

DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES

STD. No. A-4

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

STANDARDS AND REQUIREMENTS REGARDING THE EXPORT OF EGGS

The Executive Officer: Agricultural Product Standards has stipulated under section 4(3)(a)(ii) of the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990), as amended, these standards regarding the quality of eggs and the requirements regarding the packing, marking and labelling of eggs.

STD. No. A-4

STANDARDS AND REQUIREMENTS REGARDING CONTROL OF THE
EXPORT OF EGGS AS STIPULATED BY GOVERNMENT NOTICE
NO. R. 1983 OF 23 AUGUST 1991

Promulgation

Notice No. 82 of 8 February 2013

DIRECTORATE FOOD SAFETY AND QUALITY ASSURANCE

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Definitions

1. In these standards and requirements any word or expression to which a meaning has been assigned in the Act, shall have a corresponding meaning and —

"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;

"barn eggs" means eggs which are laid by poultry that are not caged but are confined to a shed indoors;

"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 illuminated with a candling device;

"blood spot" means a concentration of blood or oxidised blood;

"bubbly air cell" means an air cell with small bubbles floating in the immediate vicinity of such an air cell;

"clean" with regard to the cleanliness of the egg shell, means that such a shell 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 owner, which is delivered at any one time under cover of the same consignment note, delivery note or receipt note, or is delivered by the same vehicle, or if such a quantity is sub-sorted into different production groups, grades, or size groups or each quantity of each of the different production groups, grades, or size groups;

"container" means the immediate container in which eggs are packed for sale;

"crack" means a fracture of the shell, irrespective of whether the shell membrane is intact or not;

"depth" with regard to an air cell, means the greatest distance between the outer surface area of the egg shell and the lower meniscus of the air cell, measured vertically with such meniscus;

"diffused blood" means blood that is diffused through the white of an egg and egg yolk;

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

"foreign matter" means, feathers or parts of feathers, egg yolk, egg white, poultry feedstuff, soil or any other material or substance that are not normally present in or on eggs, excluding ink of a food grade which was applied to the shell of the egg for a specific purpose;

"free range eggs" means eggs which are laid by poultry which have daily access to an outdoor range area accessible through openings in any side of the barn;

"good colour" with regard to the yolk of an egg, means any colour in a colour range varying from light yellow to a decided orange colour, and does not include shades of green or brown or other off-colours;

"haugh value" means a value as determined in accordance with item 15 that indicates the firmness of the white;

"inspector" means the Executive Officer or an officer under his or her control, or an Assignee or an employee of an Assignee;

"meat spot" means a severed ovary or other foreign matter that is not a normal constituent of the yolk or egg white and which 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, provided that an outer container with 60 or less eggs, is seen as a container;

"packer" means a person dealing in the course of trade with eggs by packing it for sale, and also a person on behalf of whom such product is packed for sale;

"pasteurised eggs" means eggs subjected to heat or other treatments to reduce or destroy harmful viable micro-organisms;

"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 shell of an egg, means that such shell has no cracks, soft spots or large air pores;

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"swimmer" means an air cell that does not maintain a normal 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 trade mark as defined in the Trade Marks Act, 1993 (Act 194 of 1993); and

"tremulous" with regard to an air cell, means a condition where an air cell penetrates between the inner and outer shell membranes when such egg is rotated.

Scope

2. (a) These standards and requirements shall relate to eggs for human consumption in respect of which an approval for the export thereof is required in terms of section 4 of the Act.

(b) These standards and requirements are in addition to and not in substitution of any other relevant legislation to the product concerned.

Requirements for approval

3. (1) An approval referred to in section 4 of the Act may be issued in respect of a consignment of eggs if —

- (a) the consignment concerned complies with the classification of eggs as set out in item 4;
- (b) the consignment concerned be graded as set out in item 5;
- (c) the consignment concerned complies with the standards for eggs as set out in item 6;
- (d) the containers in which such product is packed comply with the requirements as set out in item 7;
- (e) the eggs are packed in accordance to the packing requirements as set out in item 8;
- (f) the containers in which the consignment concerned have been packed, are marked in accordance with the marking requirements set out in items 9 to 11;
- (g) a sample for inspection is drawn from the consignment concerned according to the requirements set out in item 12 and 13;

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- (h) the working samples are inspected according to the methods of an inspection as set out in items 14 to 17;
- (i) the consignment concerned has been presented for inspection in accordance with the requirements of the Regulations Regarding Control of the Export of Eggs;
- (j) an inspector has, after an inspection in terms of the said regulations, found that the provisions of these standards and requirements have been complied with in respect of the consignment concerned; and
- (k) the eggs do not contain prohibited articles in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972).

(2) If an inspector has, after an inspection in terms of the said regulations found that any of the provisions of these standards and requirements have not been complied with in respect of the consignment concerned, the consignment shall be rejected for export if it does not comply with the requirements as set out in subitem (1).

(3) The Executive Officer may grant written exemption, entirely or partially, to any person on such conditions as he or she deems necessary, from the provisions of subitem (1): Provided —

- (a) that if the requirement of an importing country is stricter or lower than the requirements of the mentioned Act, the requirement of the importing country shall be complied with; and
- (b) the exporter shall, if requested as such, furnish the Executive Officer with an official legislation or proof of the requirements of the importing country.

QUALITY STANDARDS

Size groups of eggs

4. (1) A consignment of eggs shall be classified into the following sizes:
- (a) Super Jumbo: Eggs with a mass of at least 72 g
 - (b) Jumbo: Eggs with a mass of at least 66 g.
 - (c) Extra large: Eggs with a mass of at least 59 g.
 - (d) Large: Eggs with a mass of at least 51 g.

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- (e) Medium: Eggs with a mass of at least 43 g.
- (f) Small: Eggs with a mass of at least 33 g.
- (g) Mixed sizes: Eggs with a mass of at least 33 g.

(2) A maximum permissible deviation of not more than 2,0 g lower than the indicated minimum mass, per egg shall be allowed for sizes as set out in subitem 4 (1): Provided that the deviation will be limited to 3.3% as stated in Table 1.

Grades

5. There is one grade of eggs intended for export, namely Grade 1.

Standards for eggs

6. (1) A consignment of eggs shall be graded as Grade 1 if —
- (a) the eggs are free from cracks;
 - (b) the eggs are clean;
 - (c) the eggs are free from, blood spots, meat spots, blood rings, diffused blood, mould, absorbed odours, flavours and foreign matter;
 - (d) the consignment has regularly formed strong shells;
 - (e) the egg yolks shall be normally positioned, not spotted, flat or enlarged and with characteristic colour;
 - (f) the egg whites are clear and the thick white part of the eggs are reasonably firm with a Haugh value of at least 55 units;
 - (g) the eggs have air cells of depth of not more than 6 mm;
 - (h) the eggs have air cells of which with the depth is not more than 6 mm: Provided that the air cell may be slightly tremulous and may not move more than 4 mm in any direction when the egg is moved out of the vertical position: Provided further that this limit may, with the approval of the Executive Officer, be exceeded in accordance with the requirements of the country to which the eggs concerned are exported; and
 - (i) the eggs are free from swimmers and bubbly air cells.

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(2) A consignment intended for export shall not exceed the maximum permissible deviations as set out in Table 1 of the Annexure.

(3) Subject to the provision of subitems (1) and (2) an exporter may request an inspector, after an inspection, to certify as correct the specifications on the product specification document accompanying the consignment.

REQUIREMENTS FOR CONTAINERS

General

7. (1) The containers in which eggs are exported shall —
- (a) be manufactured from a material that will protect the contents thereof from contamination and that will not impart any undesirable flavour or odour to the contents thereof;
 - (b) be dry and clean;
 - (c) be suitable and strong enough not to tear or break during the packing, normal handling and transport practises of the eggs;
 - (d) not absorb an excessive amount of moisture during cooling;
 - (e) be strong and intact;
 - (f) be free from any foreign matter;
 - (g) be closed properly in a manner allowed by the nature thereof; and
- (2) If the container containing eggs is packed in outer containers, such outer containers shall be clean, neat and intact and shall not transmit any harmful substance or any substance that may be injurious to human health to the contents thereof.

PACKING REQUIREMENTS

General

8. (1) Each container and outer container in which eggs are packed, shall be packed to the full capacity of the packing material used.
- (2) Eggs shall be packed in a container with the broad ends thereof facing downwards.

MARKING REQUIREMENTS

General

9. (1) Each container and outer container containing eggs shall be clearly, legibly and indelibly marked or labelled, in at least English: Provided that where a foreign language is used, translation must be submitted to PPECB on inspection, on a contrasting background with the following particulars:

- (a) An indication of the size and grade designation on the front or top panel of which the vertical height of the letters and figures shall be at least 5mm: Provided that —
 - (i) eggs of different sizes packed in the same container be marked with the expression "mixed sizes" and;
 - (ii) the letter size of the grade designation shall not be less than any other letter or figure, except a letter or figure used in the trade mark or the expression as set out in subitem (b).
- (b) A true description of the contents thereof on the front or top panel which shall include the expression "Eggs" or "Fragile Eggs" or "Free Range Eggs" or "Barn Eggs";
- (c) The expression "Pasteurized Eggs" shall appear on the front or top panel if eggs have been pasteurized;
- (d) An indication of the number of eggs as required in terms of the Trade Metrology Act, 1973 (Act 77 of 1973);
- (e) An indication of the particulars of the packer on any panel as set out in item 10;
- (f) A date indication: Provided that —
 - (i) The best before date shall be marked on each container and outer container of which the eggs are packed; the date shall be preceded by the expressions "Best Before"; abbreviation "BB" for "Best Before" shall be permitted. The date shall be indicated in the order, "Day-Month-Year"; and
 - (ii) the minimum vertical height of figures shall be at least 5 mm.

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- (g) In the case of eggs obtained from poultry other than *Gallus Domesticus* an indication of the poultry from which the eggs were obtained shall be marked on the front or top panel;
 - (h) The country of origin: Provided that no abbreviations shall be used.
 - (i) Other markings or nutrition related claims shall in addition to the above-mentioned requirements also comply with the regulations published under the Foodstuffs, Cosmetics and Disinfectant Act, 1972 (Act No. 54 of 1972).
- (2) In the case of loose trays packed in an outer container, markings may only be on the outer container.

Indication of the packer

10. (1) The name of the packer of eggs marked on each container and outer container shall consist of the initials, surname and number, trade mark or trade name.

(2) The address of the packer which is marked on a container or outer container 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 and city or magisterial district in which that premises is situated: Provided that in the case where it is not possible to use the physical address a postal address may be used together with the telephone number; and
 - (b) be marked on such container or outer container following the particulars referred to in subitem (1);
- (3) If the eggs have been packed on behalf of a person —
- (a) the initials and surname or trade name of the person on whose behalf the eggs have been packed shall be substituted for the particulars referred to in subitem (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 and city or magisterial district in which that premises is situated, or the postal address together with the telephone number,

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shall be substituted for the particulars referred to in paragraph (a) of subitem (2);

- (c) such address shall be marked on such 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, on request, be able to inform the Executive Officer who the supplier of the eggs are.

(4) An indication of the packer shall be clearly, legibly and indelibly marked or labelled on a contrasting background of which the vertical height shall be: Provided that —

- (a) in the case of an outer container containing more than 60 eggs at least 5 mm; and
- (b) in the case of a container at least 2 mm.

Restricted particulars

11. (1) The words “natural”, “super”, “extra”, except when indicating the size of the eggs, or any other word, mark, illustration, depiction, or any other method of expression that constitutes a misrepresentation or which directly or by implication creates or may create a misleading impression regarding the quality, nature, size or grade of that eggs shall not appear on a container or outer container.

(2) (a) Eggs shall only be marked with the expression “free range” if such eggs were obtained from poultry which had continuous daytime access to open air runs for at least 6 hours per day: Provided that —

- (i) open air runs be mainly covered with vegetation where poultry is able to scratch and dustbath; and
 - (ii) open air runs be big enough to allow ample running space.
- (b) Eggs shall only be marked with the expression “barn eggs” if, such eggs were obtained from poultry which are free to move around indoors: Provided that —
- (i) birds will have enough space to roam freely inside and not let outside; and
 - (ii) ample deep litter areas, perches, platforms and nest boxes be provided.

- (c) Eggs shall only be marked with the expression "pasteurized" if such eggs have been pasteurised; and
 - (i) the egg whites are slightly opaque and the thick white part of the eggs are reasonably firm with a Haugh Value of at least 65 units and maintain a Haugh Value of more than 60 units after 56 days;
- (d) The word "fresh" shall not be restricted provided that the eggs marked as such shall at any stage during the shelf life comply with the Haugh Value as prescribed in Item 6(1)(f); Provided that pasteurised eggs shall not be labeled as "fresh" and the word "fresh" shall not be labeled with letter sizes above 5 mm; and
- (e) No trade mark or brand name which may possibly, directly or by implication, be misleading or create a false impression of the contents of a container containing eggs, shall appear on such a container.

SAMPLING PROCEDURES

Obtaining a representative working sample

12. (1) An inspector shall for the purpose of these standards and requirements take a random sample of eggs in the following manner and shall be satisfied that the sample so taken is representative of the consignment concerned:

- (a) Select at random 2 % of the number of outer containers in the consignment and select at random a working sample of a maximum of 25 % eggs from each outer container and determine the total deviation.

Deviation sample

13. If an inspector should notice during the process of drawing the random samples or during the inspection that any of the quantities of eggs taken from any container are obviously inferior to or differ from the samples abstracted from the remainder of the containers, he or she shall base the inspection result only on the samples abstracted from the containers of the deviating portion and further samples required for inspection shall be drawn from the deviating portion.

METHODS OF INSPECTION

Determination of defects

14. (1) The defects as set out in item 6 shall be determined as follows:
- (a) Obtain a representative working sample as set out in item 12.
 - (b) Examine each egg in the working sample visually in terms of external defects and where applicable by means of a suitable candling device with which internal defects can be observed;
 - (c) Determine the number of defects separately.
 - (d) Express the number of eggs determined as a percentage of the working sample.
 - (e) Such percentage shall represent the percentage of eggs in the quantity concerned in which a defect of the type occurs.
- (2) If it appears from an inspection as set out in subitem (1) that an egg 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

15. (1) The Haugh value of the white of an egg shall be determined as follows:
- (a) Determine the mass of the egg.
 - (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, it 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 out 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 meter or micro meter to the mass of the specific egg as determined in paragraph (a).

- (f) The Haugh meter or micro meter shall be moved into position over the broken-open egg so that the measuring rod thereof when lowered will touch the egg 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 egg white, and the reading on the meter shall then be taken.
- (h) Such reading represents 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.

Determination of depth of air cell

16. The depth of the air cell of an egg that is graded as set out in item 6 shall be determined as follows:

- (a) 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.
- (b) The value on the calibrated measuring plate shall be read off opposite the lower meniscus of the air cell.
- (c) Such reading shall represent the depth of the air cell of the egg concerned.

Repetition of determinations

17. (1) A determination in terms of these standards and requirements may be repeated at any time with a further sample of the same quantity of eggs.

(2) If the result of such repetition differs substantially from the result of the original determinations, the determination concerned shall be repeated on a third working sample of the quantity concerned, where after the average of the results of the two determinations with the smallest difference shall be deemed to be the result of the determination concerned.

ANNEXURE

TABLE 1
MAXIMUM PERMISSIBLE DEVIATION

Nature of deviation	Maximum percentage of permissible deviation by number of eggs in consignment allowed
(a) Eggs with cracks that result in leakages	1,6
(b) Eggs with cracks that do not result in leakages	6,6
(c) Air cells with excessive depth, bubbly air cells and swimmers	5,0
(d) (i) Eggs with faeces and mould adhering to shells	1,6
(d) (ii) Eggs with nesting materials adhering to Shells	1,6
(e) Eggs with discolourations or stains on shells	6,6
(f) Total number of eggs with foreign matter, nesting material, discolouration, stains or mould on shells	5,0
(g) Blood spots, blood rings, diffused blood, meat spots, mould and spotted yolks -	
(i) Light intensity : up to and including 1 mm in diameter;	3,3
(ii) Strong intensity: more than 1 mm in diameter;	1,6
(iii) deviations in (i) and (ii) collectively: Provided that spotted yolks of any intensity shall be deemed to be spotted yolks of a light intensity	3,3
(h) Eggs which are packed with their broad ends downwards in the container	6,6
(i) Deviations referred to in paragraphs (a), (b), (c), (d), (e), (f), (g) and (h) collectively: Provided that such deviations are individually within the limits specified above	10,0
(j) Eggs of which the mass deviates not more than 2 g from the indicated minimum mass	3,3

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