DEPARTMENT OF AGRICULTURE, LAND REFORM AND RURAL DEVELOPMENT

Please Note: All changes introduced are highlighted in blue

No.R. dd/mm/yyyy

AGRICULTURAL PRODUCT STANDARDS ACT, 1990 (ACT No. 119 OF 1990)

DRAFT REGULATIONS REGARDING THE GRADING, PACKING AND MARKING OF EGGS INTENDED FOR SALE IN THE REPUBLIC OF SOUTH AFRICA

The Minister of Agriculture, Land Reform and Rural Development has, under section 15 of the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990) –

- (a) made the regulations in the Schedule;
- (b) determined that the said regulations shall come into operation 12 months after date of publication thereof; and
- (c) read together with section 3(2) of the said Act, repealed the regulations published by Government Notices No. R.725 of 16 September 2011 and R.440 of 15 April 2016 with effect from the date of commencement.

Regulation

SCHEDULE

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Definitions

- 1. In these regulations, any word or expression to which a meaning has been assigned in the Act, shall have that meaning and unless the context otherwise indicates -
- "air cell" means the air filled space occurring between the inner and outer shell membranes of an egg and which is normally located at the broad end of the egg;
- "assignee" means a person, undertaking, body, institution, association or board designated under section 2(3) of the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990);
- "barn eggs" means eggs which are produced by poultry as set out in regulation 8(3);
- "best before" or "best quality before date" means the date which signifies the end of period under any stated storage conditions during which the unopened product will remain fully marketable and will retain any specific qualities for which implied or express claims have been made, however, beyond the date the food may still be acceptable for consumption;
- "blood ring" means a line or ring that is visible at a certain stage of development in a fertilised egg when such egg is broken open or candled;
- "blood spot" means a concentration of blood or oxidised blood;
- "broad end" means the end of the egg that is rounder and is not pointed, and in which the air cell is normally located;
- "bubbly air cell" means an air cell with small air bubbles floating in the immediate vicinity of such an air cell;
- "cage eggs" means eggs which are produced by poultry as set out in regulation 8(4);
- "candling" means examining the interior condition of an egg by rotating or causing the egg to rotate in front of or over a light source that illuminates the contents of the egg;
- "clean" with regard to the cleanliness of the shell of an egg, means a shell that is free of visible foreign matter, stains or discolourations to such a degree that the general clean appearance thereof is not detrimentally affected;
- "consignment" means a quantity of eggs belonging to the same supplier, which is delivered at any one time under cover of the same invoice, consignment note, delivery note or receipt note, or is delivered by the same vehicle, or if such a quantity is sub-sorted into different batches, grades or size groups, each quantity of each of the different batches, grades or size groups;
- "container" means the wrapper in which a maximum of 60 eggs are packed for sale;
- "controlled heat treatment process" means a standardised process where the time and temperature parameters were determined by heat penetration tests using temperature probes measuring the internal temperatures in the centre/core of the eggs, using the Z-value and Lethal rate (L) calculation to ensure that at least a 5 logarithmic reduction is obtained for the target organism (*Salmonella spp.* in this case) in the coldest egg: Provided that a logarithmic reduction of 4 may be used for the coldest egg if a validated *Salmonella spp.* management system is in place along the entire value chain;
- "depth" with regard to an air cell, means the greatest distance between the outer surface of the shell of the egg and the lower meniscus of the air cell, measured vertically with such meniscus;
- "diffused blood" means blood that has passed through to the egg white and the egg yolk;
- "**D-value**" means the Decimal Reduction Time, i.e. the time in minutes for the population of micro-organisms to be reduced by one log (i.e. 90%) at a specified temperature (Tx);

"eggs" means the eggs of the species *Gallus gallus domesticus* (domesticated fowls), *Meleagrus gallapavo* (turkeys) and *Anas platyrhynchos* (ducks and muscovies);

"Executive Officer" means the officer designated under section 2(1) of the Act;

"foreign matter" means poultry faeces, blood, body fluids, feathers or parts of feathers, egg yolk, egg white, poultry feedstuffs, soil or any other matter, excluding ink and mineral oil of food grade which were applied to the shell of the egg for a specific purpose;

"free range eggs" means eggs which are produced by poultry as set out in regulation 8(2);

"germ development" means a circular dark area near the centre of the yolk shadow, but if blood is visible the egg is at a decay stage;

"graded eggs" means eggs which are sorted into lots having similar characteristics as to quality and weight as set out in this regulation: Provided that mixed sized eggs which complies with the quality standards prescribed in this regulation shall be regarded as graded eggs;

"Haugh value" means a value as determined in accordance with regulation 16, that indicates the firmness of the egg white;

"inspector" means the executive officer of the Act or an officer under his or her control, or an assignee or an employee of an assignee;

"Lethal rate (L)" means the formula L= (10^{[(T-Tx)/Z])}/D used to calculate the equivalent lethality (i.e. equivalent log reduction) at different egg core temperatures in the pasteurisation process at one minute (60 second) intervals as measured using appropriate instruments. The sum of the Lethal rates gives the cumulative lethality (Total log reduction) over the entire temperature profile, where --

L = Lethal rate (equivalent log reduction calculated at 1 minute intervals)

T = Temperature (°C) under consideration (i.e. the actual pasteurisation temperature measured at a given point of time in the core of the egg)

Tx = Reference Temperature (°C) (i.e. 57.2°C)

Z = Z-value (i.e. 3.3)

D = D-value (i.e. 1.9 minutes);

"logarithmic reduction" means the reduction of the number of surviving spores of the target organism by a factor of 10 (i.e. a 90% reduction in the population);

"loose eggs" means eggs that are displayed for sale in loose quantities or in a container that is not covered or boxed:

"meat spot" means a severed ovary or other foreign tissue that is not a normal constituent of the egg yolk or egg white and that detrimentally affects the appearance of an egg;

"mould" means any fungus or mouldy growth occurring in an egg or on the shell thereof;

"outer container" means a container in which more than one container of eggs is packed;

"pack station" means any premises where eggs are packed for sale to the retail trade;

"packer" means a person dealing in the course of trade with eggs by packing them for sale, and also a person on behalf of whom such product is packed for sale and, in the case of such product that is imported into the Republic in the containers in which the eggs are to be sold in the retail trade, the person importing such eggs for sale;

"pasteurised eggs" means eggs which have been treated as set out in regulation 8(5);

"person" means any individual, partnership, corporation, association, recognized legal entity or other business unit;

- "**poultry**" means the species *Gallus gallus domesticus* (domesticated fowls), *Meleagrus gallapavo* (turkeys) and *Anas platyrhynchos* (ducks and muscovies);
- "reasonably clean" with regard to the cleanliness of the shell of an egg, means that not more than six per cent of the total surface area of the shell may be covered with foreign matter, stains or discolourations, and that no individual occurrence of foreign matter or a stain or discolouration covers more than three per cent of the total surface area of the shell;
- "spotted" with regard to a yolk, means that the yolk appears mottled owing to the occurrence of spots or a developed germ cell that is not a blood spot or meat spot and which detrimentally affects the appearance of the yolk;
- "strong" with regard to the texture of the shell of an egg, means that such shell has no cracks, soft spots or large air pores;
- "total log reduction" means the sum of the Lethal rates (La + Lb + Lc + Ld, etc.) as calculated at one minute intervals over the entire pasteurisation process;
- "swimmer" means an air cell that does not maintain a fixed position within an egg, but moves freely between the shell membranes when that egg is rotated;
- "the Act" means the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990);
- "trade mark" means a trade mark as defined in the Trade Marks Act, 1993 (Act No. 194 of 1993);
- "validated Salmonella spp. management system" means tests done by an independent third party throughout the value chain (i.e. at breeder, grower, layer, packer, heat treatment, distributor, wholesale and retail levels) to provide proof that the management system is working and that there is no Salmonella spp. contamination or re-contamination; and
- "Z-value" means a value (Kinetic factor) providing information on the relative resistance of an organism (Salmonella spp. in this case) to different destructive temperatures, thus allowing for the calculation of equivalent thermal processes at different temperatures using the lethal rate (L) calculation: Provided that it is advised that the worst case scenario value be used, i.e. a Z-value of 3.3 at 57.2°C and a D-value of 1.9 (reference Lemgo D and Z-value database for food; http://www.hs-owl.de/fb4/ldzbase/index.pl).

Restrictions on the sale of eggs

- 2. (1) No person shall, subject to the provisions of sub-regulation (2), sell eggs for human consumption in the Republic of South Africa --
 - (a) unless those eggs are sorted according to size and grade in terms of regulations 3 and 4 respectively;
 - (b) unless those eggs comply with the standards for the grades referred to in regulation 5;
 - (c) unless those eggs, when packed, are packed in a container and an outer container in accordance with regulations 6 and 7;
 - (d) unless the container and outer container in which the eggs are packed, are marked with the particulars and in the manner set out in regulations 8 to 11;
 - (e) unless eggs sold in loose quantities are marked with the particulars and in the manner set out in regulation 12; and
 - (f) if the container or outer container in which the eggs are packed, is marked with any restricted particulars or in a manner which is prohibited in terms of regulation 13.

(2) The Executive Officer may grant written exemption, entirely or partially to any person on such condition, as he or she may deem necessary, from the provisions of sub-regulation (1).

PART I

SIZING AND GRADING OF EGGS

Sizing of eggs

- 3. (1) Sorting of eggs into sizes is optional: Provided that if the eggs are
 - (a) sorted into sizes, they shall be sorted according to the mass ranges set out in column 2 of Table 2, and presented for sale in accordance with the applicable size designation set out in column 1 of the said Table; or
 - (b) not sorted into sizes, they shall be presented for sale as "Mixed sizes" only.
- (2) In the case of eggs sorted into sizes, the applicable minimum mass prescribed for a particular size in Table 2 may deviate to the extent allowed for in Table 4.

Grades of eggs

- 4. (1) Eggs shall be graded as Grade 1, Grade 2 and Grade 3.
- (2) Eggs which do not qualify as Grade 3, or do not comply with the standards for sizes prescribed in Table 2, shall not be presented for sale.

Standards for grades

- 5. Eggs shall be graded as follows:
 - (1) Grade 1 if
 - the standards for grades set out in column 2, of Table 3 of the Annexure, opposite the quality factor set out in column 1 of the said table, is complied with;
 - (b) the extent to which a defect may occur does not exceed the maximum percentage or quantity as set out in column 2, of Table 4 of the Annexure, opposite the nature of defect set out in column 1 of the said table; and
 - (c) the number of eggs in accordance with the maximum percentage permissible deviation as set out in Table 5 of the Annexure is not exceeded.
 - (2) Grade 2 if
 - the standards for grades set out in column 3, of Table 3 of the Annexure, opposite the quality factor set out in column 1 of the said table, is complied with;
 - (b) the extent to which a defect may occur does not exceed the maximum percentage or quantity set out in column 3, of Table 4 of the Annexure, opposite the nature of the defect set out in column 1 of the said table; and
 - (c) the number of eggs in accordance with the maximum percentage permissible deviation as set out in Table 5 of the Annexure is not exceeded.
 - (3) Grade 3 if -
 - (a) the standards for grades set out in column 4, of Table 3 of the Annexure, opposite the quality factor set out in column 1 of the said table, is complied with;

- (b) the extent to which a defect may occur does not exceed the maximum percentage or quantity set out in column 4, of Table 4 of the Annexure, opposite the nature of defect set out in column 1 of the said table; and
- (c) the number of eggs in accordance with the maximum percentage permissible deviation as set out in Table 5 of the Annexure is not exceeded.

PART II CONTAINERS AND OUTER CONTAINERS

Requirements for containers and outer containers

- 6. (1) A container and an outer container --
 - (a) shall be intact and be made from material that --
 - (i) is suitable for the purpose; and
 - (ii) does not impart any taste or odour to the eggs packed therein;
 - (b) shall be so strong that it protects the eggs during normal handling or transport practices, to such an extent that the eggs packed therein shall not be damaged;
 - (c) shall not absorb an excessive quantity of moisture during cooling to the extent that the packaging deviates from its intended form;
 - (d) shall be free from any matter other than the eggs packed therein and the packing material in which such eggs are customarily packed: Provided that advertising material is permitted on or in the container or outer container or on the eggs;
 - (e) may be new or recycled: Provided that if a recycled container or outer container is used, it shall be cleaned thoroughly before eggs are packed therein and all the previous marks and labels shall be removed or be covered by new labels; and
 - (f) shall be closed properly in a manner allowed by the nature thereof.
- (2) Containers, including any other packaging material used to contain and/or protect the eggs, shall --
 - (a) by design be compatible with the outer containers; and
 - (b) fit snugly into the outer containers and leave no unused space, ullage or gaps.

Packing requirements

- 7. (1) Each container and outer container shall, with due regard to the packing material used therein, be packed with eggs to the full capacity thereof.
- (2) Eggs of different grades shall not be packed together in the same container or outer container.
- (3) Subject to regulation 10(2)(b), eggs of different sizes shall not be packed together in the same container or outer container.

PART III

MARKING REQUIREMENTS

Marking of containers and outer containers

- 8. (1) Containers and outer containers shall be marked at least in English with the following particulars and in the following manner: Provided that, if preferred, the containers and outer containers may, in addition to English, also be marked in any other official language of the Republic of South Africa, or in the case of imported eggs, in the language of the country of origin:
 - (a) The size and grade of eggs, as set out in regulation 10, shall be indicated on the front or top panel of the container or outer container: Provided that where the aforementioned information is indicated on the outer container, a list of the sizes and/or grades with boxes next to them that can be ticked may be used: Provided further that the boxes ticked shall correspond with the actual size and/or grade of the eggs packed in such outer containers.
 - (b) The expression "eggs" shall be indicated on the front or top panel: Provided that the following information may precede or follow the expression "eggs" in letters of the same size, font and colour:
 - (i) The specific production methods, namely "cage", "barn" or "free range": Provided further that the production method indicated shall at least comply with the applicable definition in regulation 1.
 - (ii) The particulars referred to in paragraphs (a), (c) and (e).
 - (iii) Registered trademarks which include any reference related to a particular feed ingredient such as but not limited to "grain fed", "canola", etc. and which has been registered for use on eggs and/or allowed for on eggs prior to 15 April 2016 (i.e. the date of publication of the egg amendment regulations in the Government Gazette in 2016): Provided that such registered trademarks shall also comply with the requirements stipulated in paragraph (i).
 - (iv) Registered trademarks or brand names which include the name of a farm, name/surname of the owner/packer/producer, the name of the registered company or closed corporation, or any other names which does not make any health or nutrition claims and which has been registered for use on eggs and/or allowed for on eggs prior to 15 April 2016 (i.e. the date of publication of the egg amendment regulations in the Government Gazette in 2016).
 - (c) The expression "Pasteurised" shall be indicated on the front or top panel if the eggs have been pasteurized: Provided that the standards set out in regulation 8(5) have been complied with.
 - (d) Details about the packer, as set out in regulation 11, shall be indicated on any panel.
 - (e) If the eggs were not obtained from the species *Gallus gallus domesticus*, the name of the species from which the eggs were obtained shall be indicated on the front or top panel.
 - (f) The "best before" or "best quality before" date shall be indicated on any panel: Provided that such date shall –
 - (i) in the case of unpasteurised eggs not exceed 40 days from the date of lay of the eggs; or
 - (ii) in the case of pasteurised eggs not exceed 56 days from the date of lay of the eggs;

- (iii) be preceded by the expression "best before" or the abbreviation "BB", or "best quality before", as the case may be;
- (iv) be indicated in the sequence "day-month-year" (i.e. "dd/mm/yyyy") when numbers only are used: Provided that in the case of imported products where an altered date sequence is used, the month shall be indicated in letters, either written out in full or abbreviated, and the year shall be written out in full; and
- (v) not be removed or altered by any person.
- (g) The expression "oiled" shall be indicated on the front or top panel if the eggs have been coated with food grade mineral oil.
- (h) Other descriptions, statements, expressions, markings or claims which implies a message of eggs being healthy or healthier, additive-free, or energy and/or nutritionally enhanced or improved by any method, including agricultural practices, shall comply with the requirements of the regulations published under the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972).
 - (ii) The producer, packer or retailer shall upon request provide the Executive Officer with the necessary scientific based evidence justifying the use of these claims.
- (2) (a) Eggs shall only be marked with the expression "free range" if such eggs are produced by poultry which --
 - (i) are not caged and are housed in a shed/ barn with a stocking density not exceeding 10 adult hens per square meter of available floor space; and
 - (ii) have daily access to an outdoor range area not exceeding 5 adult hens per square meter: Provided that
 - (aa) such outdoor range shall -
 - (aaa) be accessible through openings in the side of the shed/barn;
 - (bbb) be maintained in a manner that allows for a minimum of 50% living vegetation present at all times; and
 - (ccc) have adequate shade by way of trees or artificial structures at the rate of 4 square meters per 1000 adult hens; and
 - (bb) egg producers may during the high risk period for Highly Pathogenic Avian Influenza (HPAI) or during an outbreak of Virulent Newcastle disease (vND), house free range flocks indoors for a maximum continuous period of 24 weeks during a year: Provided further that
 - (aaa) the commencement of the 24 week period shall start on the date on which the flock concerned is confined to the shed/barn;
 - (bbb) the producers shall on or before the first day of commencement inform the designated assignee that the flock is/ will be confined indoors; and
 - (ccc) each producer shall keep accurate records about the dates on which the flock is confined to the shed/ barn and allowed to roam outdoors again.

- (b) If the 24 week confinement period referred to paragraph (a)(ii)(bb) above is exceeded, all eggs produced thereafter shall be marked and presented for sale as "barn eggs".
- (c) Egg producers shall, on or before the first day of commencement of confinement, inform the channels of distribution used and their customers, that the flock concerned is being confined to the shed/ barn under veterinary instruction, and shall advise their distribution channels and their customers to display notices advising the consumers of the confinement of the flock.
- (3) Eggs shall only be marked with the expression "barn eggs" if such eggs are produced by poultry that are not caged but are confined to a shed/ barn indoors, with a stocking density not exceeding 10 adult hens per square meter of available floor space.
- (4) Eggs shall only be marked with the expression "cage eggs" if such eggs are produced by poultry that are kept in cages throughout their laying period: Provided that --
 - (a) cages shall be within a shed and may include a nest box, perch and a dust bath; and
 - (b) birds shall have adequate space to feed and lay.
- (5) Eggs shall only be marked with the expression "pasteurised" if such eggs were exposed to a controlled heat treatment process (e.g. irradiation, microwave, hot air and/or hot water) to ensure a minimum of 5 logarithmic reduction (5 log) of the target organism (*Salmonella spp.* in this case) in the coldest egg: Provided that
 - (a) producers shall have the following requirements in place:
 - (i) Sorting of eggs by weight (5g tolerance, i.e. 2.5g deviation both sides of the target weight) and removal of cracked eggs since the pasteurisation process (heat treatment) require uniform eggs sizes and uncracked eggs to be effective.
 - (ii) Microbiological tests of pasteurised eggs as part of a Quality Management System.
 - (iii) Good Manufacturing Practices (GMP) to ensure that adequate separation of unprocessed eggs and pasteurised eggs occurs inside the packing station and that the same workers do not handle unpasteurised and pasteurised eggs.
 - (iv) Regular screening of chicken flocks in the egg production units for Salmonella spp.
 - (v) Traceability of the eggs.
 - (vi) Record keeping of all processes.
 - (b) a logarithmic reduction of 4 may apply for the coldest egg if a validated Salmonella spp. management system is in place along the entire value chain; and
 - (c) the following egg quality related aspects shall be kept in mind:
 - (i) The egg whites may be slightly opaque but no gelling, coagulation and lumps may be present.
 - (ii) The pasteurisation temperature may vary between 54°C and 59°C, but it is advised that the eggs should not be kept for long at the higher temperatures or go above 59°C since the eggs whites may become unacceptable from a quality viewpoint.

- (iii) The thick white part of the eggs shall be reasonably firm with a Haugh Value of at least 65 units and maintain a value of more than 60 after 56 days.
- (6) The provisions of this regulation shall also apply to --
 - (a) particulars that are marked on a notice board displayed at or in the immediate vicinity of eggs; and
 - (b) all advertisements and any other promotional material related to the sale of eggs.
- (7) Any information appearing on any container or outer container, in terms of these regulations, shall be marked in letters and figures that -
 - (a) appear on a contrasting background;
 - (b) are clearly legible; and
 - (c) comply with the minimum vertical heights stipulated in columns 2 and 3 of Table 1 of the Annexure, opposite the corresponding nature of indication set out in column 1 of the said table.
 - (8) If eggs have been imported into the Republic of South Africa
 - (a) in containers in which such eggs will be sold, the name of the country of origin thereof, preceded by the expression "Imported from" shall be indicated on each such container and outer container together with the particulars referred to in regulation 11; or
 - (b) in bulk for the purpose of repacking into containers, the expression "Imported from" followed by the expression "Packed by" shall be indicated on such container and outer container together with the particulars referred to in regulation 11;
 - (c) the outer containers and containers shall be marked with the expression "eggs have been refrigerated", or any other expression having a similar meaning, on the top or front panel;
 - (d) the outer containers and containers shall, for the purpose of traceability, be marked with the name of the farm in the country of origin; and
 - (e) the importer shall ensure that the requirements set out in the "Prohibition regarding the removal of imported regulated agricultural products intended for the sale in the Republic of South Africa from the prescribed ports of entry" published in terms of the Act have been met.
- (9) The vertical height of the letters and figures used to indicate the applicable size and grade designation referred to in sub-regulation (1), shall not be less than any other letter or figure, except a letter or figure used in the trade mark or name of the packer, whichever is applicable, or in the expressions "Eggs", "Free Range Eggs" or "Barn Eggs" that appears on the container or outer container into which the eggs are packed.

Additional particulars on containers

- 9. (1) The expression "fresh" may be marked on a container: Provided that
 - the eggs marked as such shall at any stage during the shelf life comply with the Haugh Value as set out in item 11 of Table 3 for Grade 1;
 - (b) pasteurised eggs and Grade 2 and Grade 3 eggs shall not be labelled as "fresh"; and

- (c) the letter size of the largest letter shall not exceed 5 mm in height.
- (2) The expression "heat treated" may only be marked on a container containing pasteurised eggs.

Indication of the size and grade designations

- 10. (1) The designations of the size and grade into which eggs have been sorted and classified shall be marked conspicuously on the container and outer container in which those eggs are packed.
 - (2) A designation referred to in sub-regulation (1) shall
 - (a) in the case of a size designation, consist of the applicable expression set out in column 1 of Table 2 in the Annexure;
 - (b) in the case of different sizes packed in the same container or outer container, be marked with the expression "mixed sizes"; and
 - (c) in the case of a grade designation, consist of the applicable expression referred to in regulation 4.

Indication of the packer

- 11. (1) The initials and surname, or trade name of the packer shall appear on each container and outer container used.
- (2) The address of the packer shall be marked on the containers and outer containers, and shall
 - (a) consist of the physical address of the premises in the Republic where that product is packed by such packer, or where the ordinary place of business of such packer is situated, followed by the name of the town, suburb, city or magisterial district in which that premises is situated, or the postal address together with the telephone number; and
 - (b) be marked on such container and outer container following the particulars referred to in sub-regulation (1).
 - (3) If the eggs have been packed on behalf of a person
 - (a) the initials and surname or trade name of the persons on whose behalf the eggs have been packed shall be substituted for the particulars referred to in subregulation (1);
 - (b) the physical address of the premises in the Republic where the ordinary place of business of such person is situated, followed by the name of the town, suburb, city or magisterial district in which that premises is situated, or the postal address together with the telephone number, shall be substituted for the particulars referred to in paragraph (a) of sub-regulation (2);
 - (c) such address shall be marked on the container and outer container following the particulars referred to in paragraph (a); and
 - (d) the person on whose behalf the eggs have been packed, must at all times be able to inform the Executive Officer who the supplier of the eggs is, i.e. eggs shall at all times be traceable to the farm from which they originate.

Indications when eggs are presented for sale in loose quantities

12. When eggs are kept or displayed for sale in loose quantities --

- eggs of different grades, types (i.e. pasteurised or unpasteurised), sizes, origin and type of production system, except in the case of mixed sizes, shall be kept or displayed separately; and
- (b) the following information shall be prominently marked on a notice board in the immediate vicinity of the eggs in clear legible letters and figures with a vertical height of at least 10 mm in height:
 - (i) The size designation of the eggs concerned or the expression "mixed sizes", whichever is applicable.
 - (ii) The grade designation of the eggs concerned.
 - (iii) The country of origin.
 - (iv) The name of the packer only.
 - (v) The best before date.
 - (vi) The expression "pasteurised" if the eggs have been pasteurised.

Restricted particulars on containers and outer containers

- 13. (1) (a) No registered trademark, brand name, mark or other method of expression using the following words or wording shall be indicated on a container or outer container containing eggs:
 - (i) The words "super" and "extra" (including any translation thereof), except when used as an indication of the size designation of the eggs.
 - (ii) A message of veterinary medicine-free or which indicates the more humane treatment or rearing of poultry or which creates an impression that the eggs are safer or that poultry was fed a special diet such as, but not limited to, "antibiotic free", "fed a diet free of hormones", "cage free", "furnished cage", "safe", "pure", "grass fed", "pasture fed", "forage fed", "canola fed", "grain fed", "mixed grain", "organic", etc.
 - (iii) Any other wording not addressed in sub-paragraphs (i) and (ii) above that constitutes a misrepresentation or either directly or by implication creates or may create a misleading impression regarding the contents, quality, origin, grade, size group, production method or diet.
 - No illustration, depiction, logo or other method of visual expression that constitutes a misrepresentation or either directly or by implication creates or may create a misleading impression regarding the contents, quality, origin, grade, size group, production method or diet shall be indicated on a container or outer container containing eggs.
 - (c) Only production methods addressed and defined in these regulations shall be permitted on any container or outer container containing eggs.

PART IV SAMPLING AND EXAMINATION

Sampling

14. For the purpose of inspection for quality control an inspector shall take such samples of a product, material, substance or other article in question as he or she may deem necessary.

Methods of examination

- 15. (1) The methods to be employed when a sample referred to in regulation 14, is examined in order to determine the extent to which eggs, with a defect referred to in regulation 5 are present in the quantity of eggs from which that sample is taken shall be as follows:
 - (a) Subject to the provisions of sub-regulation (2)
 - (i) each egg in the sample shall be numbered;
 - (ii) each egg in that sample shall be examined visually in terms of external defects and where applicable by means of a suitable candling device with which internal defects can be observed; and
 - (iii) the depth of the air cell of an egg shall be determined as follows:
 - (aa) A calibrated measuring plate shall be placed on the broad end of the egg while it is held vertically against the candling device with the broad end at the top.
 - (bb) The value on the calibrated measuring plate shall be read off opposite the lower meniscus of the air cell.
 - (cc) Such reading shall represent the depth of the air cell of the egg concerned; or
 - (dd) The inspector inspecting the eggs may choose to use the Haugh value determined in accordance with the method set out in regulation 16 instead.
 - (b) Eggs with defects shall
 - (i) be removed from the sample if the egg is examined individually and thereafter replaced into its numbered place;
 - (ii) not be replaced into its numbered place after it has been broken open; and
 - (iii) each separate number of eggs with each deviation shall be determined separately.
 - (c) Each number thus determined shall be expressed as a percentage of the number of eggs thus inspected.
 - (d) Such percentage shall represent the percentage of eggs in the quantity concerned in which a defect of the type concerned occurs.
- (2) If it appears from an examination in terms of sub-regulation (1) that an egg thus examined has a particular internal defect, that egg may be broken open in order to verify the occurrence of the defect concerned.

Determination of Haugh value

- 16. The Haugh value of the white of an egg that is graded in terms of regulation 5 shall be determined as follows:
 - (a) The mass of the egg shall be determined.
 - (b) A Haugh meter or micro meter shall be set up in accordance with the manufacturer's directions for use thereof on a level glass or stainless steel surface, the operation thereof shall be tested, and if necessary, shall be calibrated.

- (c) The temperature of the egg concerned shall be increased or decreased to between 7°C and 15°C.
- (d) The egg shall be broken open carefully so that the thick white is not ruptured and the contents of the egg are carefully placed on the glass or stainless steel surface.
- (e) Adjust the reading on the scale of the Haugh Value conversion table/ chart to reflect the mass, as determined in paragraph (a), of the egg concerned.
- (f) The Haugh meter or micro meter shall be moved into position over the broken egg so that the measuring rod thereof, when lowered, will touch the white approximately 10 mm away from the edge of the yolk.
- (g) The measuring rod of the Haugh meter or micro meter shall be lowered carefully until the lower end thereof just touches the white, and the reading on the meter shall then be taken.
- (h) Such reading shall represent the Haugh Value of the white of the egg concerned. If a micro meter is used, the Haugh Value is read off from the Haugh Value conversion table/ chart.

PART V

VALIDITY PERIOD FOR PRODUCTION METHOD REQUIREMENTS

17. The minimum production method requirements prescribed in these regulations for "barn eggs", "cage eggs" and "free range eggs" shall only be applicable until the regulations for management control systems addressing these production methods have been promulgated.

PART VI OFFENCES AND PENALTIES

Offences and penalties

18. Any person who contravenes or fails to comply with a provision of these regulations, shall be guilty of an offence and on conviction be liable to a fine or to imprisonment in accordance with section 11 of the Act.

ANNEXURE TABLE 1 LETTER SIZES OF INDICATIONS

Nature of indication	Minimum vertical height of smallest letter or figure (mm)	
	Container	Outer container
1	2	3
1. Indication of size and grade designation [Reg. 8(1)(a), 10]	5	5
2. The expressions "Eggs" [Reg. 8(1)(b)]	5	5
3. The optional expressions "cage", "barn", and "free range" [Reg. 8(1)(b)(i)]	5	5
4. The expression "pasteurized" [Reg. 8(1)(c)]	5	5
5. Indication of packer [Reg. 8(1)(d), 11]	1	5
6. Name of the species [Reg. 8(1)(e)]	5	5
7. Indication of best before date [Reg. 8(1)(f)]	1	1
8. The expression "oiled" [Reg. 8(1)(g)]	3	5
9. Country of origin [Reg. 8(8)]	1	5
10. Indication of the marking requirements in the case of sale in loose quantities [Reg. 12]	10	
11. Indication that the flock has been confined [Reg. 8(2)(c)]	10	0

TABLE 2
SIZES AND STANDARDS FOR SIZES

Size designation	Mass per egg
1	2
Super Jumbo	More than 72 g
Jumbo	More than 66 g
Extra large	More than 59 g
Large	More than 51 g
Medium	More than 43 g
Small	More than 33 g
Mixed sizes	More than 33 g

TABLE 3 STANDARDS FOR GRADES OF EGGS

	Quality factor	Grade 1	Grade 2	Grade 3	
	1	2	3	4	
1.	Soundness of shell	No cracks	No cracks	No cracks	
2.	Cleanliness of shell	Clean	Clean	Reasonably clean	
3.	Shape of shell	Regular	Regular	Regular	
4.	Texture of shell	Strong and smooth	Strong and smooth	Strong and smooth	
5.	Blood spots, blood rings and diffused blood in egg	None	None	None	
6.	Meat spots in egg	None	None	None	
7.	Mould	None	None	None	
8.	Poultry faeces	None	None	None	
9.	Abnormal or unacceptable odours	None	None	None	
10.	Yolk	(i) Normally positioned	(i) Normally positioned	*	
		(ii) Not spotted, flat or enlarged	(ii) Not spotted, flat or enlarged	*	
		(iii) Characteristic colour	(iii) Characteristic colour	*	
11.	Egg white	(i) Clear: Provided that pasteurised egg whites are slightly opaque	(i) Clear: Provided that pasteurised egg whites are slightly opaque	(i) Clear: Provided that pasteurised egg whites are slightly opaque	
		(ii) Haugh value at least 55 units: Provided that for pasteurised eggs minimum Haugh value is 65	(ii) Haugh value at least 35 units: Provided that for pasteurised eggs minimum Haugh value is 65	*	
12.	Aircells	(i) Maximum depth 6 mm	(i) Maximum depth 9 mm	*	
		(ii) Shall not move more than 6 mm in any direction when the egg is tilted from the vertical position	(ii) Shall not move more than 12 mm in any direction when the egg is tilted from the vertical position	*	
		(iii) No swimmers	(iii) No swimmers	(iii) No swimmers	
		(iv) No bubbly air cells	(iv) No bubbly air cells	(iv) No bubbly air cells	

Quality factor	Grade 1	Grade 2	Grade 3
1	2	3	4
13. Decay or germ developments	None	None	None

^{*} Not specified

TABLE 4

EXTENT TO WHICH CERTAIN DEFECTS MAY OCCUR IN EGGS

Nature of defect per consignment	Grade 1	Grade 2	Grade 3
1	2	3	4
Eggs with cracks that result in leakage	1,7%	3,4%	6,7%
Eggs with cracks that do not result in leakages	6,7%	8,4%	*
3 (a) Eggs with mould, adhering to shells.	0%	3,4%	16,7%
(b) Eggs with faeces.	1,7%	3,4%	16,7%
(c) Eggs with nesting material adhering to shells and foreign matter.	3,4%	6,7%	*
4. Eggs with discolouration or stains on shells	6,7%	8,4%	*
5. Eggs with blood spots, blood rings, diffused blood, meat spots of -			
(a) light intensity: up to and including 1 mm in diameter; and	3,4%	6,7%	*
(b) strong intensity: up to and including 2 mm in diameter.	1,7%	3,4%	*
6. Eggs with whites of which the Haugh Value is not more than five units lower than the applicable minimum specified in Table 3	10%	33,4%	*
7. Eggs with air cells that -			
(a) exceed the permissible maximum depth or limit of movement; or	3.4%	10%	*
(b) are swimmers or bubbly air cells.	3.4%	6.7%	10%
B. Irregular shape of the shell	6,7%	*	*

Nature of defect per consignment	Grade 1	Grade 2	Grade 3
1	2	3	4
9. Deviations in mass:			
(a) All sizes of eggs of which the mass deviates not more than 2 g from the minimum mass prescribed in Table 2.	3,4%	6,7%	6,7%
(b) Small eggs of which the mass deviates by more than 2 g below the minimum mass of 33 g prescribed in Table 2.	3,4%	6,7%	*
Eggs packed with their broad ends down and pointed ends up	6,7%	10%	*
11. Eggs with defects in:			
(a) Yolk colour.	6,7%	10%	*
(b) Yolk normal position.	6,7%	10%	*
(c) Yolk not spotted, flat or enlarged.	6,7%	10%	*
12. Total number of eggs with defects, excluding defects mentioned under item 6	10%	20%	*

^{*} Not specified

NUMBER OF EGGS IN ACCORDANCE WITH THE MAXIMUM PERCENTAGE PERMISSIBLE DEVIATION

TABLE 5

Maximum percentage (%) permissible deviation of eggs in a batch of 60 eggs and more	Number of eggs	Maximum percentage (%) permissible deviation of eggs in a batch of less than 60 eggs	Number of eggs
1,7%	1	1,7%	0
3,4%	2	3,4%	1
5,0 %	3	5,0 %	1
6,7%	4	6,7%	2
8,4%	5	8,4%	2
10,0%	6	10,0%	3
13,4%	8	13,4%	4
16,7%	10	16,7%	5
20%	12	20%	6
33,4%	20	33,4%	10
41,7%	25	41,7%	12
50,0%	30	50,0%	15