
GOVERNMENT NOTICES • GOEWERMENTSKENNISGEWINGS

DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES

NO. R. 63

29 JANUARY 2016

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

REGULATIONS RELATING TO THE GRADING, PACKING AND MARKING OF MAIZE PRODUCTS INTENDED FOR SALE IN THE REPUBLIC OF SOUTH AFRICA

The Minister of Agriculture, Forestry and Fisheries 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 from the date of publication; and
- (c) read together with section 3(2) of the said Act, repealed the Regulations published by Government Notice No. R 1739 of 17 September 1993, and R 31 of 25 January 2008.

SCHEDULE

Definitions

1. Unless the context otherwise indicates, any word or expression in these regulations to which a meaning has been assigned in the act shall have that meaning, and --

"address" means a physical address which includes the street or road name, number, and the name of the town, village or suburb and incase of a farm, the name or number of the farm and of the magisterial district in which it is situated;

"approved fortificant" means a fortificant as defined in terms of Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972);

"approved micro nutrients" means a micro nutrient as defined in terms of Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972);

"bag" means a bag made from suitable material;

"bulk container" means, any vehicle or container in which bulk maize product is stored or transported;

"bulk grain probe" means a double-tubed probe with multiple apertures on one side of both tubes or other similar bulk probe which is suitable for taking a sample of maize products kept in bulk, by means of probing;

"bulk probe" means a double-tube probe of suitable length with multiple apertures on the one side thereof or other similar bulk probe which is suitable for taking a sample of a maize product kept in bulk, by means of probing;

"bulk quantities" means a quantity of more than 50 kg of maize products, whether sold in containers or bulk containers;

"consignment" means a quantity of maize products of the same kind or grade which is delivered at any one time under cover of the same consignment note, delivery note or receipt note, or delivered by the same container, or which is loaded from the same bin of a grain elevator or

from a ship hold or railway truck, or if such a quantity is subdivided into different classes, each quantity of each of the different classes;

"container" means a bag or a bulk container or other suitable packing unit or container;

"enriched maize meal" means maize meal that is enriched in terms of Foodstuffs, Cosmetics and Disinfectants Act, 1971 (Act No. 54 of 1972);

"fortified maize meal" means maize meal that is fortified in terms of Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972);

"foreign matter" in relation to maize products, means any material which does not naturally form part of maize products, but excluding an approved fortificant or approved micro nutrients or permitted colourants and flavourants;

"industrial grade maize product" means a maize product other than a maize product listed in regulation 3, and which is intended for industrial processing;

"insect" means any stored product insect which is injurious to grain products, irrespective of the stage of development of the insect;

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

"maize" means the shelled seed or grain of the plant *Zea mays*;

"maize product" means a commodity derived from the processing of maize and which includes enriched, fortified and pre-cooked maize meal but excluding an industrial grade maize product;

"meal" means the product obtained by the grinding and sifting process of maize;

"permitted colourants and flavourants" means colourants and flavourants permitted under the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972);

"pre-cooked maize meal" means a maize product defined in terms of its cooking properties by the use of the word, expression, reference, particulars or indication such as, but not limited to "par-cooked, quick-cook, cooking time and instant maize product";

"retail quantities" means a quantity of 50 kg or less of maize products;

"sieve" means a utensil with a woven mesh bottom or perforated metal, constructed from a suitable rigid material used for separating material of varying granulation (grit gauze or wire)) square or round sieve (hand, rotary and automatic sieves);

"4,0 mm sieve" means a sieve with wire cloth screening bottom with apertures of 4,0 mm by 4,0 mm and a wire diameter of 1.4 mm;

"6.35 mm sieve" means a sieve with a wire cloth screening bottom with apertures of 6.35 mm by 6.35 mm and a wire diameter of or 1.8 mm;

"2,36 mm sieve" means a sieve with a wire cloth screening bottom with apertures of 2,36 mm by 2,36 mm and a wire diameter of or 1.0 mm;

"2,0 mm sieve" means a sieve with a wire cloth screening bottom with apertures of 2,0 mm by 2,0 mm and a wire diameter of 0.9 mm;

"1,4 mm sieve" means a sieve with a wire cloth screening bottom with apertures of 1,4 mm by 1,4

mm and a wire diameter of 0.71 mm;

"1,18 mm sieve" means a sieve with a wire cloth screening bottom with apertures of 1,18 mm by 1,18 mm and a wire diameter of 0.63 mm;

"1,0 mm sieve" means a sieve with a wire cloth screening bottom with apertures of 1,0 mm by 1,0 mm and a wire diameter of 0.56 mm;

"0,850 mm sieve" means a sieve with a wire cloth screening bottom with apertures of 0,850 mm by 0,850 mm and a wire diameter of 0.50 mm;

"0,3 mm sieve" means a sieve with a wire cloth screening bottom with apertures of 0,3 mm by 0,3 mm and a wire diameter of 0.20 mm;

"0,5 mm sieve" means a sieve with a wire cloth screening bottom with apertures of 0,5 mm by 0,5 mm and a wire diameter of 0.315 mm;

"the Act" means the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990); and

"unspecified maize product" means a maize product which in form or texture is similar to any of the mentioned products but which does not comply with the requirements of any of the grades as prescribed in this regulation.

Restrictions on the sale of maize products

2. (1) No person shall sell a consignment of maize products in the Republic of South Africa --
- (a) unless the maize products are sold according to the grades referred to in regulation 3;
 - (b) unless the maize products comply with the specifications regarding quality referred to in regulation 4;
 - (c) unless such maize products are packed in a container and in the manner prescribed in regulation 5; and
 - (d) unless such maize products are marked with the particulars and in the manner prescribed in regulation 6.
- (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 subregulation (1).

QUALITY STANDARDS

Grades

3. There are 19 grades of maize products for sale in the Republic of South Africa, namely:
- (a) Samp;
 - (b) Maize rice;
 - (c) Maize grits; (brewing, snacks and cereal grits)
 - (d) Maize flour;
 - (e) Super fine maize meal;
 - (f) Super maize meal;
 - (g) Special maize meal;

- (h) Sifted maize meal;
- (i) Unsifted maize meal;
- (j) No. 1 straightrun maize;
- (k) No. 2 straightrun maize;
- (l) Sifted crushed maize;
- (m) Unsifted crushed maize;
- (n) Fine crushed maize;
- (o) Maize germ meal;
- (p) Fine maize bran;
- (q) Coarse maize bran; and
- (r) Unspecified maize product.

Specifications

4. (1) All grades of maize products mentioned in regulation 3 shall --
- (a) be free from a mouldy, sour or rancid smell or taste;
 - (b) be free from wet and caked patches;
 - (c) have a moisture content not exceeding **14** percent with the exception of Maize Germ Meal, Fine and Coarse Maize Bran;
 - (d) in the case of Maize Bran and Maize Germ have a moisture content not exceeding 18 percent;
 - (e) be free from foreign matter;
 - (f) be free from insects; and
 - (g) not exceed the permissible deviations regarding toxins, chemical or other substance that renders it unfit for human or animal consumption as prescribed in terms of Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972).
- (2) The grades super maize meal; special maize meal; Super fine maize meal; sifted maize meal and unsifted maize meal shall be fortified in terms of Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972).
- (3) Subject to the provisions of subregulation (1) and (2), all grades of maize products mentioned in regulation 3, shall also comply with the specifications for fibre contents, fat content and fineness or granulation as set out in the Table 1 of the Annexure.

PACKING AND MARKING REQUIREMENTS

Packing requirements

5. (a) Maize products of different grades shall not be packed in the same container.
- (b) Bags shall be filled in accordance with the mass depicted and properly closed.

Marking requirements

6. (1) Each container in which a maize product is packed shall be marked in clearly legible symbols, letters and figures with --

- (a) the name and physical address of the manufacturer, packer, processor, distributor and/or importer of the maize product concerned;
- (b) the grade of the maize product as mentioned in regulation 3; and
- (c) the net mass of the maize product concerned in that container as prescribed in terms of the Trade Metrology Act 1973 (Act No. 77 of 1973).

(2) Each container in which a fortified maize product is packed, shall contain the particulars in terms of Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972).

(3) The provisions of this sub-regulation (1 and 2) shall not apply with regard to a maize product which --

- (a) is sold in bulk; or
- (b) is repacked in quantities of less than 50 kg, where the mass concerned is measured in the presence of the buyer of that maize product or his agent, and is taken from a container which is marked as contemplated in subregulation (1).

Prohibited particulars

7. No wording, illustration or other device of expression which constitutes a misrepresentation or which directly or by implication can create a misleading impression of the contents shall appear on the container containing any grade of maize products or on a label affixed thereto or which is displayed therewith.

SAMPLING**Obtaining a sample**

8. (1) An inspector shall for the purpose of the application of these regulations, take random sample of maize product in the following manner and shall satisfy himself/herself that the samples so drawn are the representative of the consignment concerned.

(a) In the case of maize products packed in retail quantities, samples shall be taken in accordance with the table below:

SAMPLING FREQUENCY

| 1 Number of containers comprising quantity of maize products | 2 Minimum number of containers to be selected at random |
|---|--|
| < 10 | 2 |
| 10-50 | 4 |
| > 50 | 6 |

- (b) In the case of a consignment in bulk quantities --

samples of maize products which are presented for inspection in bulk containers, excluding grain elevators, shall be drawn at six different places with a bulk probe in such a manner that the samples taken will be representative of the contents of the bulk container. Samples may also be taken with a suitable container at regular intervals while a bulk container is being emptied.

- (2) The collective sample obtained in subregulation (1)(a) or (b) shall --

- (a) Have a total mass of at least 10 kg; and
(b) Be thoroughly mixed.

(3) Samples drawn as prescribed in subregulation (1) shall first be examined for deviations in quality standards as set out in regulation 4, which can be determined by feeling, smelling and visual inspection and shall subsequently be subjected to further examination. A sample taken in terms of these regulations is considered to be representative of the consignment from which it was taken.

(4) If an inspector should notice during the course of obtaining the representative samples that any of the quantities of maize products drawn from any bag or portion of a bulk container are obviously inferior to, or differ from, that drawn from the remainder of the bags or from the other parts of the bulk container, she/he shall draw samples only out of such bags or portion of the bulk container from which the inferior or differing maize products have been taken, place them in a collecting tray and mix them thoroughly. Samples drawn in this manner shall, in the application of this regulation be considered as deviating samples.

(5) Any bags or containers of which the contents do not comply in any respect with the requirements of this regulation or bags and containers from which deviating samples have been taken, shall be marked with a distinguishing mark.

Obtaining of a working sample

9. (1) A working sample shall be obtained by dividing the representative or deviating sample of the consignment according to ICC (International Association for Cereal Science and Technology) 101/1 (approved 1982) method.

Determination of Fineness or Granulation

10. The particle size of maize products shall be determined by any suitable sieving method in accordance with the prescribed apertures and diameter of the sieve as specified in the table below.

Table 2: Sieve Specifications

| DIMENSION OF SIEVE | SIZE OF APERTURE | DIAMETER OF WIRE |
|--------------------|-----------------------|------------------|
| 1 | 2 | 3 |
| 0.3 mm | 0.30mm by 0.30mm | 0.20mm |
| 0.850 mm | 0.85 0 mm by 0.850 mm | 0.50mm |
| 0.5 mm | 0.50mm by 0.50mm | 0.315mm |
| 1.0 mm | 1.0mm by 1.0mm | 0.56mm |
| 1.18 mm | 1.18mm by 1.18mm | 0.63mm |
| 1.4 mm | 1.4mm by 1.4mm | 0.71mm |
| 2.0 mm | 2.0mm by 2.0mm | 0.9mm |
| 2.36 mm | 2.36mm by 2.36mm | 1.0mm |
| 4.0 mm | 4.0mm by 4.0mm | 1.4mm |
| 6.35 mm | 6.35mm by 6.35mm | 1.8mm |

Determination of the percentage of whole maize kernels

11. The percentage of whole maize kernels shall be determined as follows:

- (a) Obtain a working sample of at least 50 g from either a representative or a deviating sample, as the case may be.
- (b) Sort out the working sample by hand in such a manner that the whole maize kernels are retained.
- (c) Determine the mass of whole kernels so obtained and express it as a percentage of the mass of the working sample.

Determination of the moisture content

12. The moisture content of a consignment of maize products may be determined according to any suitable method: Provided that the results thus obtained are in accordance with the maximum permissible deviation for a class 1 moisture meter as detailed in ISO 7700/1 based on the results of the applicable oven dried method (AACC International Approved Method 44-15A).

Determination of Fibre Content

13. (1) The fibre content of a consignment of maize products may be determined by any suitable method: Provided that the results thus obtained are in accordance with (0.2 %) with the results obtained by means of crude fibre method (AACC International Approved 32-10.01).

Determination of Fat content

14. The fat content of a maize product shall be determined by any suitable method: Provided that the results thus obtained are in accordance with (0.3%) with the results obtained by means of the Petroleum Ether Soxhlet Extraction method (AACC International Approved 30-25.01).

Offences and Penalties

15. Any person who contravenes or fails to comply with the provisions of these regulations shall be guilty of an offence and upon conviction be liable to a fine or imprisonment for a period not exceeding two years or both such fine and imprisonment.

Other Legislation

16. The provisions of these regulations shall be in addition to and not in substitution for regulations published under the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972) and Trade Metrology Act 1973 (Act No. 77 of 1973).

ANNEXURE

TABLE 1.

COMPOSITION OF MAIZE PRODUCTS

| | Class of Maize Products | Fat content by mass (%) | | Fibre content by mass (%) | | Fineness or Granulation by mass |
|---|-------------------------|-------------------------|---------|---------------------------|---------|--|
| | | Minimum | Maximum | Minimum | Maximum | |
| A | Samp | * | 1.5 | * | 0.8 | Not more than 5% shall be whole grain, and not more than 5% shall pass through a 2.36 mm sieve. |
| B | Maize Rice | * | 1.5 | * | 0.8 | At least 90% shall pass through a 4.0 mm sieve, and not more than 5% shall pass through a 1.18 mm sieve. |
| C | Maize Grits | | | | | |
| | • Snack | * | 1.5 | * | 0.8 | At least 90% shall pass through a 2.0 mm sieve and not more than 5% shall pass through a 0.850 mm sieve. |
| | • Brewing | * | 1.5 | * | 0.8 | At least 90% shall pass through a 4.0 mm sieve and not more than 5% shall pass through a 0.50 mm sieve. |
| | • cereal | * | 1.5 | * | 0.8 | Not more than 5% shall be whole grain and at least 90% shall pass through a 6.35 mm sieve and not more than 5% shall pass through a 0.50 mm sieve. |
| D | Maize Flour | * | <2.0 | * | 0.8 | At least 90% shall pass through a 0.3 mm sieve. |
| E | Super Fine Maize Meal | * | <2.0 | * | 0.8 | At least 80% shall pass through a 0.3 mm sieve. |
| F | Super Maize Meal | * | <2.0 | * | 0.8 | At least 90% shall pass through a 1.4 mm sieve, and less than 90% shall pass through a 0.3 mm sieve. |
| G | Special Maize Meal | 2.0 | <3.0 | * | 1.2 | At least 90% shall pass through a 1.4 mm sieve. |
| H | Sifted Maize meal | 3.0 | <4.0 | * | 1.2 | At least 90% shall pass through a 1.4 mm sieve. |
| I | Unsifted Maize Meal | 3.5 | <4.5 | >1.2 | 2.5 | At least 90% shall pass through a 1.4 mm sieve. |

| | Class of Maize Products | Fat content by mass (%) | | Fibre content by mass (%) | | Fineness by mass |
|---|-----------------------------|-------------------------|---------|---------------------------|---------|---|
| | | Minimum | Maximum | Minimum | Maximum | |
| J | No.1 Straightrun Maize Meal | 3.7 | * | 18 | 2.5 | At least 90% shall pass through a 2.36 mm sieve. |
| K | No.2 Straightrun Maize Meal | 3.7 | * | >2.5 | 6.5 | At least 90% shall pass through a 2.36 mm sieve. |
| L | Sifted crushed Maize | 1.5 | * | * | 2.0 | Not more than 5% shall be whole grain, and not more than 5% shall pass through a 1.18 mm sieve. |
| M | Unsifted crushed Maize | 3.2 | * | * | 2.5 | Not more than 5% shall be whole grain, and not more than 40% shall pass through a 2.36 mm sieve. |
| N | Fine crushed Maize | 1.5 | * | * | 2.0 | At least 90% shall pass through a 2.36 mm sieve, and not more than 10% shall pass through a 1.0 mm sieve. |
| O | Maize Germ Meal | 10.0 | * | * | * | * |
| P | Fine Maize Bran | * | * | * | * | At least 90% shall pass through a 2.00 mm sieve, and not more than 50% shall pass through a 1.4 mm sieve. |
| Q | Coarse Maize Bran | * | * | * | * | * |
| R | Unspecified Maize Product | * | * | * | * | * |