g bands starting from 1.1 kg for example birds marked 1.2 kg shall weigh between 1.2 kg and 1.299 kg	-

31	Poultry including when processed or enhanced in any manner	Mass except that whole birds may be packed in mass bands and marked with the lowest mass of each band. Bands shall be as follows: - Below 1.1 kg in 50 g bands starting with either 100 g or 50 g for example birds marked 900 g shall weigh between 900 g and 949 g - 1.1 kg and above in 100 g bands starting from 1.1 kg for example birds marked 1.2 kg shall weigh between 1.2 kg and 1.299 kg	-
32	Rice	Mass	any quantity less than 10 g, then in integral multiples of 5 g from 10 g up to and including 100 g, then 125 g, 200 g, 250 g, 500 g, 1 kg, 2 kg, 2.5 kg, 4 kg, 5 kg, 10 kg and integral multiples of 1 kg above 10 kg
33	Rope, Cordage and Twine	Mass or Length	-
34	Salads	Mass except that if sold as part of a meal in terms of Fourth Schedule, Clause 4, salads may be sold per portion without reference to the mass	-
35	Salt	Mass	any quantity less than 10 g, then in integral multiples of 5 g from 10 g up to and including 100 g, then 125 g, 200 g, 250 g, 500 g, 750 g, 1 kg and integral multiples of 1 kg above 1 kg
36	Seeds including maize seeds	Mass or Number, except that packages of seed marked by mass may also be marked with a supplementary statement of the average or approximate number of seeds and packages of seed marked by number may also be marked with a supplementary statement of the average or approximate mass of the seeds, for information only and except further that such supplementary statements shall not be more prominent than the primary indication (See Fourth Schedule Part 1, Clause 2)	-
37	Sewing Thread	Length, except that the un stretched length is indicated and except further that non-consumer packages may be sold by mass	-
38	Spices and Herbs used for seasoning and flavouring of food, whether ground or whole including flavoured salt and mixtures of spices and or herbs and salt but excluding such spices or herbs when packed for Industrial use or when in a formula pack	Mass Volume when in the form of ground spices and herbs only	- 100 mL and 200 mL when packed in transparent self supporting containers of nominal volume 100 mL and 200 mL except that containers are completely filled at the time of packing

39	Spreads being meat extracts vegetable extracts and fish paste	Mass	any quantity less than 10 g, then in integral multiples of 5 g from 10 g up to and including 100 g, then 125 g, 225 g, 250 g and 500 g
40	Sugar	Mass	any quantity less than 10 g, then in integral multiples of 5 g from 10 g up to and including 100 g, then 125 g, 250 g, 500 g, 750 g, 1 kg and integral multiples of 0.5 kg above 1 kg
41	Sugar or chocolate confectionery	Mass except that non-consumer packages containing articles intended to be sold individually in the retail and confectionery of a novelty shape or in the form figure ines such as Easter eggs may be sold by number (See Fourth, Part 1, Clause 6)	-
42	Tea (a) All types including herbal and flavoured except when packed in the form of tea bags (b) All types when packed in the form of tea bags	Mass Number except that the total mass of the teabags, shall also be marked	any quantity less than 75 g, then 75 g, 100 g, 125 g, 150 g, 250 g, 300 g, 500 g, 750 g, 1 kg and integral multiples of 0.25 kg above 1 kg -
43	Toilet soap when in the form of bars, tablets or cakes	Mass	any quantity less than 10 g, then in integral multiples of 5 g from 10 g up to 100g, then in integral multiples of 25g up to 1 kg and in integral multiples of 250 g above 1 kg
44	Toothpaste	Mass or Volume	any quantity less than 10 g or mL, then in integral multiples of 5 g or mL from 10 g or mL up to and including 100 g or mL, then in integral multiples of 25 g or mL above 100 g or mL
45	Vinegar, excluding flavoured or speciality vinegars	Volume	any quantity less than 10 mL, then in integral multiples of 5 mL from 10 mL up to and including 100 mL, then 125 mL, 200 mL, 250 mL, 375 mL, 500 mL, 625 mL, 750 mL, 1 L, 1.5 L, 2 L, 5 L, 20 L, 25 L, and integral multiples of 1L above 25 L
46	Wire (all types)	Mass or Length Except that the thickness shall also be marked on pre-packages	-
47	Animal feed	Mass or Volume	

Item	2 Product	3 Quantity to be Expressed	4 Prescribed Quantities
1	Alcoholic beverages		
(a)	When packaged	(Fourth Schedule Clause 2	
	(1) Wine, including sparkling wine, vermouth, wine cocktails and flavoured grape liquors	Volume	187 mL, 200 mL, 250 mL, 300 mL, 340 mL, 375 mL, 400 mL, 500 mL, 750 mL, 1 L, 1.5 L, 2 L, 3 L, 4 L, 4.5 L, 5 L and integral multiples of 1 L above 5 L
	(2) Potable spirits including liqueurs, cream liqueurs and spirit cocktails	Volume	Any quantity up to and including 50 mL, 200 mL, 250 mL, 300 mL, 375 mL, 500 mL, 750 mL, 1 L then 150 L and integral multiples of 1 L above 150 L
	(3) Beer including grain sorghum or a mixture of beer and lemonade or other mixer, containing more than 0.5 % by volume of alcohol	Volume	
	(4) Other, including spirit coolers, alcoholic fruit beverages, alcoholic fruit beers/ales	Volume	Any quantity up to and including 100mL, then 275 mL, 300 mL, 330 mL, 340 mL, 375 mL, 450 mL, 500 mL, 750 mL, 1 L and 1.5L
(b)	When served from bulk containers in the retail for consumption on the premises	(Fourth Schedule Clause 2	
	(1) Wine, including sparkling wine, vermouth, wine cocktails and flavoured grape liqueurs	By the glass except that no reference is made to volume	
	(2) Potable spirits	Volume measured by an approved instrument except that where two or more potable spirits are taken from their bulk containers and mixed at the time of serving such mixture may be sold by the glass except that no reference is made to volume	__mL or multiples thereof

	(3) Liqueurs, cream liqueurs and spirit cocktails	By the glass except that no reference is made to volume	
	(4) Beer including grain sorghum or a mixture of beer and lemonade or other mixer, containing more than 0.5 % by volume of alcohol	Volume measured by an approved instrument or filled to a clearly marked datum line on the container conforming to requirements for such containers, or if exempted by the glass	
	(5) Other, including spirit coolers, alcoholic fruit beverages, alcoholic fruit beers/ales	Volume measured by an approved instrument or filled to a clearly marked datum line on the container conforming to requirements for such containers or, if exempted by the glass	
2	Bread	Mass (See Fourth Schedule, Clause 9)	Any quantities from 100g, then in integral multiples of 50g then not exceeding 1kg
3	Coal, anthracite, coke or charcoal	Mass except that when sold in open tins of nominal volume of 20 L or 25 L, it may be sold per container (See Fourth Schedule, Clause 13)	(a) Coal or Anthracite: Any mass except that quantities of 40 kg, 50 kg, 70 kg or 90 kg need not be marked with a statement of net mass (b) Coke or Charcoal: Any mass except that quantities of 20 kg, 40 kg or 50 kg need not be marked with a statement of net mass and; That any unmarked quantity more than 10 % in excess of the above quantities for coal, anthracite, coke and charcoal shall be deemed to be efficient of the next higher quantity
4	Fertilizer (a) in solid form (b) in liquid form	Mass Volume	

5	<p>Fruit and vegetables</p> <p>(a) Fresh</p> <p>(1) When sold loose or in open receptacles, bunches or groups which form a unit</p> <p>(2) When pre-packed</p> <p>(b) Frozen</p> <p>(c) Canned</p> <p>(d) Pure fruit or vegetable juices</p>	<p>(See Fourth Schedule Clause 8)</p> <p>Mass, Number or unit</p> <p>(i) Produce permitted to be sold by mass only:</p> <p>(ii) Produce permitted to be sold by mass, unit or number:</p> <p>All produce not falling under (i) above</p> <p>Mass Volume except that concentrates may be sold by mass</p>	
6.	<p>Maize in the following forms; whole, meal, flour, crushed, samp, maize rice and grits</p>	<p>Mass</p>	<p>any quantity less than 10 g, then in integral</p> <p>multiples of 5 g from 10 g up to and including</p> <p>100 g then 200 g, 250 g, 500 g, 1 kg, 2 kg,</p> <p>2.5 kg, 3 kg and integral multiples of 1 kg up</p> <p>to and including 12 kg, 12.5 kg, 13 kg and</p> <p>integral multiples of 1 kg above 13 kg</p>
7.	<p>Paper products</p> <p>(a) Tissue paper which is sold as or under the name of toilet paper or which has the appearance of toilet tissue paper when wound in the form of a roll with a width not exceeding 140 mm.</p>	<p>Sheet count, paper ply and length and width of individual sheets</p>	<p>200 sheets and a multiple of 100 sheets above 200 sheets</p>

8.	Sorghum meal	Mass	<p>any quantity less than 10 g then in integral</p> <p>multiples of 5 g from 10 g up to and including</p> <p>100 g then 250 g, 500 g, 1 kg 2 kg, 2.5 kg,</p> <p>3 kg, and integral multiples of 1 kg up to and including 12 kg, 12.5 kg, 13 kg and integral multiples of 1 kg above 13 kg</p>
9.	Wheaten meal and wheaten flour including self-raising flour, rye meal and rye flour	Mass	<p>any quantity less than 10 g then in integral</p> <p>multiples of 5 g from 10 g up to and including</p> <p>100 g then 250 g, 500 g, 1 kg 2 kg, 2.5 kg, 3 kg and integral multiples of 1 kg up to and including 12 kg, 12.5 kg, 13 kg and integral multiples of 1 kg above 13 kg</p>
10.	Yoghurt and sour milk (eating or drinking)	Mass or volume	

<i>Item</i>	<i>Product</i>	<i>Tolerable Error</i>	
		<i>Percent of on</i>	
		<i>Deficiency</i>	<i>Excess</i>
1	Bread (all types)	5%	10% applicable only to bread required to be sold by mass but exempted from a quantity indicator
2	Fresh fruits and vegetables	5%	Unrestricted
3	Poultry packed in mass bands and with the nominal mass declared as the lowest mass in the band	0	Unrestricted
4	Industrial and medical gases including dissolved gases but excluding liquid petroleum gases	5%	Unrestricted
5	Seed sold by number	Quantities not greater than 50 items = 0 greater than 50 items but not greater than 1 000 items = 4% (refer to table A.1a)	Unrestricted
6	Coal, anthracite, coke and charcoal	As prescribed in table A.1a)	10% applicable only when required to be sold by mass but exempted from a quantity indicator
7	Liquid petroleum gases (propane and butane and mixtures thereof)	3%	unrestricted
8	Sheet width and length for perforated rolls and width and total length for perforated rolls of tissue paper which is sold as or under the name of toilet paper or which has the appearance of toilet paper when wound in the form of roll with a width not exceeding 140mm	2%	unrestricted



SEVENTH SCHEDULE
(Regulation 19 (1) and (2))

INSPECTION PROCEDURE OUTLINE FOR THE DETERMINATION
OF THE QUANTITY IN PRE-PACKAGES

B.1 General.

This Schedule gives inspection procedures for checking the quantity of product in pre-packages packed in accordance with Regulation 14 and incorporates the applicable requirements of regulations **19, 20, 21, 22, 23 and 24**. It may be used as it is with due consideration of specific requirements prescribed for individual products or groups of products or to develop equivalent procedures more suitable to identified circumstances.

This applicable requirement shall be used when inspecting pre-packages packed as specified in regulation 12.

B.2 Procedure

B.2.1 Define the inspection lot according to Regulation 24.

B.2.2 Where sampling of the inspection lot to determine compliance is to be used, determine a sample size appropriate for the inspection lot from Column 1 of Table A3, A4) or A5).

B.2.3 Determine the tolerable deficiency (*T*), if any, appropriate for the nominal quantity(ies) of the pre-packages according to the Sixth Schedule.

Where random quantity pre-packages are inspected the random quantities may fall within different ranges of tolerable deficiency and each pre-package shall need to be compared with its respective tolerable deficiency in B.2.7.

B.2.4 Determine the number of pre-packages equal to 2.5% of the inspection lot that are allowed to have a *TI* error if sampling shall not be used. Where sampling is used to determine the number of pre-packages allowed to have a *TI* error from Column 4 of Table A3, A4) or A5) as applicable.

This regulation is ignored if the pre-packages are allowed no deficiency.

B.2.5 Measure and record the net quantity of each pre-package. To determine the net quantity of certain pre-packages the following procedures are applicable:

- (a) B.3 gives requirements for inspection by gravimetric means including the determination of tare masses.
- (b) B.4 gives requirements for inspection by volumetric means.
- (c) B.5 gives requirements for inspecting linear measurements.
- (d) Appendix H gives requirements for determining the drained mass of a foodstuff that is packed in a liquid medium.
- (e) Appendix I gives requirements for determining the net quantity of pre-packages containing frozen products with added water or glazed products.

- B.2.6 Determine the individual pre-package error (see B.3, B.4 or B.5 as applicable).
- B.2.7 Determine if the inspection results comply with an individual pre-package as specified in sub-regulation 14(4) as follows.
- B.2.7.1 For pre-packages where no tolerable deficiency is allowed, the inspection lot fails if any pre-package is found to have a negative error in B.2.6. If the pre-packages measured pass this requirement the average of the sample will be correct and there is no need to carry out any further evaluation.
- B.2.7.2 For pre-packages where a tolerable deficiency is prescribed, compare all negative individual pre-package errors obtained in B.2.6 with the value(s) for T determined in B.2.3 and the number of pre-packages allowed to have a $T1$ error as determined in B.2.4.
- (a) If the number of pre-packages having a $T1$ error exceeds the number determined in B.2.4, the inspection lot fails.
- (b) if any pre-package has a $T2$ error the inspection lot fails.
- If the pre-packages for which a tolerable deficiency is prescribed pass this requirement, the pre-package proceeds to B.2.8.
- B.2.8 Determine if the inspection results comply with the average pre-package as specified in subregulation 14(3).
- B.2.8.1 Where sampling is not used and all pre-packages in the inspection lot were measured, calculate the total pre-package error by adding together the individual pre-package errors determined in B.2.6 and evaluate for compliance. If the total pre-package error is:
- Equal to zero or a positive number the inspection lot passes.
- (a) A negative number the inspection lot fails.
- B.2.8.2 Where sampling of the inspection lot is used to determine compliance, carry out the following procedure as specified in Regulation 24:
- (i) calculate the total pre-package error by adding together the individual pre-package errors determined in B.2.6.
- (ii) divide the total pre-package error by the sample size to calculate the average error.
- (iii) evaluate the sample for compliance. If the average error in item II. is:
- (a) equal to zero or a positive number the inspection lot passes.
- (b) if the average error is a negative number proceed to IV.
- (iv) Compute the standard deviation of the individual pre-package errors determined in B.2.6.
- (v) Compute the sample error limit by multiplying the standard deviation determined in IV. by the sample correction factor given in column 3 of Table A3, A4) or A5), as applicable, for the relevant sample size given in column 2.
- (v) Correct the average error by adding the sample error limit determined in V. to the average error and evaluate the sample for compliance—
- (a) if the corrected average error is zero or a positive number the inspection lot passes; or
- (b) if the corrected average error is a negative number the inspection lot fails.

B 3 Special procedures for quantity determination by gravimetric means**B.3.1 Determination of net quantity and average mass of packing material**

When non-destructive testing is undertaken, it is necessary to subtract the mass of the packing material from the actual gross mass of the pre-package to determine the net quantity of product therein. The average mass of the packing material is used if the criteria in Table B.1 is complied with.

Actual Quantity of Product = Mass of the pre-package – Average mass of the packing material

The following requirements apply to the determination of the average mass of packing material:

B.3.1.1 Use may be made of unused packing material of the same type used for the pre-packages being inspected or use may be made of packing material that has been used as part of a pre-package and has been separated from the product and cleaned using normal household procedures used by consumers of the product (e.g., the material should not be dried in an oven).

B.3.1.2 Packing material used for the average mass determination shall be clean and dry.

B.3.1.3 Randomly select an initial tare sample of 10 or more packing materials (e.g., from the sample taken from an inspection lot or from a lot of unused packing materials at the point-of-pack) and measure the mass of each packing material. When packing material from the inspection lot is used, first measure and record the gross mass of each pre-package to be opened for tare determination, for use in B.3.1.5.

B.3.1.4 Where pre-packages are filled with a protective gas this forms part of the packing material and where pre-packages are sealed under a vacuum this shall affect the actual net mass determination. In both cases each pre-package in the sample selected as a tare sample in B.3.1.3 shall first be measured with the packing material in its normal state ready for sale. The pre-package (packing material) shall then be punctured to allow the contents to attain atmospheric pressure and each pre-package in the sample shall again be measured. Determine the effect of the gas or vacuum, as applicable, by subtracting the mass of each punctured pre-package from the mass of the respective sealed pre-package.

Effect of gas or vacuum = Mass of sealed pre-package – Mass of punctured pre-package

Determine the average mass of the effect of the gas or vacuum and add this algebraically to the mass of the average tare value determined according to B.3.1.5 and Table B.1, as applicable (ie. added gas will increase the tare value and vacuum will reduce the tare value).

B.3.1.5 Add together the individual packing material masses determined in B.3.1.3 and divide by the number of samples to determine the Average Tare Mass (ATM). Calculate the sample standard deviation of the initial tare sample and proceed according to one of the criteria in Table B.1:

Table B.1
Criteria for determination of tare masses

If	Then
The ATM is equal to or less than 10 percent of nominal quantity of product	Use the ATM to determine the actual quantity of product in the pre-packages according to B.3.1.6.
The ATM is greater than 10 percent of the nominal quantity and the standard deviation determined in B.3.1.5 is equal to or less than $0.25T$	Use a total of 25 packing materials to compute the ATM and determine the actual quantity of product in the pre-packages according to B.3.1.6.
The ATM is greater than 10 percent of the nominal quantity and the standard deviation determined in B.3.1.5 is greater than $0.25T$	An ATM cannot be used. It is necessary to determine and use each individual tare mass (destructive testing). Determine the actual quantity of product in each pre-package according to B.3.1.6

B.3.1.6 Measure the individual pre-package gross mass and subtract the average mass of the packing material determined in B.3.1.5 or the actual mass of each packing material, as applicable, (see Table B.1 for criteria) to determine the actual net mass of the pre-packages.

Where the average mass of the packing material is used for pre-packages with a constant nominal quantity an alternative procedure is to add the average mass of the packing material to the nominal quantity to obtain a calculated gross mass and subtract this from the individual gross masses to determine the individual pre-package errors in B.3.1.7.

B.3.1.7 Determine the actual error of each pre-package by subtracting the nominal quantity from the actual net mass of each pre-package.

B.3.2 Determination of the quantity of liquid by gravimetric means

When gravimetric testing is used to determine the actual contents of pre-packages containing liquids labelled in units of volume, calculate the nominal mass of liquid product in the pre-package taking air buoyancy into consideration by using the following formula. The density of the liquid shall be at the specified reference temperature. Liquid products shall comply with applicable requirements when at the reference temperatures specified in Regulation 5.

$$\frac{\text{Mass of the product (g)} \times 0.99985}{\text{Nominal volume calculated from mass (g)} = \text{Liquid density (g/mL)} - 0.0012}$$

Nominal volume calculated from mass (g) =

$$\frac{\text{Mass of the product (g)} \times 0.99985}{\text{Liquid density (g/mL)} - 0.0012}$$

$$\frac{\text{Volume (mL)} \times [\text{Liquid density (g/mL)} - 0.0012]}{\text{Calculated nominal mass (g)} = 0.99985}$$

Calculated nominal mass (g) =

$$0.99985$$

The above formulae compensates for the effect of the difference in air buoyancy between the liquid being measured and masspieces used to calibrate inspection scales and having a density equal to 8 g/mL.

When errors are determined by comparing the actual masses of the liquid with the calculated nominal mass, the tolerable deficiencies (T) shall be determined from table A.1 a) according to the marked nominal volume and then also converted to the calculated mass, using the above formula, before checking the errors for compliance.

B.4 S pecial procedures for quantity determination by volumetric means

If necessary and the required accuracy of measurement may be achieved, the net quantity of individual pre-packages in B.2.5 may be determined by making use of a certified volumetric measure. This method is not recommended for liquids with characteristics that do not allow complete draining from the packing material. The following requirements apply when this method is used:

B.4.1 Requirements for use of volumetric measures

B.4.1.1 Volumetric measures calibrated as wet (delivery) measures (usually marked **Ex** on the measure to indicate that it was wetted with water before calibration)—

- (a) before initial use wet the measure by filling it at least to the pre-package nominal quantity with water, empty and drain for the drainage period specified on the calibration certificate.
- (b) after every measurement, empty the liquid that has been measured, rinse the volumetric measure with water and drain for the drainage time specified on the calibration certificate, before each subsequent measurement.

In this case the liquid being measured should preferably be compatible with water to avoid an unwanted reaction with the water used to wet the measure prior to testing.

B.4.1.2 Volumetric measures calibrated as a dry (container) measures (usually marked **“In”** on the measure to indicate that it was dry when calibrated) —

- (a) Before initial use, ensure that the volumetric measure is completely dry.
- (b) After every measurement empty the liquid that has been measured, rinse the volumetric measure with water and dry before the next measurement.

B.4.2 Temperature of measurement

Before measurement the liquid should be stabilised at the reference temperature as specified in Regulation 17. Should this not be practical, the co-efficient of expansion of the liquid being measured shall be used to correct the volume at the temperature of measurement to volume at the specified reference temperature.

B.4.3 Emptying of pre-packages

The contents of pre-packages shall be drained into the volumetric measure as completely as possible. Any method may be used to facilitate draining except that it does not effect the characteristics or quantity of the liquid and that any change in temperature is taken into account.

B.4.4 Determination of individual pre-package error

Determine the individual pre-package error by subtracting the nominal quantity (Q_n) of the pre-package from the actual net quantity as measured using the volumetric measure.

B.5 Special procedures for quantity determination of linear measurements

- B.5.1 When an article is marked with more than one dimension (e.g. timber marked with its length, width and thickness) each dimension shall be inspected separately for compliance. If any dimension on the articles in the inspection lot being inspected fails either the individual pre-package or average requirement, the inspection lot fails.
- B.5.2 Where the actual dimension of an article appears to be inconsistent (e.g. the width varies), at least five measurements at approximately equal intervals along the length of the dimension being inspected shall be made to determine the average dimension for each article. The average value of the dimension shall then be used to evaluate compliance. In cases where a minimum value (of a dimension) is marked (e.g. minimum thickness) the average dimension does not apply and none of the measurements made shall be less than the marked minimum value.

B.6 Use of templates to determine volume

Templates designed for use with measuring container bottles may be used to determine the volume of liquid contained therein except that bottles and associated templates are manufactured according to a controlled process that will ensure the accuracy of measurement required as specified in Regulation 20, as applicable.



EIGHTH SCHEDULE
(Regulations 15 (2) and 19 (1) and (2))

DRAINED QUANTITY OF FOODSTUFFS PACKED IN A LIQUID MEDIUM

The following test method shall be used when determining the actual quantity of foodstuffs (drained mass) when packed in a liquid medium to check for compliance as specified in Regulation 15.

C.1 TIME OF INSPECTION

The drained mass shall be determined after the equilibrium of solution process is completed.

C.1.1 An inspection may be carried out from the time indicating that the pre-packages are ready to be marketed according to the manufacturer or that distribution has taken place.

C.1.2 An inspection shall not be carried out prior to the elapse of the period given in the second column of Table C.1 should the manufacturer indicate that the pre-packages are not ready to be marketed.

Table C.1
Period of time for inspection

Product	Period of Time of inspection for matters specified in C.1.2	
	From	To
Fruit, vegetables and other vegetable foodstuffs (except for strawberries, raspberries, blackberries, kiwis, loganberries)	30 days after packaging	Tenability
Strawberries, raspberries, blackberries, kiwifruit, loganberries	30 days after packaging	2 years after packaging
Products made from salted fish, anchovies, sardines, marinades, stewed fish goods, preserved fish, mussels, shrimps and suchlike.	Immediately after packaging	14 days after packaging
Marinades of fried fish	48 hours after packaging	14 days after packaging
Sausages and other meat products	5 days after packaging	Tenability
Other products	14 days after packaging	Tenability

C.2 Inspection sample

The sample determined in B.2.2 and used to check for compliance of the net quantity of pre-packages, shall be used.

C.3 Temperature of sample

The samples shall be stored within the temperature range specified by the packer or between 20 °C and 24 °C, inclusive, for a period of 12 hours before testing.

C.4 Apparatus required

- C.4.1 For draining the product from a pre-package, use a flat sieve with a square mesh having a nominal aperture size of 2.8mm and a nominal wire thickness of 1.2 mm. The diameter of this sieve should be 20 cm for use with pre-packages of 850 mL or less, and 30 cm for use with containers over 850 ml. If the nominal quantity is 2.5 kg or more, the quantity may, after weighing the whole amount, be divided among several sieves.
- C.4.2 For determination of mass, the weighing instrument shall meet the requirements as specified in Regulation 20.

C.5 Determination of the actual quantity of product

- C.5.1 Determine the mass of the sieve and its drip pan.
- C.5.2 Open the pre-package and pour the product and liquid medium across the sieve. Distribute the product and liquid medium over the surface of the sieve but do not shake the material on the sieve. Tilt the sieve to an angle of approximately 17 to 20 degrees from horizontal to facilitate draining. Carefully invert by hand all solid product, or parts thereof, with cups or cavities if they fall on the sieve with cups or cavities up. Drain the cups or cavities in soft products (e.g., sliced fruit) by tilting the sieve. Drain for two minutes.
- C.5.3 Weigh the pre-weighed drip pan and sieve containing the product and calculate the drained mass of the product as follows:

$$P = P_{e2} - P_{e1}$$

where:

P = drained mass of the product

P_{e1} = mass of the clean sieve and drip tray

P_{e2} = mass of the sieve and drip tray plus product after draining

- C.5.4 Before the sieve is again used ensure that it is clean and free of product debris. The sieve need not be dry as long as it is weighed accurately immediately before being used.



NINTH SCHEDULE

(Regulations 18 ((2) and (4)) and 19 ((1) and (2))

TEST PROCEDURES FOR DETERMINING THE ACTUAL QUANTITY OF FROZEN PRODUCTS WITH ADDED WATER AND GLAZED PRODUCTS

The following test methods, as applicable, shall be used when determining the net quantity of pre-packages in B.2.5 when the contents of the pre-packages are frozen with added water or glazed. In the case of frozen products, if no water is added at the time of freezing this procedure is not used and the net mass shall be determined in the frozen state exclusive of packing material. If a product does not fall within one of the categories of products as specified in the Ninth Schedule the most appropriate method for removing excess ice from the outside of the product, shall be used.

D.1 Apparatus required

- D.1.1 For draining the water from a product, use a flat sieve with diameters as prescribed in the relevant procedures and having square mesh openings with a nominal aperture size of 2.8 mm and a nominal wire thickness of 1.2 mm.
- D.1.2 For determination of mass, the weighing instrument shall meet the requirements as specified in **Regulation 20**

D.2 Frozen Fruits and Vegetables

- D.2.1 Determine the mass of the appropriate sieve and its drip pan after wetting the sieve and draining for two minutes. For pre-packages with a nominal quantity not greater than 1.4 kg the sieve shall have a diameter of 20 cm. For pre-packages with a nominal quantity greater than 1.4 kg, the sieve shall have a diameter of 30 cm.
- D.2.2 Immerse the pre-package in water maintained at $25\text{ }^{\circ}\text{C} \pm 10\text{ }^{\circ}\text{C}$ with a continuous water flow. If the pre-package is not water-tight, place it in a plastic bag and remove any excess air using a vacuum and then seal it securely. Avoid agitating the pre-package while it is thawing. When all of the ice has melted remove it from the water bath and wipe it dry. Open the pre-package with care and a minimum of agitation.
- D.2.3 Transfer the product to the sieve by distributing evenly in one sweeping motion. Incline the sieve to approximately 17 to 20 degrees from the horizontal to facilitate drainage without shifting the product. Drain for two minutes.
- D.2.4 Weigh the pre-weighed drip pan and sieve containing the product and determine the actual net quantity of the product.

D.3 Glazed fish and fishery products (products covered with a film of ice to preserve their quality).

- D.3.1 Determine the mass of the appropriate sieve and its drip pan after wetting the sieve and draining for two minutes. For pre-packages with a nominal quantity not greater than 900g, the sieve shall have a diameter of 20cm. For pre-packages with a nominal quantity greater than 900g the sieve shall have a diameter of 30 cm.

- D.3.2 Remove the product from the pre-package and place it in a wire mesh basket large enough to hold the contents. Subject the product to a gentle spray of cold water until the ice glaze is removed. Agitate the product with care to avoid damage or loss of any natural water contained in the product.
- D.3.3 Transfer the product to the sieve and incline the sieve to approximately 17 to 20 degrees from the horizontal to facilitate drainage without shifting the product. Drain for two minutes.
- D.3.4 Weigh the pre-weighed drip pan and sieve containing the product and determine the actual net quantity of the product.

D.4 Frozen fish and fishery products

- D.4.1 Determine the mass of the appropriate sieve and its drip pan after wetting the sieve and draining for two minutes. For pre-packages with a nominal quantity not greater than 450g, the sieve shall have a diameter of 20cm. For pre-packages with a nominal quantity greater than 450g, the sieve shall have a diameter of 30 cm.
- D.4.2 Open a pre-package and place the product in a wire mesh basket large enough to hold the contents of the pre-package and with openings small enough to retain the product while thawing. Immerse the wire mesh basket in a water bath (e.g., a 15L container of water) at $25\text{ }^{\circ}\text{C} \pm 10\text{ }^{\circ}\text{C}$ so that the top of the basket extends above water level. Introduce water at $25\text{ }^{\circ}\text{C} \pm 10\text{ }^{\circ}\text{C}$ at the bottom of the container in a continuous flow until all excess ice has melted. Care shall be taken not to remove any water occurring naturally in the product and it is recommended that the frozen core of each item is not completely defrosted unless this contains added water.
- D.4.3 Transfer the product to the sieve and incline the sieve to approximately 17 to 20 degrees from the horizontal to facilitate drainage without shifting the product. Drain for two minutes.
- D.4.4 Weigh the pre-weighed drip pan and sieve containing the product and determine the actual net quantity of the product.

D.5 Frozen Poultry

If the poultry being inspected is encompassed with ice or it is suspected that water was added to the abdominal cavity before or during the freezing process, the following method is used to thaw the product:

- D.5.1 Remove the carcass from the packing material and place it in a strong waterproof plastic bag with the abdominal cavity facing towards the closed end of the bag. The bag shall be big enough to ensure that it can be sealed properly but shall not be unduly large. Remove as much air as possible from the bag by compressing and close securely.

Until such time as this test is carried out the samples should be kept frozen under the conditions in which they were stored before selection as the inspection sample.

- D.5.2 Immerse the bag containing the frozen carcass in a bath of water maintained at $42\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ with the closed end positioned such that water from the bath cannot leak into the bag. It may be held in position by means of weights if necessary.

D.5.3 The bag shall be left in the bath of water until all excess ice is melted. If necessary to check that all excess ice has melted, the bag may be opened and the temperature in the abdominal cavity measured.

To prevent the loss of natural water in the product, the flesh of the poultry should remain frozen as far as possible, and only surrounding ice should be melted.

D.5.4 Determine the mass of a drip pan and 20 cm sieve after wetting the sieve and draining for five minutes.

D.5.5 Remove the carcass from the bag and place in the sieve with the abdominal cavity facing down and allow to drain for five minutes. If the abdominal cavity contains offal packed in separate packing material, take the offal out of the packing material and place it in the sieve with the carcass to drain.

D.5.6 Weigh the pre-weighed drip pan and sieve containing the carcass and offal, if applicable, and determine the actual net quantity of the product.



TENTH SCHEDULE
(Regulation 19 (1) and (2))

STATISTICAL PRINCIPLES OF CONTROL

The requirements of this document are based on the following statistical principles of control.

E.1 Uncertainties

The expanded uncertainties at the 95 percent confidence level associated with measuring instruments and test methods used for determining quantities shall not exceed 0.2 T. Examples of the source of uncertainty include the maximum permissible error and repeatability in measuring instruments, variations in packing materials, and fluctuations in density determinations caused by the differing amounts of solids in the liquid or temperature changes.

E.2 Significance levels

E.2.1 The significance level for Type I Risk (the value which is the upper limit of this type of error) shall be 0.005. The tests shall determine if the average of the quantity of product in a pre-package has a one-sided significance level of 99.5 percent using coefficients as derived from Student's t distribution:

$$\alpha_p d \leq 0.5\% \text{ for } \mu = Q_n$$

That is, the probability of rejecting a correctly filled inspection lot with $\mu = Q_n$ shall not exceed 0.5 percent.

E.2.2 The test for Type II Risk¹ shall have a significance level α_p of:

$$\alpha_p d \leq 5\% \text{ for } p = 2.5\%$$

that is, the probability (p) of rejecting a inspection lot containing 2.5 percent of inadequate pre-packages shall not exceed 5 percent.

E.2.3 Significance level of the tests for percentage of inadequate pre-packages (Type II risk) shall detect inspection lots in at least 90 percent of the cases -

- (a) for which the average fill is less than $(Q_n - 0.74 \sigma)$ where σ is the sample standard deviation of the quantity of product in the pre-packages of the inspection lot; and
- (b) lots that contain 9 percent inadequate pre-packages.

C. YALUMA,
Minister of Commerce Trade
and Industry

LUSAKA
11th May, 2021
[MCTi/64/9/1C]

