

# GOVERNMENT NOTICES

## GOEWERMENSKENNISGEWINGS

### DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES

### DEPARTEMENT VAN LANDBOU, BOSBOU EN VISSERYE

No. R. 1184

17 December 2010

#### DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES

##### AGRICULTURAL PRODUCT STANDARDS ACT, 1990 (ACT NO. 119 OF 1990)

##### REGULATIONS RELATING TO THE GRADING, PACKING AND MARKING OF DURUM WHEAT INTENDED FOR SALE IN THE REPUBLIC OF SOUTH AFRICA

The Minister of Agriculture, Forestry and Fisheries acting under section 15 of the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990), has

- (a) made the regulations in the Schedule;
- (b) determined that the said regulations shall come into operations on the date of publication; and
- (c) repealed the regulations published in Government Notice No's R. 905 of 10 July 1998 as amended by R.1421 of 6 November 1998, R.876 of 14 September 2001, R. 979 of 19 July 2002, and R.1210 of 29 August 2003.

#### 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;

**"amber glossy and flinty kernels"** means all kernels of durum wheat of which the endosperm is not white and mealy, or partly white and mealy and which do have a glossy and flinty appearance;

**"animal rests"** means dead rodents, dead birds and dung;

**"bag"** means a bag manufactured from - -

- (a) jute or phormium or a mixture of jute and phormium; or
- (b) polypropylene that complies with SABS specification CKS632;

**"bulk container"** means any vehicle or container in which bulk wheat is stored or transported;

**"consignment"** means --

- (a) a quantity of wheat of the same class, which belongs to the same owner, delivered at any one time under cover of the same consignment note, delivery note or receipt note, or delivered by the same vehicle or bulk container, or loaded from the same bin of a grain elevator or from a ship's hold; or
- (b) in the case where a quantity referred to in paragraph (a), is subdivided into different grades, each such quantity of each of the different grades;

**"container"** means a bag or bulk container;

**"cultivar list"** means the list of cultivars determined from time to time by the Executive Officer: Agricultural Product Standards and which is obtainable from the Executive Officer: Agricultural Product Standards, Private Bag X258, Pretoria, 0001;

**"damaged wheat"** means wheat --

- (a) which have been damaged by insects;

- (b) which have been distinctly discoloured (orange-brown, dark brown or black) by external heat or as a result of heating caused by internal fermentation in wheat with an excessive moisture content, excluding wheat kernels in respect of which the discolouration is confined to the germ end;
- (c) which are immature and have a distinctly green colour; and
- (d) in which germination has proceeded to such an extent that the skin covering the embryo has been broken or the developing sprouts and/or rootlets are clearly visible;

**"ergot sclerotia"** means the sclerotia of the fungus *Claviceps purpurea*; and **"ergot"** has a corresponding meaning;

**"falling number"** means the time in seconds according to Hagberg-Perten as a measure of the degree of Alpha-Amylase activity in grain and flour;

**"field fungi infected wheat"** means wheat of which the kernels are visibly infected with fungi, and that -

- (a) clearly have greyish brush-ends that are discoloured as a whole; or where field fungi growth is present from the brush-ends into the crease;
- (b) have a dull, lifeless, chalky or pinkish and shrunken appearance as a result of *Fusarium* infection;

**"foreign matter"** means all material excluding wheat, other grain and un threshed ears;

**"heavily frost-damaged wheat"** means --

- (a) wheat which have been damaged by severe frost during the milk to soft dough stage and which is characterised by the kernels being fairly plump but covered entirely with small blisters extending into the crease, excluding --
  - (i) kernels in which blistering is confined to the back of the kernel; and
  - (ii) immature wrinkled kernels in which wrinkling has been caused by frost while the kernels were still immature; and
- (b) kernels which have a slightly flaked-off bran coat due to frost: Provided that evidence of frost damage is present and that the bran coat had not been rubbed off due to handling;

**"hectolitre mass"** means the mass in kilogram per hectolitre;

**"insect"** in relation to wheat, means any live insect that is injurious to stored grain irrespective of the stage of development of that insect;

**"other grain"** means the kernels or pieces of kernels of barley, oats, triticale, maize, rye and sorghum;

**"poisonous seeds"** means the seeds or bits of seeds of plant species that may in terms of the Food-stuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972) represent a hazard to human or animal health when consumed, including seeds of *Argemone mexicana*, *Convolvulus spp.*, *Crotalaria spp.*, *Datura spp.*, *Ipomoea purpurea*, *Lolium temulentum*, *Ricinus communis* or *Xanthium spp.*;

**"protein content"** means the percentage protein in wheat on a 12% moisture basis;

**"screenings"** means all material that passes through the standard sieve;

**"standard sieve"** is a slotted sieve --

- (a) with a flat bottom of metal sheet of 1,0 mm thickness with apertures 12,7 mm long and 1,8 mm wide with rounded ends. The spacing between the slots in the same row must be 2,43 mm wide and the spacing between the rows of slots must be 2,0 mm wide. The slots must be alternately orientated with a slot always opposite the solid inter segment of the next row of slots.
- (b) of which the upper surface of the sieve is smooth;
- (c) with a round frame of suitable material with an inner diameter of between 300 mm and 310 mm maximum and at least 50 mm high;
- (d) that fits onto a tray with a solid bottom and must be at least 20 mm above the bottom of the tray;

**"stinking smut infection"** means wheat that is infected with *Tilletia spp.* with the exception of wheat infected with *Tilletia indica* (karnal bunt). Wheat is considered stinking smut infected if one or more of the following characteristics are present:

- (a) has an unmistakable stinking smut odour; or
- (b) contains wheat kernels that are smeared with stinking smut; or
- (c) contains more than four stinking smut balls (or pieces of balls equal to four stinking smut balls) per 100 g of wheat;

**"storage fungi infected wheat"** means wheat that are visibly infected with fungi, and that show -

- (a) blue, green, blackish or yellow fungal growth anywhere on the kernel; or
- (b) visible mould beneath the bran;

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

**"un threshed ears"** means ears and bits of ears of wheat, barley, triticale and rye that still contain seeds that are completely covered with glumes; and

**"wheat"** means the kernels and pieces of kernels of the species *Triticum durum*, *Triticum polonicum* and *Triticum turgidum*.

#### ***Restrictions on sale of wheat***

2. (1) No person shall sell a consignment of wheat in the Republic of South Africa --
  - (a) unless the wheat is sold according to the classes set out in regulation 3;
  - (b) unless the wheat complies with the standards for the classes set out in regulation 4;
  - (c) unless the wheat, where applicable, complies with the grades of wheat and the standards for grades set out in regulations 5 and 6 respectively;
  - (d) unless the wheat is packed in accordance with the packing requirements set out in regulation 7;
  - (e) unless the containers or sale documents, as the case may be, are marked in accordance with the marking requirements set out in regulation 8; and
  - (f) if such wheat contains a substance that renders it unfit for human consumption or for processing into or utilisation thereof as food or feed.

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

## PART I

### QUALITY STANDARDS

#### *Classes of wheat*

3. The classes of wheat are –

- (a) Durum Wheat; and
- (b) Other Wheat.

#### *Standards for classes*

4. (1) Notwithstanding the provisions of sub regulations (2) and (3) all consignments of wheat must --

- (a) be free from any toxin, chemical or other substances that renders it unsuitable for human consumption or for processing into or utilisation thereof as food or feed and may not exceed the permissible deviations regarding aflatoxin in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972);
  - (b) contain not more poisonous seeds or ergot sclerotia than permitted in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972);
  - (c) be free from organisms of phytosanitary importance as determined in terms of the Agricultural Pest Act, 1983 (Act No. 36 of 1983);
  - (d) be free from mould infected, sour and rancid other grain, foreign matter and any other matter;
  - (e) be free from any undesired odour, taste or colour not typical of undamaged and sound wheat;
  - (f) be free from animal rests;
  - (g) with the exception of Other Wheat, be free from insects;
  - (h) with the exception of Other Wheat, be free from stinking smut infection; and
  - (i) with the exception of Other Wheat, have a moisture content not exceeding 13 per cent.
- (2) A consignment shall be classified as Durum Wheat if --
- (a) the wheat in the consignment consists of at least 95 per cent (m/m) of one or more of the durum wheat cultivars specified in the cultivar list; and
  - (b) it complies with the standards for Grade 1, Grade 2, Grade 3 or Grade 4 as set out in regulation 6.
- (3) A consignment of wheat shall be classified as Other Wheat if it does not comply with the standards for Durum Wheat.

***Grades of wheat***

5. (1) The grades for Durum Wheat shall be as follows:

- (a) Grade 1
- (b) Grade 2;
- (c) Grade 3; and
- (d) Grade 4.

(2) No grades are determined for Other Wheat.

***Standards for grades of wheat***

6. (1) Subject to the provisions of subregulations (2), (3) and (4), a consignment of wheat shall be graded as --

- (a) Grade 1 if the nature of deviation, specified in column 1 of Table 1 of the Annexure, in that consignment does not exceed the percentage specified in column 2 of the said table opposite the deviation concerned;
- (b) Grade 2 if the nature of deviation, specified in column 1 of Table 1 of the Annexure, in that consignment does not exceed the percentage specified in column 3 of the said table opposite the deviation concerned; and
- (c) Grade 3 if the nature of deviation, specified in column 1 of Table 1 of the Annexure, in that consignment does not exceed the percentage specified in column 4 of the said table opposite the deviation concerned;
- (d) Grade 4 if the nature of the deviation, specified in column 1 of Table 1 of the Annexure, in that consignment does not exceed the percentage specified in column 5 of the said table opposite the deviation concerned.

(2) The minimum hectolitre masses for different grades are as follows:

- (a) Grade 1 - 79 kg;
- (b) Grade 2 - 77 kg;
- (c) Grade 3 - 76 kg. and
- (d) Grade 4 – 72 kg

(3) (a) Grade 1, grade 2, grade 3 and grade 4 shall have a minimum falling number value of not less than 300 seconds;

(b) Notwithstanding the provision of paragraph (a), wheat shall be deemed to comply with the requirements of the paragraph concerned if it deviates with not more than 30 seconds lower than the minimum prescribed for Grade 1, Grade 2, Grade 3 and Grade 4 as the case may be.

(4) Durum Wheat shall --

- (a) in the case of Grade 1, contain --
  - (i) a minimum of 12 per cent protein; and
  - (ii) a minimum of 85 per cent amber glossy and flinty kernels;

- (b) in the case of Grade 2, contain --
  - (i) a minimum of 11 per cent protein; and
  - (ii) a minimum of 75 per cent amber glossy and flinty kernels;
- (c) in the case of Grade 3, contain --
  - (i) a minimum of 10 per cent protein; and
  - (ii) a minimum of 60 per cent amber glossy and flinty kernels; and
- (d) in the case of Grade 4, contain --
  - (i) a minimum of 9 per cent protein; and
  - (ii) a minimum of 50 per cent amber glossy and flinty kernels.

## PART II

### PACKING AND MARKING REQUIREMENTS

#### *Packing requirements*

7. Wheat of different grades shall be packed in different containers, or stored separately.

#### *Marking requirements*

8. (1) Every container or the accompanying sale documents of a consignment of wheat shall be marked or endorsed by means of appropriate symbols specified in subregulation (2), with --

- (a) the class of the wheat; and
  - (b) the grade.
- (2) The symbols referred to in subregulation (1) shall appear in the order of class and grade.
- (3) The symbols used to indicate the different --
- (a) classes shall be --
    - (i) D in the case of Durum Wheat; and
    - (ii) O in the case of Other Wheat;
  - (b) grades shall be --
    - (i) 1 in the case of Grade 1;
    - (ii) 2 in the case of Grade 2;
    - (iii) 3 in the case of Grade 3, and
    - (iv) 4 in the case of grade 4.

## PART III

### SAMPLING

***Taking of sample***

9. (1) A sample of a consignment of wheat shall --
- (a) in the case of wheat delivered in bags and subject to regulation 10, be obtained by sampling at least ten per cent of the bags, chosen from that consignment at random, with a bag probe: Provided that at least 25 bags in a consignment shall be sampled and where a consignment consists of less than 25 bags, all the bags in that consignment shall be sampled; and
  - (b) in the case of wheat delivered in bulk and subject to regulation 10, be obtained by sampling that consignment throughout the whole depth of the layer, in at least six different places, chosen at random in that bulk quantity, with a bulk sampling apparatus.
- (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 by means of dividing before further examination.
- (3) If it is suspected that the sample referred to in sub regulation (1)(a) is not representative of that consignment, an additional five per cent of the remaining bags, chosen from that consignment at random, shall be emptied into a suitable bulk container and sampled in the manner contemplated in sub regulation (1)(b).
- (4) If it is suspected that the sample referred to in sub regulation (1)(b) is not representative of that consignment, an additional representative sample shall be obtained by using an alternative sampling pattern, apparatus or method.
- (5) A sample taken in terms of these regulations shall be deemed to be representative of the consignment from which it was taken.

***Sampling if contents differ***

10. (1) If, after an examination of the wheat taken from different bags in a consignment in terms of regulation 9(1)(a), it appears that the contents of those bags differ substantially --
- (a) the bags concerned shall be placed separately;
  - (b) all the bags in the consignment concerned shall be sampled with a bag probe in order to do such separation; and
  - (c) each group of bags with similar contents in that consignment shall for the purposes of these regulations be deemed to be a separate consignment.

(2) If, after the discharge of a consignment of wheat in bulk has commenced, it is suspected that the consignment could be of a class or grade other than that determined by means of the initial sampling, the discharge shall immediately be stopped and the part of the consignment remaining in the bulk container as well as the wheat already in the hopper shall be sampled anew with a bulk sampling apparatus or by catching at least 20 samples, by means of a suitable container, at regular intervals throughout the whole offloading period from the stream of wheat flowing in bulk.

***Working sample***

11. A working sample is obtained by dividing the representative sample of the consignment according to the ICC (International Association for Cereal Science and Technology) 101/1 method.

**PART IV****DETERMINATION OF OTHER SUBSTANCES*****Determination of undesirable odours and harmful substances***

12. A consignment of wheat or a sample of a consignment of wheat shall be sensorial assessed or chemically analysed in order to determine --

- (a) whether it contains a substance that renders the wheat unfit for human consumption or for processing into or for utilisation as food or feed; and
- (b) whether it has a musty, sour, rancid or other undesirable odour: Provided that a working sample of unscreened wheat that is ground in a grain mill to a fine meal may be used for the determination concerned.

**PART V****DETERMINATION OF CLASS, HECTOLITRE MASS, AMBER GLOSSY AND FLINTY KERNELS, MOISTURE CONTENT, PROTEIN CONTENT AND FALLING NUMBER*****Determination of class***

13. The class of a consignment of wheat shall be determined as follows:

- (a) Obtain a working sample of at least 500 g and screen the working sample in the manner prescribed in regulation 19.
- (b) Take at least 100 g of the screened wheat and remove all other grain, un threshed ears and foreign matter by hand.
- (c) Obtain a working sample of at least 25 g each after all other grain, un threshed ears and foreign matter have been removed and separate the different cultivars.
- (d) Determine the combined mass of all of the cultivars that belongs according to the cultivar list to the same class and express the mass thus determined as a percentage of the mass of the working sample.
- (e) Such percentage represents the percentage of all the cultivars that belongs according to the cultivar list to the same class in the consignment.

***Determination of the hectolitre mass***

14. The hectolitre mass of a consignment of unscreened wheat may be determined by any suitable instrument: Provided that the instrument complies with and has been calibrated to, the specifications detailed in ISO (International Organization for Standardization) 7971-3.

***Determination of the percentage amber glossy and flinty kernels***

15 (1) The percentage amber glossy and flinty kernels shall be determined by means of a kernel-cutter as follows:

- (a) Fill the cup of the kernel-cutter (knife in open position) with wheat from which all foreign matter, screenings and broken kernels have been removed and shake it in order to fill the 50 holes with kernels.
- (b) Close the cup with one hand in such a manner that the wheat does not spill out and use the other hand to cut the kernels with the knife.

- (c) Open the kernel-cutter and calculate the percentage mealy kernels by adding 1 per cent for each kernel with one or more mealy spots and 2 per cent for each kernel of which half or more is mealy.
- (d) Subtract the percentage obtained in paragraph (c) from hundred.
- (e) Such percentage represents the percentage amber glossy and flinty kernels in the consignment.

(2) The kernel-cutter referred to in subregulation (1), must be capable of simultaneously cutting 50 kernels broad wise.

#### ***Determination of moisture content***

16. The moisture content of a consignment wheat may be determined by any suitable method: Provided that the results thus obtained is in accordance with the maximum permissible deviation for a class 1 moisture meter as detailed in ISO (International Organization for Standardization) 7700/1 based on the results of the 72 hour, 103°C oven dried method [AACC (American Association for Cereal Chemists) Method 44-15A].

#### ***Determination of protein content***

17. The percentage of protein of a consignment of wheat may be determined according to any suitable method: Provided that --

- (a) the determination shall be conducted on a sample which had been sifted using a screen with the same apertures as the standard sieve and from which other grain, un threshed ears and foreign matter had been removed by hand; and
- (b) the results thus obtained are in accordance ( $\pm 0,3$  per cent) with the results obtained by the Dumas Combustion Analysis Method [AACC (American Association for Cereal Chemists) Method 46/30].

#### ***Determination of falling number in wheat***

18. (1) The falling number of a consignment of wheat may be determined according to any suitable method: Provided that --

- (a) the determination shall be conducted on a sample which had been sifted using a screen with the same apertures as the standard sieve and from which other grain, un threshed ears and foreign matter had been removed by hand; and
- (b) the results thus obtained are in accordance ( $\pm 5$  percent) with the results obtained by the ICC (International Association for Cereal Science and Technology) No.107/1 Method.

(2) If the falling number of a consignment of wheat is determined according to the ICC (International Association for Cereal Science and Technology) No. 107/1 method, --

- (a) the sampling in the mentioned method shall be replaced with the manner prescribed in regulation 9; and
- (b) only the altitude corrected value shall be used.

## **PART VI**

### **DETERMINATION OF PERCENTAGE DEVIATIONS**

#### ***Determination of percentage screenings***

19. The percentage screenings in a consignment of wheat shall be determined as follows:
- Obtain a working sample of at least 500 g.
  - Place the sample on the standard sieve and screen the sample by moving the sieve 50 strokes to and fro, alternately away from and towards the operator of the sieve, in the same direction as the long axes of the slots of the sieve. Move the sieve, which rests on a table or other suitable smooth surface, 250 mm to 460 mm away from and towards the operator with each stroke. The prescribed 50 strokes must be completed within 50 to 60 seconds: Provided that the screening process may also be performed in some or other container or an automatic sieving apparatus.
  - Determine the mass of the material that has passed through the sieve and express it as a percentage of the mass of the working sample.
  - Such percentage represents the percentage screenings in the consignment.

***Determination of the percentage heavily frost-damaged wheat***

20. The percentage heavily frost-damaged wheat in a consignment of wheat shall be determined as follows:
- Obtain a working sample of at least 25 g of a screened sample.
  - Remove all heavily frost-damaged kernels by hand and determine the mass thereof.
  - Express the mass thus determined as a percentage of the mass of the working sample.
  - Such percentage represents the percentage heavily frost-damaged wheat in the consignment concerned.

***Determination of the percentages other grain and unthreshed ears***

21. The percentage other grain and unthreshed ears in a consignment of wheat shall be determined as follows:
- Obtain a working sample of at least 50 g from a screened sample.
  - Remove all other grain and unthreshed ears by hand and determine the mass thereof.
  - Express the mass thus determined as a percentage of the mass of the working sample.
  - Such percentage represents the percentage other grain and unthreshed ears in the consignment concerned.

***Determination of the percentage foreign matter***

22. The percentage foreign matter in a consignment of wheat is determined as follows:
- Obtain a working sample of at least 100 g from a screened sample.
  - Remove all foreign matter by hand and determine the mass thereof.
  - Express the mass thus determined as a percentage of the mass of the working sample.
  - Such percentage represents the percentage foreign matter in the consignment concerned.

***Determination of the percentage damaged wheat***

23. The percentage damaged wheat in a consignment of wheat shall be determined as follows:
- (a) Obtain a working sample of at least 25 g of a screened sample.
  - (b) Remove all damaged kernels by hand and determine the mass thereof.
  - (c) Express the mass thus determined as a percentage of the mass of the working sample.
  - (d) Such percentage represents the percentage damaged wheat in the consignment concerned.

***Determination of the percentage heat-damaged wheat***

24. The percentage heat-damaged wheat in a consignment of wheat shall be determined as follows:
- (a) Obtain a working sample of at least 100 g from a screened sample.
  - (b) Remove all heat-damaged kernels by hand and determine the mass thereof. Kernels from an additional working sample may also be sensorially assessed (by smelling and tasting the kernels) to confirm suspicion of heat damage.
  - (c) Express the mass thus determined as a percentage of the mass of the working sample.
  - (d) Such percentage represents the percentage heat-damaged wheat in the consignment concerned.

***Determination of percentage field fungi infected wheat***

25. The percentage field fungi infected wheat in a consignment of wheat shall be determined as follows:
- (a) Obtain a working sample of at least 25 g from a screened sample.
  - (b) Remove all field fungi infected kernels by hand and determine the mass thereof.
  - (c) Express the mass thus determined as a percentage of the mass of the working sample.
  - (d) Such percentage represents the percentage of field fungi infected wheat in the consignment concerned.

***Determination of percentage storage fungi infected wheat***

26. The percentage storage fungi infected wheat in a consignment of wheat shall be determined as follows:
- (a) Obtain a working sample of at least 100 g from a screened sample.
  - (b) Remove all storage fungi infected kernels by hand and determine the mass thereof.
  - (c) Express the mass thus obtained as a percentage of the mass of the working sample.
  - (d) Such percentage represents the percentage storage fungi infected wheat in the consignment concerned.

**PART VII*****Offence and penalties***

27. Any person who contravenes or fails to comply with any provision of these regulations shall be guilty of an offence and upon conviction be liable to a fine of not exceeding R50 000 or to imprisonment for a period not exceeding two years, or to both that fine or imprisonment.

No. R. 1184

17 Desember 2010

**WET OP LANDBOUPRODUKSTANDAARDE, 1990**  
**(WET No. 119 VAN 1990)**

**REGULASIES MET BETREKKING TOT DIE GRADERING, VERPAKKING EN MERK  
 VAN DURUMKORING BESTEM VIR VERKOOP IN DIE REPUBLIEK VAN SUID-AFRIKA**

Die Minister van Landbou, Bosbou en Visserye, handelende kragtens artikel 15 van die Wet op Landbouprodukstandaarde, 1990 (Wet No. 119 van 1990),

- (a) het die regulasies in die Bylae uitgevaardig;
- (b) bepaal dat die genoemde regulasies op die datum van publikasie in werking sal tree; en
- (c) herroeping van regulasies gepubliseer deur Goewermentskennisgewing Nos. R.905 van 10 Julie 1998 gewysig deur Goewermentskennisgewing Nos. R.1421 van 6 November 1998, R.876 van 14 September 2001, R.979 van 19 Julie 2002 en R.1210 van 29 Augustus 2003.

**BYLAE**

**Woordomskrywing**

1. In hierdie regulasies het enige word of uitdrukking waaraan 'n betekenis in die Wet geheg is, daardie betekenis en tensy uit die samehang anders blyk, beteken --

**"ander graan"** die korrels of stukkies korrels van gars, hawer, triticale, mielies, rog en sorghum;

**"besending"** --

- (a) 'n hoeveelheid koring van dieselfde klas, wat aan dieselfde eienaar behoort, wat op 'n bepaalde tydstip afgelewer word onder dekking van dieselfde vragbrief, afleveringsbrief of ontvangsbewys, of gelewer word deur dieselfde voertuig of losmaathouer, of wat uit dieselfde buis van 'n graansuier of 'n skeepsruim gelaai word; of
- (b) in die geval waar 'n hoeveelheid in paragraaf (a) bedoel, ingedeel is in verskillende grade, elke sodanige hoeveelheid van elk van die verskillende grade;

**"beskadigde koring"** koring --

- (a) wat deur insekte beskadig is;
- (b) wat deur hitte van buite of as gevolg van hitte deur binnegisting in koring met 'n oormaat vog duidelik verkleur is (oranje-bruin, donkerbruin of swart), uitgesonderd koringkorrels ten opsigte waarvan die verkleuring tot die kiem-end beperk is;
- (c) wat onryp is en 'n duidelike groen kleur het; en
- (d) waarin ontkieming tot so 'n mate gevorder het dat die vel wat die kiem bedek, gebreek is of die ontwikkelende spruitjies en/of worteltjies duidelik sigbaar is;

**"die Wet"** die Wet op Landbouprodukstandaarde, 1990 (Wet No. 119 van 1990);

**"dierlike reste"** dooie knaagdiere, dooie voëls en mis;

**"ergot sclerotia"** die sclerotia van die fungus *Claviceps purpurea*; en **"ergot"** het 'n ooreenstemmende betekenis;

**"erg rypbeskadigde koring"** --

- (a) koring wat gedurende die melk- tot sagte deegstadium deur strawwe ryp beskadig is en wat gekenmerk word deur korrels wat taamlik vet, maar heeltemal tot in die groef met klein blasies bedek is, met uitsondering van --
  - (i) korrels waarvan net die rugkant met blasies bedek is; en
  - (ii) onryp gerimpelde korrels waarin rimpeling deur ryp veroorsaak is terwyl die korrels nog onryp was; en
- (b) korrels wat 'n effens afgeskilferde semelskil het as gevolg van ryp: Met dien verstande dat bewys van rypskade teenwoordig is en dat die semelskil nie afgevryf is as gevolg van hantering nie;

**"giftige sade"** die sade of gedeeltes van sade van plantspesies wat volgens die Wet op Voedingsmiddels, Skoonheidsmiddels en Ontsmettingsmiddels, 1972 (Wet no 54 van 1972) 'n risiko vir menslike en dierlike gesondheid kan inhoud indien dit verbruik word, insluitende sade van *Argemone mexicana*, *Convolvulus* spp., *Crotalaria* spp., *Datura* spp., *Ipomoea purpurea*, *Lolium temulentum*, *Ricinus communis* of *Xanthium* spp.;

**"hektolitermassa"** die massa in kilogram per hektoliter;

**"horingagtigde korrels"** alle koring waarvan die endosperm nie wit en melerig, of gedeeltelik wit en melerig is nie en wat 'n glasagtige en horingagtige voorkoms het;

**"houer"** 'n sak of losmaathouer;

**"insek"** met betrekking tot koring, enige lewende insek wat skadelik is vir opgebergde graan ongeag die stadium van ontwikkeling van daardie insek;

**"koring"** die korrels of stukkies korrels van die spesies *Triticum durum*, *Triticum polonicum* en *Triticum turgidum*;

**"kultivarlys"** die lys van kultivars van tyd tot tyd deur die Uitvoerende Beampte: Landbouprodukstanndaarde vasgestel en wat vanaf die Uitvoerende Beampte: Landbouprodukstandaarde, Privaatsak X258, Pretoria, 0001 verkrygbaar is;

**"landswambesmette koring"** koring waarvan die korrels sigbaar met swamme besmet is, en wat --

- (a) duidelik grysagtige kwas-ente, wat as geheel verkleur is, het; of waar land swamgroeи vanaf die kwas-ent tot in die groef voorkom;
- (b) as gevolg van *Fusarium*-besmetting 'n dowie lewelose, krytagtige of pienkerige en verkrimpte voorkoms het;

**"losmaathouer"** enige vervoermiddel of houer waarin losmaatkoring opgeberg of vervoer word;

**"ongedorste are"** are en gedeeltes van are van koring, gars, triticale en rog wat nog korrels bevat wat ten volle met blomkaffies bedek is;

**"opbergingswambesmette koring"** koring wat sigbaar met swamme besmet is, en wat --

- (a) blou, groen, swartagtige, wit of geel swamgroeи enige plek op die korrel vertoon; of
- (b) sigbare swamgroeи onder die semel vertoon;

**"proteïeninhoud"** die persentasie proteïen in koring op 'n 12% vogbasis;

**"sak"** 'n sak vervaardig—

- (a) van jute of phormium of 'n mengsel van jute of phormium; of
- (b) van polipropileen wat voldoen aan SABS spesifikasie CKS632;

**"sifseis"** alle materiaal wat deur die standaardsif gaan;

**"standaardsif"** is 'n gleufsif:

- (a) met 'n plat bodem van metaalplaat van 1,0 mm dikte met langwerpige gleue van 12,7 mm in lengte en 1,8 mm in breedte met geronde ente. Die spasiëring tussen die gleue in dieselfde ry moet 2,43 mm wyd wees en die spasiëring tussen die rye gleue moet 2,0 mm wyd wees. Die gleue moet afwisselend georiënteerd wees, met 'n gleuf altyd regoor 'n soliede tussensegment van die naasliggende ry gleue;
- (b) waarvan die boonste oppervlak van die sif glad is;
- (c) met 'n ronde raam van gesikte materiaal met 'n binnedeursnee van minstens 300 mm en maksimum 310 mm en minstens 50 mm hoog;
- (d) wat op 'n pan met 'n soliede bodem pas en moet minstens 20 mm bo die bodem van die pan wees.

**"stinkbrandbesmetting"** koring wat met *Tilletia spp.* besmet is, met uitsondering van koring wat met *Tilletia indica* (karnal bunt) besmet is. Koring word as stinkbrand besmet beskou as een of meer van die volgende eienskappe waargeneem word:

- (a) 'n onmiskenbare stinkbrandreuk; of
- (b) koringkorrels wat met stinkbrand besmeer is; of
- (c) meer as vier stinkbrandballe of stukkies bal gelyk aan vier stinkbrandballe per 100 g koring;

**"valgetal"** die tydperk in sekondes volgens Hagberg-Perten as 'n maatstaf van die graad van Alfa-Amilase aktiwiteit in graan en meel; en

**"vreemde voorwerpe"** alle materiaal uitgesonderd koring, ander graan en ongedorste are.

#### **Beperkings op verkoop van koring**

2. (1) Niemand mag 'n besending koring in die Republiek van Suid-Afrika verkoop nie --
  - (a) tensy die koring verkoop word volgens die klasse in regulasie 3 uiteengesit;
  - (b) tensy die koring voldoen aan die standaarde vir die betrokke klas in regulasie 4 uiteengesit;
  - (c) tensy die koring, waar van toepassing, voldoen aan die grade van koring en standaarde vir grade in regulasies 5 en 6 onderskeidelik uiteengesit;
  - (d) tensy die koring verpak is volgens die verpakkingsvereistes in regulasie 7 uit-eengesit;
  - (e) tensy die houer of verkoopsdokumente, na gelang van die geval, gemerk is in ooreenstemming met die merkvereistes in regulasie 8 uiteengesit; en
  - (f) indien sodanige koring 'n stof bevat wat dit ongeskik maak vir menslike verbruik of vir verwerking tot of aanwending daarvan as voedsel of voer.
- (2) Die Uitvoerende Beampte kan iemand skriftelik, in die geheel of gedeeltelik, op die voorwaardes wat hy of sy nodig ag, van die bepalings van subregulasie (1) vrystel.

**DEEL I****GEHALTESTANDAARDE*****Klasse koring***

3. Die klasse koring is --
- (a) Durumkoring; en
  - (b) Ander Koring.

***Standaarde vir klasse***

4. (1) Neteenstaande die bepalings van subregulasie (2) en (3) moet alle besendings koring --
- (a) vry wees van enige toksiene, chemiese of ander stowwe wat dit ongesik maak vir menslike verbruik of vir verwerking tot of aanwending daarvan as voedsel of voer en mag nie die toelaatbare afwykings ten opsigte van aflatoksiene kragtens die Wet op Voedingsmiddels, Skoonheidsmiddels en Ontsmettingsmiddels, 1972 (Wet No. 54 van 1972) oorskry nie;
  - (b) nie meer giftige sade of ergot sclerotia bevat as wat toegelaat word kragtens die Wet op Voedingsmiddels, Skoonheidsmiddels en Ontsmettingsmiddels, 1972 (Wet No. 54 van 1972) nie;
  - (c) vry wees van organismes van fitosanit re belang soos bepaal word kragtens die Wet op Landbouplae, 1983 (Wet No. 36 van 1983);
  - (d) vry wees van swambesmette, suur- en galsterige ander graan, vreemde voorwerpe en enige ander materiaal;
  - (e) vry wees van enige ongewenste reuk, smaak of kleur wat nie eie aan ongesonde en gesonde koring is nie;
  - (f) vry wees van dierlike reste;
  - (g) met die uitsondering van Ander Koring, vry wees van insekte;
  - (h) met die uitsondering van Ander Koring, vry wees van stinkbrandbesmetting; en
  - (i) met die uitsondering van Ander Koring, 'n voginhoud van hoogstens 13 persent h .
- (2) 'n Besending koring word as Durumkoring geklassifiseer indien --
- (a) dit bestaan uit minstens 95 persent (m/m) van een of meer van die durumkoringkultivars in die kultivarlys bepaal; en
  - (b) dit voldoen aan die standaarde vir Graad 1, Graad 2, Graad 3 of Graad 4 in regulasie 6 uiteengesit.
- (3) 'n Besending koring word as Ander Koring geklassifiseer indien dit nie voldoen aan die standaarde vir Durumkoring nie.

***Grade koring***

5. (1) Die grade vir die Durumkoring is soos volg:

- (a) Graad 1;
  - (b) Graad 2;
  - (c) Graad 3; en
  - (d) Graad 4.
- (2) Geen grade word vir Ander Koring bepaal nie.

**Standaarde vir grade koring**

6. (1) Behoudens die bepalings van subregulasies (2), (3) en (4) word 'n besending koring gegradeer as --

- (a) Graad 1 indien die aard van afwyking, in kolom 1 van Tabel 1 van die Aanhangsel gespesifiseer, in daardie besending nie die persentasie in kolom 2 van genoemde tabel teenoor die betrokke afwyking gespesifiseer, oorskry nie;
  - (b) Graad 2 indien die aard van afwyking, in kolom 1 van Tabel 1 van die Aanhangsel gespesifiseer, in daardie besending nie die persentasie in kolom 3 van genoemde tabel teenoor die betrokke afwyking gespesifiseer, oorskry nie;
  - (c) Graad 3 indien die aard van afwyking, in kolom 1 van Tabel 1 van die Aanhangsel gespesifiseer, in daardie besending nie die persentasie in kolom 4 van genoemde tabel teenoor die betrokke afwyking gespesifiseer, oorskry nie;
  - (d) Graad 4 indien die aard van afwyking, in kolom 1 van Tabel 1 van die Aanhangsel gespesifiseer, in daardie besending nie die persentasie in kolom 5 van genoemde tabel teenoor die betrokke afwyking gespesifiseer, oorskry nie.
- (2) Die minimum hektolitermassas vir die verskillende grade is soos volg:
- (a) Graad 1- 79 kg;
  - (b) Graad 2 – 77 kg;
  - (c) Graad 3– 76 kg; en
  - (d) Graad 4 – 72kg.
- (3) (a) Graad 1, Graad 2, Graad 3 en Graad 4 moet 'n minimum valgetalwaarde hê van nie minder as 300 sekondes nie.
- (b) Nieteenstaande die bepalings van paragraaf (a) word koring geag aan die toepaslike vereistes van die betrokke paragraaf te voldoen indien dit nie met meer as 30 sekondes laer as die minimum voorgeskryf vir Graad 1, Graad 2, Graad 3 en Graad 4, na gelang van die geval, afwyk nie.
- (4) Durumkoring moet --
- (a) in die geval van Graad 1, --
    - (i) 'n minimum van 12 persent proteïen bevat; en
    - (ii) 'n minimum van 85 persent horingagtige korrels bevat;
  - (b) in die geval van Graad 2, --
    - (i) 'n minimum van 11 persent proteïen bevat; en

- (ii) 'n minimum van 75 persent horingagtige korrels bevat; en
- (c) in die geval van Graad 3, --
  - (i) 'n minimum van 10 persent proteïen bevat; en
  - (ii) 'n minimum van 60 persent horingagtige korrels bevat; en
- (d) in die geval van Graad 4,
  - (i) 'n minimum van 9 persent proteïen bevat; en
  - (ii) 'n minimum van 50 persent horingagtige korrels bevat.

**DEEL II****VERPAKKINGS- EN MERKVEREISTES*****Verpakningsvereistes***

7. Koring van verskillende klasse moet in verskillende houers verpak word.

***Merkvereistes***

8. (1) Elke houer of die meegaande verkoopsdokumente van 'n besending koring moet gemerk of geëndoseer word, met behulp van gepaste simbole in subregulasie (2) bepaal, met --

- (a) die klas van die koring; en
- (b) die graad.
- (2) Die simbole in subregulasie (1) bedoel moet in die orde van klas en graad, aangedui word.
- (3) Die simbole gebruik as aanduiding van die verskillende --
  - (a) klasse is --
    - (i) D in die geval van Durumkoring;
    - (ii) O in die geval van Ander Koring;
  - (b) grade is --
    - (i) 1 in die geval van Graad 1;
    - (ii) 2 in die geval van Graad 2;
    - (iii) 3 in die geval van Graad 3; en
    - (iv) 4 in die geval van Graad 4.

**DEEL III****MONSTERNEMING*****Verkryging van monster***

9. (1) 'n Monster van 'n besending koring word --

- (a) in die geval van koring in sakke gelewer en behoudens regulasie 10, verkry deur minstens tien persent van die sakke, ewekansig uit daardie besending gekies, met 'n saksteker te bemonster: Met dien verstande dat minstens 25 sakke in 'n besending bemonster word en waar 'n besending uit minder as 25 sakke bestaan, al die sakke in daardie besending bemonster word; en
  - (b) in die geval van koring in losmaat gelewer en behoudens regulasie 10, verkry deur daardie besending deur die volle diepte, by minstens ses verskillende plekke, ewekansig in daardie losmaathoeveelheid uitgekies, met 'n losmaat-monsternemingsapparaat te bemonster.
- (2) Die gesamentlike monster in subregulasie (1)(a) of (b) verkry, moet --
- (a) 'n totale massa van minstens 10 kg hê; en
  - (b) deeglik gemeng word deur verdeling voor verdere ondersoek.
- (3) Indien vermoed word dat die monster in subregulasie (1)(a) bedoel, nie verteenwoordigend van daardie besending is nie, word 'n addisionele vyf persent van die oorblywende sakke, ewekansig uit daardie besending gekies, in 'n gesikte losmaathouer uitgegooi en bemonster op die wyse in subregulasie (1)(b) beoog.
- (4) Indien vermoed word dat die monster in subregulasie (1)(b) bedoel, nie verteenwoordigend van daardie besending is nie, moet 'n addisionele verteenwoordigende monster verkry word deur 'n alternatiewe monsternemingspatroon, -apparaat of -metode gebruik te maak.
- (5) 'n Monster ingevolge hierdie regulasies geneem, word geag verteenwoordigend te wees van die besending waaruit dit geneem is.

#### ***Monsterneming indien inhoud verskil***

10. (1) Indien dit blyk, na 'n ondersoek van die koring wat ingevolge regulasie 9(1)(a) uit verskillende sakke in 'n besending geneem is, dat die inhoud van daardie sakke wesenlik verskil, word --
- (a) die onderskeie sakke van mekaar geskei;
  - (b) al die sakke in die betrokke besneding met 'n saksteker bemonster ten einde sodanige skeiding te doen; en
  - (c) elke groep sakke met 'n soortgelyke inhoud in daardie besending vir die doel-eindes van hierdie regulasies geag 'n afsonderlike besending te wees.

(2) Indien, nadat met die aflaai van 'n besending koring in losmaat begin is, daar vermoed word dat die besending van 'n ander klas of graad kan wees as wat met behulp van die aanvanklike bemonstering bepaal is, word die aflaaioproses onmiddellik gestaak en word die deel van die besending wat in die losmaathouer oorbly asook die koring wat reeds in die opvangbak gestort is, van vooraf met 'n losmaatmonsternemingsapparaat bemonster of deur minstens 20 monsters met 'n gesikte houer, met gereelde tussenposes oor die hele aflaaiperiode, uit die stroom van die koring wat in losmaat vloei, op te vang.

#### ***Werkmonster***

11. 'n Werkmonster koring word verkry deur die verteenwoordigende monster van die besending volgens die ICC (International Association for Cereal Science and Technology) 101/1 metode, te verdeel.

**DEEL IV****BEPALING VAN ANDER STOWWE*****Bepaling van ongewenste reuke en skadelike stowwe***

12. 'n Besending koring of monster van 'n besending koring word sintuiglik beoordeel of skeikundig ontleed ten einde te bepaal --

- (a) of dit 'n stof bevat wat die koring ongesik maak vir menslike verbruik of vir verwerking tot of aanwending as voedsel of voer; en
- (b) of dit 'n muwwie, suur, galsterige of ander ongewenste reuk: Met dien verstande dat 'n werkmonster ongesifte koring met 'n graanmeul tot 'n fyn meel gemaal vir die betrokke beoordeling gebruik kan word.

**DEEL V****BEPALING VAN KLAS, HEKTOLITERMASSA, HORINGAGTIGE KORRELS,  
VOGINHOUD, PROTEïENINHOUD EN VALGETAL*****Bepaling van klas***

13. Die klas van 'n besending koring word soos volg bepaal:

- (a) Verkry 'n werkmonster van minstens 500 g en sif die werkmonster op die wyse soos in regulasie 19 bepaal.
- (b) Neem minstens 100 g van die gesifte koring en verwijder alle ander graan, ongedorste are en vreemde stowwe met die hand.
- (c) Verkry 'n werkmonster van minstens 25 g nadat alle ander graan, ongedorste are en vreemde stowwe verwijder is en skei die verskillende kultivars.
- (d) Bepaal die massa van alle kultivars wat volgens die kultivarlys aan dieselfde klas behoort gesamentlik en druk die massa aldus bepaal uit as 'n persentasie van die werkmonster.
- (e) Sodanige persentasie verteenwoordig die persentasie van alle kultivars wat volgens die kultivarlys aan dieselfde klas behoort in die besending.

***Bepaling van hektolitermassa***

14. Die hektolitermassa van 'n besending koring kan volgens enige gesikte instrument bepaal word: Met dien verstande dat die instrument voldoen aan die spesifikasies en is gekalibreer deur soos uiteengesit in ISO (International Organization for Standardization) 7971-3.

***Bepaling van persentasie horingagtige korrels***

15. (1) Die persentasie horingagtige korrels word met behulp van 'n korrelsnyer soos volg bepaal:
- (a) Vul die korrelsnyer se bakkie (mes in oop posisie) met koring waaruit alle vreemde stowwe, sifse en gebreekte korrels verwijder is en skud dit sodat die korrels die 50 gaan vul.
  - (b) Maak die bakkie met een hand toe op so 'n wyse dat die koring nie uitval nie en gebruik die ander hand om die korrels met die mes deur te sny.

- (c) Maak die korrelsnyer oop en bereken die persentasie melerige korrels deur persent vir elke korrel met een of meer melerige kolletjies en 2 persent vir elke korrel waarvan die helfte of meer melerig is bymekaar te tel.
- (d) Trek die persentasie in paragraaf (c) verkry van 100 af.
- (e) Sodanige persentasie verteenwoordig die persentasie horingagtige korrels in die besending.

(2) Die korrelsnyer waarna daar in subregulasie (1) verwys word, moet 50 korrels op een slag in die breedte kan deursny.

#### ***Bepaling van voginhoud***

16. Die voginhoud van 'n besending koring kan volgens enige gesikte metode bepaal word: Met dien verstande dat die resultate aldus verkry in ooreenstemming is met die maksimum toelaatbare afwyking vir 'n klas 1 vogmeter soos uiteengesit in ISO (International Organization for Standardization) 7700/1 gebaseer op die resultate van die 72 uur, 103°C oondroogmetode [AACC (American Association for Cereal Chemists) Metode 44-15A].

#### ***Bepaling van proteïeninhoud***

17. Die persentasie proteïen van 'n besending koring kan volgens enige gesikte metode bepaal word: Met dien verstande dat --

- (a) die bepaling gedoen word op 'n monster wat oor 'n sif met dieselfde openinge as die standaardsif gesif is en waarvan ander graan, ongedorste are en vreemde voorwerpe met die hand verwijder is; en
- (b) die resultate aldus verkry in ooreenstemming ( $\pm 0,3$  persent) is met die resultate verkry deur die Dumas ontbrandingsanalisemetode [AACC (American Association for Cereal Chemists) Metode 46-30].

#### ***Bepaling van valgetal in koring***

18. (1) Die valgetal van 'n besending koring kan volgens enige gesikte metode bepaal word: Met dien verstande dat --

- (a) die bepaling op 'n monster wat oor 'n sif met dieselfde openinge as die standaardsif gesif is en waarvan ander graan, ongedorste are en vreemde voorwerpe met die hand verwijder is; en
- (b) die resultate aldus verkry in ooreenstemming ( $\pm 5$  persent) is met die resultate verkry deur die ICC (International Association for Cereal Science and Technology) 107/1 metode.

(2) Indien die valgetal van 'n besending koring volgens die ICC (International Association for Cereal Science and Technology) 107/1 metode bepaal word, word --

- (a) monsterneming in genoemde metode met die wyse voorgeskryf in regulasie 9, vervang; en
- (b) slegs die waardes aangepas vir hoogte bo seenvlak gebruik.

**DEEL VI****BEPALING VAN PERSENTASIE AFWYKINGS*****Bepaling van die persentasie sifseis***

19. Die persentasie sifseis in 'n besending koring word soos volg bepaal:
- Verkry 'n werkmonster van minstens 500 g.
  - Plaas die monster op 'n standaardsif, sif die monster deur die sif 50 stote heen en weer, beurtelings weg van en terug na die hanteerder van die sif, te beweeg in dieselfde rigting as die lengte-asse van die openings van die sif. Beweeg met elke stoot die sif, wat op 'n tafel of ander gesikte gladde oppervlak rus, 250 mm tot 460 mm weg van en terug na die hanteerder. Die voorgeskrewe 50 stote moet binne 50 tot 60 sekondes voltooi word: Met dien verstande dat die sifproses ook op die voorgeskrewe wyse in een of ander houer of 'n outomatiese sifapparaat gedoen kan word.
  - Bepaal die massa van die materiaal wat deur die sif gegaan het en druk dit uit as 'n persentasie van die massa van die werkmonster.
  - Sodanige persentasie verteenwoordig die persentasie sifseis in die betrokke besending.

***Bepaling van persentasie erg rypbeskadigde koring***

20. Die persentasie erg rypbeskadigde koring in 'n besending koring word soos volg bepaal:
- Verkry 'n werkmonster van minstens 25 g van 'n gesifte monster.
  - Verwyder alle erg rypbeskadigde korrels met die hand en bepaal die massa daarvan.
  - Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
  - Sodanige persentasie verteenwoordig die persentasie erg rypbeskadigde koring in die betrokke besending.

***Bepaling van persentasie ander graan en ongedorste are***

21. Die persentasie ander graan en ongedorste are in 'n besending koring word soos volg bepaal:
- Verkry 'n werkmonster van minstens 50 g van 'n gesifte monster.
  - Verwyder alle ander graan en ongedorste are met die hand en bepaal die massa daarvan.
  - Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
  - Sodanige persentasie verteenwoordig die persentasie ander graan en ongedorste are in die besending.

***Bepaling van persentasie vreemde voorwerpe***

22. Die persentasie vreemde voorwerpe in 'n besending koring word soos volg bepaal:
- Verkry 'n werkmonster van minstens 100 g van 'n gesifte monster.
  - Verwyder alle vreemde voorwerpe met die hand en bepaal die massa daarvan.

- (c) Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
- (d) Sodanige persentasie verteenwoordig die persentasie vreemde voorwerpe in die besending.

***Bepaling van persentasie beskadigde koring***

23. Die persentasie beskadigde koring in 'n besending koring word soos volg bepaal:
- (a) Verkry 'n werkmonster van minstens 25 g van 'n gesifte monster.
  - (b) Verwyder alle beskadigde korrels met die hand en bepaal die massa daarvan.
  - (c) Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
  - (d) Sodanige persentasie verteenwoordig die persentasie beskadigde koring in die besending.

***Bepaling van persentasie hittebeskadigde koring***

24. Die persentasie hittebeskadigde koring in 'n besending koring word soos volg bepaal:
- (a) Verkry 'n werkmonster van minstens 100 g van 'n gesifte monster.
  - (b) Verwyder alle hittebeskadigde korrels met die hand en bepaal die massa daarvan. Korrels van 'n addisionele werkmonster mag ook sintuiglik ondersoek word (deur aan korrels te ruik en te proe) om vermoede van hittebeskadiging te bevestig.
  - (c) Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
  - (d) Sodanige persentasie verteenwoordig die persentasie hittebeskadigde koring in die besending.

***Bepaling van persentasie landswambesmette koring***

25. Die persentasie landswambesmette koring in 'n besending koring word soos volg bepaal:
- (a) Verkry 'n werkmonster van minstens 25 g van 'n gesifte monster.
  - (b) Verwyder alle landswambesmette korrels met die hand en bepaal die massa daarvan.
  - (c) Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
  - (d) Sodanige persentasie verteenwoordig die persentasie landswambesmette koring in die betrokke besending.

***Bepaling van persentasie opbergingswambesmette koring***

26. Die persentasie opbergingswambesmette korrels koring in 'n besending koring word soos volg bepaal:
- (a) Verkry 'n werkmonster van minstens 100 g van 'n gesifte monster.
  - (b) Verwyder alle opbergingswambesmette korrels uit die werkmonster met die hand en bepaal die massa daarvan.

- (c) Druk die massa aldus uit as 'n persentasie van die massa van die werkmonster.
- (d) Sodanige persentasies verteenwoordig die persentasie opbergingswambesmette koring in die betrokke besending.

## DEEL VII

### *Oortreding en strawwe*

27. Iemand wat 'n bepaling van hierdie regulasie oortree of versuim om daaraan te voldoen, is aan 'n misdryf skuldig en by skuldigbevinding strafbaar met 'n boete van hoogstens R50 000 of met gevangenisstraf vir 'n tydperk van hoogstens twee jaar of met daardie boete sowel as daardie gevangenisstraf.

## ANNEXURE/AANHANGSEL

TABLE 1/TABEL 1

STANDARDS FOR GRADES OF DURUM WHEAT/  
STANDAARDE VIR GRADE VAN DURUMKORING

Nature of deviation/ Aard van afwyking	Maximum percentage permissible deviation (m/m)/ Maksimum persentasie toelaatbare afwyking (m/m)			
	Grade 1/ Graad 1	Grade 2/ Graad 2	Grade 3/ Graad 3	Grade 4/ Graad 4
1	2	3	4	5
(a) Heavily frost-damaged kernels/ Erg ryptbeskadigde korrels	5	5	5	5
(b) Field fungi infected kernels/Land- swambesmette korrels	2	2	2	2
(c) Storage fungi infected kernels/ Opbergingswambesmette korrels	0,5	0,5	0,5	0,5
(d) Screenings/Sifsels	3	3	3	3
(e) Other grain and unthreshed ears/ Ander graan en ongedorste are	1	1	1	1
(f) Gravel, stones, turf and glass/ Gruis, klippies, turf en glas	0,5	0,5	0,5	0,5
(g) Foreign matter including gravel, stones, turf and glass: Provided that such deviations are individu- ally within the limits specified in item (f)/ Vreemde voorwerpe met inbegrip van gruis, klippies, turf en glas: Met dien verstande dat sodanige afwykings individueel binne die perke is in item (f) aan- gegee	1	1	1	1
(h) Heat-damaged kernels/Hittebe- skadigde korrels	0,2	0,3	0,5	0,7
(i) Damaged kernels, including heat- damaged kernels: Provided that such deviations are individually within the limit specified in item (h) and provided further that the minimum falling number value prescribed in regulation 6(3) for the grade concerned is at least complied with/Beskadigde korrels met inbegrip van hittebeskadigde korrels: Met dien verstande dat sodanige afwyking individueel binne die perke is in item (h) aan- gegee en met dien verstande voorts dat minstens aan die mini-	2	2	2	2

mum valgetalwaarde in regulasie 6(3) vir die betrokke graad voor- geskryf, voldoen word				
(j) Deviations in items (d), (e), (g) and (i) collectively: Provided that such deviations are individually within the limits of the said items/ Afwykings in items (d), (e), (g) en (i) gesamentlik: Met dien ver- stande dat sodanige afwykings individueel binne die perke van genoemde items is	5	5	5	5
"				

No. R. 1185

17 December 2010

**AGRICULTURAL PRODUCT STANDARDS ACT, 1990**  
**(ACT NO. 119 OF 1990)**

**REGULATIONS RELATING TO THE GRADING, PACKING AND MARKING OF  
 SOFT WHEAT INTENDED FOR SALE IN THE REPUBLIC OF SOUTH AFRICA**

The Minister of Agriculture, Forestry and Fisheries, acting under section 15 of the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990), has

- (a) made the regulations in the Schedule;
- (b) determined that the said regulations shall come into operations on the date of publication; and
- (c) repealed the regulations published in Government Notice No's R.905 of 10 July 1998 as amended by R.1421 of 6 November 1998, R.876 of 14 September 2001, R.979 of 19 July 2002, and R.1210 of 29 August 2003.

**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;

**"animal rests"** means dead rodents, dead birds and dung;

**"bag"** means a bag manufactured from --

- (a) jute or phormium or a mixture of jute and phormium; or
- (b) polypropylene that complies with SABS specification CKS632;

**"bulk container"** means any vehicle or container in which bulk wheat is stored or transported;

**"consignment"** means --

- (a) a quantity of wheat of the same class, which belongs to the same owner, delivered at any one time under cover of the same consignment note, delivery note or receipt note, or delivered by the same vehicle or bulk container, or loaded from the same bin of a grain elevator or from a ship's hold; or
- (b) in the case where a quantity referred to in paragraph (a), is subdivided into different grades, each such quantity of each of the different grades;

**"container"** means a bag or bulk container;

**"cultivar list"** means the list of cultivars determined from time to time by the Executive Officer: Agricultural Product Standards and which is obtainable from the Executive Officer: Agricultural Product Standards, Private Bag X258, Pretoria, 0001;

**"damaged wheat"** means wheat --

- (a) which have been damaged by insects;
- (b) which have been distinctly discoloured (orange-brown, dark brown or black) by external heat or as a result of heating caused by internal fermentation in wheat with an excessive

moisture content, excluding wheat kernels in respect of which the discolouration is confined to the germ end;

- (c) which are immature and have a distinctly green colour; and
- (d) in which germination has proceeded to such an extent that the skin covering the embryo has been broken or the developing sprouts and/or rootlets are clearly visible;

"**ergot sclerotia**" means the sclerotia of the fungus *Claviceps purpurea*; and "**ergot**" has a corresponding meaning;

"**field fungi infected wheat**" means wheat of which the kernels are visibly infected with fungi, and that -

- (a) clearly have greyish brush-ends that are discoloured as a whole; or where field fungi growth is present from the brush-ends into the crease;
- (b) have a dull, lifeless, chalky or pinkish and shrunken appearance as a result of *Fusarium* infection;

"**foreign matter**" means all material excluding wheat, other grain and un threshed ears;

"**heavily frost-damaged wheat**" means --

- (a) wheat which have been damaged by severe frost during the milk to soft dough stage and which is characterised by the kernels being fairly plump but covered entirely with small blisters extending into the crease, excluding --
  - (i) kernels in which blistering is confined to the back of the kernel; and
  - (ii) immature wrinkled kernels in which wrinkling has been caused by frost while the kernels were still immature; and
- (b) kernels which have a slightly flaked-off bran coat due to frost: Provided that evidence of frost damage is present and that the bran coat had not been rubbed off due to handling;

"**hectolitre mass**" means the mass in kilogram per hectolitre;

"**insect**" in relation to wheat, means any live insect that is injurious to stored grain irrespective of the stage of development of that insect;

"**other grain**" means the kernels or pieces of kernels of barley, oats, triticale, maize, rye and sorghum;

"**poisonous seeds**" means the seeds or bits of seeds of plant species that may in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972) represent a hazard to human or animal health when consumed, including seeds of *Argemone mexicana*, *Convolvulus spp.*, *Crotalaria spp.*, *Datura spp.*, *Ipomoea purpurea*, *Lolium temulentum*, *Ricinus communis* or *Xanthium spp.*;

"**screenings**" means all material that passes through the standard sieve;

"**standard sieve**" is a slotted sieve --

- (a) with a flat bottom of metal sheet of 1,0 mm thickness with apertures 12,7 mm long and 1,8 mm wide with rounded ends. The spacing between the slots in the same row must be 2,43 mm wide and the spacing between the rows of slots must be 2,0 mm wide. The slots must be alternately orientated with a slot always opposite the solid inter segment of the next row of slots.
- (b) of which the upper surface of the sieve is smooth;

- (c) with a round frame of suitable material with an inner diameter of between 300 mm and 310 mm maximum and at least 50 mm high;
- (d) that fits onto a tray with a solid bottom and must be at least 20 mm above the bottom of the tray;

**"stinking smut infection"** means wheat that is infected with *Tilletia spp.* with the exception of wheat infected with *Tilletia indica* (karnal bunt). Wheat is considered stinking smut infected if one or more of the following characteristics are present:

- (a) an unmistakable stinking smut odour; or
- (b) wheat kernels that are smeared with stinking smut; or
- (c) more than four stinking smut balls (or pieces of balls equal to four stinking smut balls) per 100 g of wheat;

**"storage fungi infected wheat"** means wheat that are visibly infected with fungi, and that show -

- (a) blue, green, blackish or yellow fungal growth anywhere on the kernel; or
- (b) visible mould beneath the bran;

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

**"un threshed ears"** means ears and bits of ears of wheat, barley, triticale and rye that still contain seeds that are completely covered with glumes; and

**"wheat"** means the kernels and pieces of kernels of the species *Triticum aestivum*.

#### ***Restrictions on sale of wheat***

2. (1) No person shall sell a consignment of wheat in the Republic of South Africa --
  - (a) unless the wheat is sold according to the classes set out in regulation 3;
  - (b) unless the wheat complies with the standards for the classes set out in regulation 4;
  - (c) unless the wheat, where applicable, complies with the grades of wheat and the standards for grades set out in regulations 5 and 6 respectively;
  - (d) unless the wheat is packed in accordance with the packing requirements set out in regulation 7;
  - (e) unless the containers or sale documents, as the case may be, are marked in accordance with the marking requirements set out in regulation 8; and
  - (f) if such wheat contains a substance that renders it unfit for human consumption or for processing into or utilisation thereof as food or feed.
- (2) The Executive Officer may grant written exemption, entirely or partially, to any person on such conditions as he or she may deem necessary, from the provisions of subregulation (1).

**PART I****QUALITY STANDARDS*****Classes of wheat***

3. The classes of wheat are --
- (a) Soft Wheat; and
  - (b) Other Wheat.

***Standards for classes***

4. (1) Notwithstanding the provisions of sub regulations (2) and (3), all consignments of wheat must --
- (a) be free from any toxin, chemical or other substances that renders it unsuitable for human consumption or for processing into or utilisation thereof as food or feed and may not exceed the permissible deviations regarding aflatoxin in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972);
  - (b) contain not more poisonous seeds or ergot sclerotia than permitted in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972);
  - (c) be free from organisms of phytosanitary importance as determined in terms of the Agricultural Pest Act, 1983 (Act No. 36 of 1983);
  - (d) be free from mould infected, sour and rancid other grain, foreign matter and any other matter;
  - (e) be free from any undesired odour, taste or colour not typical of undamaged and sound wheat;
  - (f) be free from animal rests;
  - (g) with the exception of Other Wheat, be free from insects;
  - (h) with the exception of Other Wheat, be free from stinking smut infection; and
  - (i) with the exception of Other Wheat, have a moisture content not exceeding 13 per cent.
- (2) A consignment shall be classified as Soft Wheat if --
- (a) the wheat in the consignment consists of at least 95 per cent (m/m) of one or more of the Soft wheat cultivars specified in the cultivar list; and
  - (b) it complies with the standards for Grade 1 and Grade 2 set out in regulation 6.
- (3) A consignment of wheat shall be classified as Other Wheat if it does not comply with the standards for Soft Wheat.

***Grades of wheat***

5. (1) The grades for Soft Wheat shall be as follows:
- (a) Grade 1; and
  - (b) Grade 2;

(2) No grades are determined for Other Wheat.

**Standards for grades of wheat**

6. (1) Subject to the provisions of sub regulation (2), a consignment of wheat shall be graded as --

(a) Grade 1 if the nature of deviation, specified in column 1 of Table 1 of the Annexure, in that consignment does not exceed the percentage specified in column 2 of the said table opposite the deviation concerned;

(b) Grade 2 if the nature of deviation, specified in column 1 of Table 1 of the Annexure, in that consignment does not exceed the percentage specified in column 3 of the said table opposite the deviation concerned;

(2) The minimum hectare litre masses for the different grades are as follows:

(a) Grade 1 – 76 kg;

(b) Grade 2 - 74 kg;

**PART II**

**PACKING AND MARKING REQUIREMENTS**

**Packing requirements**

7. Wheat of different grades shall be packed in different containers, or stored separately.

**Marking requirements**

8. (1) Every container or the accompanying sale documents of a consignment of wheat shall be marked or endorsed by means of appropriate symbols specified in subregulation (2), with --

(a) the class of the wheat; and

(b) the grade.

(2) The symbols referred to in subregulation (1) shall appear in the order of class and grade.

(3) The symbols used to indicate the different --

(a) classes shall be --

(i) C in the case of Soft Wheat; and

(ii) O in the case of Other Wheat;

(b) grades shall be --

(i) 1 in the case of Grade 1;

(ii) 2 in the case of Grade 2;

**PART III**

**SAMPLING**

**Taking of sample**

9. (1) A sample of a consignment of wheat shall --

- (a) in the case of wheat delivered in bags and subject to regulation 10, be obtained by sampling at least ten per cent of the bags, chosen from that consignment at random, with a bag probe: Provided that at least 25 bags in a consignment shall be sampled and where a consignment consists of less than 25 bags, all the bags in that consignment shall be sampled; and
  - (b) in the case of wheat delivered in bulk and subject to regulation 10, be obtained by sampling that consignment throughout the whole depth of the layer, in at least six different places, chosen at random in that bulk quantity, with a bulk sampling apparatus.
- (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 by means of dividing before further examination.
- (3) If it is suspected that the sample referred to in sub regulation (1)(a) is not representative of that consignment, an additional five per cent of the remaining bags, chosen from that consignment at random, shall be emptied into a suitable bulk container and sampled in the manner contemplated in subregulation (1)(b).
- (4) If it is suspected that the sample referred to in sub regulation (1)(b) is not representative of that consignment, an additional representative sample shall be obtained by using an alternative sampling pattern, apparatus or method.
- (5) A sample taken in terms of these regulations shall be deemed to be representative of the consignment from which it was taken.

#### ***Sampling if contents differ***

10. (1) If, after an examination of the wheat taken from different bags in a consignment in terms of regulation 9(1)(a), it appears that the contents of those bags differ substantially --

- (a) the bags concerned shall be placed separately;
- (b) all the bags in the consignment concerned shall be sampled with a bag probe in order to do such separation; and
- (c) each group of bags with similar contents in that consignment shall for the purposes of these regulations be deemed to be a separate consignment.

(2) If, after the discharge of a consignment of wheat in bulk has commenced, it is suspected that the consignment could be of a class or grade other than that determined by means of the initial sampling, the discharge shall immediately be stopped and the part of the consignment remaining in the bulk container as well as the wheat already in the hopper shall be sampled anew with a bulk sampling apparatus or by catching at least 20 samples, by means of a suitable container, at regular intervals throughout the whole offloading period from the stream of wheat flowing in bulk.

#### ***Working sample***

11. A working sample is obtained by dividing the representative sample of the consignment according to the ICC (International Association for Cereal Science and Technology) 101/1 method.

**PART IV****DETERMINATION OF OTHER SUBSTANCES*****Determination of undesirable odours and harmful substances***

12. A consignment of wheat or a sample of a consignment of wheat shall be sensorial assessed or chemically analysed in order to determine --

- (a) whether it contains a substance that renders the wheat unfit for human consumption or for processing into or for utilisation as food or feed; and
- (b) whether it has a musty, sour, rancid or other undesirable odour: Provided that a working sample of unscreened wheat that is ground in a grain mill to a fine meal may be used for the determination concerned.

**PART V****DETERMINATION OF CLASS, HECTOLITRE MASS AND MOISTURE CONTENT*****Determination of class***

13. The class of a consignment of wheat shall be determined as follows:

- (a) Obtain a working sample of at least 500 g and screen the working sample in the manner prescribed in regulation 16.
- (b) Take at least 100 g of the screened wheat and remove all other grain, un threshed ears and foreign matter by hand.
- (c) Obtain a working sample of at least 25 g each after all other grain, un threshed ears and foreign matter have been removed and separate the different cultivars.
- (d) Determine the combined mass of all of the cultivars that belongs according to the cultivar list to the same class and express the mass thus determined as a percentage of the mass of the working sample.
- (e) Such percentage represents the percentage of all the cultivars that belongs according to the cultivar list to the same class in the consignment.

***Determination of the hectolitre mass***

14. The hectolitre mass of a consignment of unscreened wheat may be determined by any suitable instrument: Provided that the instrument complies with and has been calibrated to, the specifications detailed in ISO (International Organization for Standardization) 7971-3.

***Determination of moisture content***

15. The moisture content of a consignment wheat may be determined by any suitable method: Provided that the results thus obtained is in accordance with the maximum permissible deviation for a class 1 moisture meter as detailed in ISO (International Organization for Standardization) 7700/1 based on the results of the 72 hour, 103°C oven dried method [AACC (American Association for Cereal Chemists) Method 44-15A].

**PART VI****DETERMINATION OF PERCENTAGE DEVIATIONS*****Determination of percentage screenings***

16. (1) The percentage screenings in a consignment of wheat shall be determined as follows:

- (a) Obtain a working sample of at least 500 g.
- (b) Place the sample on the standard sieve and screen the sample by moving the sieve 50 strokes to and fro, alternately away from and towards the operator of the sieve, in the same direction as the long axes of the slots of the sieve. Move the sieve, which rests on a table or other suitable smooth surface, 250 mm to 460 mm away from and towards the operator with each stroke. The prescribed 50 strokes must be completed within 50 to 60 seconds: Provided that the screening process may also be performed in some or other container or an automatic sieving apparatus.
- (c) Determine the mass of the material that has passed through the sieve and express it as a percentage of the mass of the working sample.
- (d) Such percentage represents the percentage screenings in the consignment.

***Determination of the percentage heavily frost-damaged wheat***

17. The percentage heavily frost-damaged wheat in a consignment of wheat shall be determined as follows:

- (a) Obtain a working sample of at least 25 g of a screened sample.
- (b) Remove all heavily frost-damaged kernels by hand and determine the mass thereof.
- (c) Express the mass thus determined as a percentage of the mass of the working sample.
- (d) Such percentage represents the percentage heavily frost-damaged wheat in the consignment concerned.

***Determination of the percentages other grain and unthreshed ears***

18. The percentage other grain and unthreshed ears in a consignment of wheat shall be determined as follows:

- (a) Obtain a working sample of at least 50 g from a screened sample.
- (b) Remove all other grain and unthreshed ears by hand and determine the mass thereof.
- (c) Express the mass thus determined as a percentage of the mass of the working sample.
- (d) Such percentage represents the percentage other grain and unthreshed ears in the consignment concerned.

***Determination of the percentage foreign matter***

19. The percentage foreign matter in a consignment of wheat is determined as follows:

- (a) Obtain a working sample of at least 100 g from a screened sample.
- (b) Remove all foreign matter by hand and determine the mass thereof.
- (c) Express the mass thus determined as a percentage of the mass of the working sample.
- (d) Such percentage represents the percentage foreign matter in the consignment concerned.

***Determination of the percentage damaged wheat***

20. The percentage damaged wheat in a consignment of wheat shall be determined as follows:

- (a) Obtain a working sample of at least 25 g of a screened sample.
- (b) Remove all damaged kernels by hand and determine the mass thereof.
- (c) Express the mass thus determined as a percentage of the mass of the working sample.
- (d) Such percentage represents the percentage damaged wheat in the consignment concerned.

***Determination of the percentage heat-damaged wheat***

21. The percentage heat-damaged wheat in a consignment of wheat shall be determined as follows:
- (a) Obtain a working sample of at least 100 g from a screened sample.
  - (b) Remove all heat-damaged kernels by hand and determine the mass thereof. Kernels from an additional working sample may also be sensorially assessed (by smelling and tasting the kernels) to confirm suspicion of heat damage.
  - (c) Express the mass thus determined as a percentage of the mass of the working sample.
  - (d) Such percentage represents the percentage heat-damaged wheat in the consignment concerned.

***Determination of percentage field fungi infected wheat***

22. The percentage field fungi infected wheat in a consignment of wheat shall be determined as follows:
- (a) Obtain a working sample of at least 25 g from a screened sample.
  - (b) Remove all field fungi infected kernels by hand and determine the mass thereof.
  - (c) Express the mass thus determined as a percentage of the mass of the working sample.
  - (d) Such percentage represents the percentage of field fungi infected wheat in the consignment concerned.

***Determination of percentage storage fungi infected wheat***

23. The percentage storage fungi infected wheat in a consignment of wheat shall be determined as follows:
- (a) Obtain a working sample of at least 100 g from a screened sample.
  - (b) Remove all storage fungi infected kernels by hand and determine the mass thereof.
  - (c) Express the mass thus obtained as a percentage of the mass of the working sample.
  - (d) Such percentage represents the percentage storage fungi infected wheat in the consignment concerned.

**PART VII**

***Offence and penalties***

24. Any person who contravenes or fails to comply with any provision of these regulations shall be guilty of an offence and upon conviction be liable to a fine of not exceeding R50 000 or to imprisonment for a period not exceeding two years, or to both that fine or imprisonment.

**No. R. 1185****17 Desember 2010**

**WET OP LANDBOUPRODUKSTANDAARDE, 1990**  
**(WET No. 119 VAN 1990)**

**REGULASIES MET BETREKKING TOT DIE GRADERING, VERPAKKING EN MERK VAN SAGTE  
 KORING BESTEM VIR VERKOOP IN DIE REPUBLIEK VAN SUID-AFRIKA**

Die Minister van Landbou, Bosbou en Visserye, handelende kragtens artikel 15 van die Wet op Landbouprodukstandaarde, 1990 (Wet No.119 van 1990),

- (a) het die regulasies in die Bylae uitgevaardig;
- (b) bepaal dat die genoemde regulasies op die datum van publikasie in werking sal tree. en
- (c) herroeping van regulasies gepubliseer deur Goewermentskennisgewing Nos. R.905 van 10 Julie 1998 gewysig deur Goewermentskennisgewing Nos. R.1421 van 6 November 1998, R.876 van 14 September 2001, R.979 van 19 Julie 2002 en R.1210 van 29 Augustus 2003.

**BYLAE**

**Woordomskrywing**

1. In hierdie regulasies het enige word of uitdrukking waaraan 'n betekenis in die Wet geheg is, daardie betekenis en tensy uit die samehang anders blyk, beteken --

**"ander graan"** die korrels of stukkies korrels van gars, hawer, triticale, mielies, rog en sorghum;

**"besending"** --

- (a) 'n hoeveelheid koring van dieselfde klas, wat aan dieselfde eienaar behoort, wat op 'n bepaalde tydstip afgelewer word onder dekking van dieselfde vragbrief, afleveringsbrief of ontvangsbewys, of gelewer word deur dieselfde voertuig of losmaathouer, of wat uit dieselfde buis van 'n graansuier of 'n skeepsruim gelai word; of
- (b) in die geval waar 'n hoeveelheid in paragraaf (a) bedoel, ingedeel is in verskillende grade, elke sodanige hoeveelheid van elk van die verskillende grade;

**"beskadigde koring"** koring --

- (a) wat deur insekte beskadig is;
- (b) wat deur hitte van buite of as gevolg van hitte deur binnegisting in koring met 'n oormaat vog duidelik verkleur is (oranje-bruin, donkerbruin of swart), uitgesonderd koringkorrels ten opsigte waarvan die verkleuring tot die kiem-end beperk is;
- (c) wat onryp is en 'n duidelike groen kleur het; en
- (c) waarin ontkieming tot so 'n mate gevorder het dat die vel wat die kiem bedek, gebreek is of die ontwikkelende spruitjies en/of worteltjies duidelik sigbaar is;

**"die Wet"** die Wet op Landbouprodukstandaarde, 1990 (Wet No. 119 van 1990);

**"dierlike reste"** dooie knaagdiere, dooie voëls en mis;

**"ergot sclerotia"** die sclerotia van die fungus *Claviceps purpurea*; en **"ergot"** het 'n ooreenstemmende betekenis;

**"erg rybeskadigde koring" --**

- (a) koring wat gedurende die melk- tot sagte deegstadium deur strawwe ryp beskadig is en wat gekenmerk word deur korrels wat taamlik vet, maar heeltemal tot in die groef met klein blasies bedek is, met uitsondering van --
  - (i) korrels waarvan net die rugkant met blasies bedek is; en
  - (ii) onryp gerimpelde korrels waarin rimpeling deur ryp veroorsaak is terwyl die korrels nog onryp was; en
- (b) korrels wat 'n effens afgeskilferde semelskil het as gevolg van ryp: Met dien verstande dat bewys van rypskade teenwoordig is en dat die semelskil nie afgelyf is as gevolg van hantering nie;

**"giftige sade"** die sade of gedeeltes van sade van plantspesies wat volgens die Wet op Voedingsmiddels, Skoonheidsmiddels en Ontsmettingsmiddels, 1972 (Wet no 54 van 1972) 'n risiko vir menslike en dierlike gesondheid kan inhoud indien dit verbruik word, insluitende sade van *Argemone mexicana*, *Convolvulus* spp., *Crotalaria* spp., *Datura* spp., *Ipomoea purpurea*, *Lolium temulentum*, *Ricinus communis* of *Xanthium* spp.;

**"hektolitermassa"** die massa in kilogram per hektoliter;

**"houer"** 'n sak of losmaathouer;

**"insek"** met betrekking tot koring, enige lewende insek wat skadelik is vir opgebergde graan ongeag die stadium van ontwikkeling van daardie insek;

**"koring"** die korrels of stukkies korrels van die spesies *Triticum aestivum*;

**"kultivarlys"** die lys van kultivars van tyd tot tyd deur die Uitvoerende Beampte: Landbouprodukstanndaarde vasgestel en wat vanaf die Uitvoerende Beampte: Landbouprodukstandaarde, Privaatsak X258, Pretoria, 0001 verkrybaar is;

**"landswambesmette koring"** koring waarvan die korrels sigbaar met swamme besmet is, en wat --

- (a) duidelik grysagtige kwas-ente, wat as geheel verkleur is, het; of waar land swamgroeи vanaf die kwas-ent tot in die groef voorkom;
- (b) as gevolg van *Fusarium*-besmetting 'n dowie lewelose, krytagtige of pienkerige en verkrimpte voorkoms het;

**"losmaathouer"** enige vervoermiddel of houer waarin losmaatkoring opgeberg of vervoer word;

**"ongedorste are"** are en gedeeltes van are van koring, gars, triticale en rog wat nog korrels bevat wat ten volle met blomkaffies bedek is;

**"opbergingswambesmette koring"** koring wat sigbaar met swamme besmet is, en wat --

- (a) blou, groen, swartagtige, wit of geel swamgroeи enige plek op die korrel vertoon; of
- (b) sigbare swamgroeи onder die semel vertoon;

**"sak"** 'n sak vervaardig—

- (a) van jute of phormium of 'n mengsel van jute of phormium; of
- (b) van polipropileen wat voldoen aan SABS spesifikasie CKS632;

**"sifseis"** alle materiaal wat deur die standaardsif gaan;

"**standaardsif**" is 'n gleufsif:

- (a) met 'n plat bodem van metaalplaat van 1,0 mm dikte met langwerpige gleuwe van 12,7 mm in lengte en 1,8 mm in breedte met geronde ente. Die spasiëring tussen die gleuwe in dieselfde ry moet 2,43 mm wyd wees en die spasiëring tussen die rye gleuwe moet 2,0 mm wyd wees. Die gleuwe moet afwisselend georiënteerd wees, met 'n gleuf altyd regoor 'n soliede tussensegment van die naasliggende ry gleuwe;
- (b) waarvan die boonste oppervlak van die sif glad is;
- (c) met 'n ronde raam van gesikte materiaal met 'n binnedeursnee van minstens 300 mm en maksimum 310 mm en minstens 50 mm hoog;
- (d) wat op 'n pan met 'n soliede bodem pas en moet minstens 20 mm bo die bodem van die pan wees.

"**stinkbrandbesmetting**" koring wat met *Tilletia spp.* besmet is, met uitsondering van koring wat met *Tilletia indica* (karnal bunt) besmet is. Koring word as stinkbrand besmet beskou as een of meer van die volgende eienskappe waargeneem word:

- (a) 'n onmiskenbare stinkbrandreuk; of
- (b) koringkorrels wat met stinkbrand besmeer is; of
- (c) meer as vier stinkbrandballe of stukkies bal gelyk aan vier stinkbrandballe per 100 g koring; en

"**vreemde voorwerpe**" alle materiaal uitgesonderd koring, ander graan en ongedorste are.

#### **Beperkings op verkoop van koring**

2. (1) Niemand mag 'n besending koring in die Republiek van Suid-Afrika verkoop nie --
  - (a) tensy die koring verkoop word volgens die klasse in regulasie 3 uiteengesit;
  - (b) tensy die koring voldoen aan die standaarde vir die betrokke klas in regulasie 4 uiteengesit;
  - (c) tensy die koring, waar van toepassing, voldoen aan die grade van koring en standaarde vir grade in regulasies 5 en 6 onderskeidelik uiteengesit;
  - (d) tensy die koring verpak is volgens die verpakkingsvereistes in regulasie 7 uiteengesit;
  - (e) tensy die houer of verkoopsdokumente, na gelang van die geval, gemerk is in ooreenstemming met die merkvereistes in regulasie 8 uiteengesit; en
  - (f) indien sodanige koring 'n stof bevat wat dit ongeskik maak vir menslike verbruik of vir verwerking tot of aanwending daarvan as voedsel of voer.
- (2) Die Uitvoerende Beampete kan iemand skriftelik, in die geheel of gedeeltelik, op die voorwaardes wat hy of sy nodig ag, van die bepalings van subregulasie (1) vrystel.

#### **DEEL I**

#### **GEHALTESTANDAARDE**

##### **Klasse koring**

3. Die klasse koring is --

- (a) Sagte koring;
- (b) Ander Koring.

**Standaarde vir klasse**

4. (1) Neteenstaande die bepalings van subregulasies (2) en (3), moet alle besendings koring -
- (a) vry wees van enige toksiene, chemiese of ander stowwe wat dit ongeskik maak vir menslike verbruik of vir verwerking tot of aanwending daarvan as voedsel of voer en mag nie die toelaatbare afwykings ten opsigte van aflatoksiene kragtens die Wet op Voedingsmiddels, Skoonheidsmiddels en Ontsmettingsmiddels, 1972 (Wet No. 54 van 1972) oorskry nie;
  - (b) nie meer giftige sade of ergot sclerotia bevat as wat toegelaat word kragtens die Wet op Voedingsmiddels, Skoonheidsmiddels en Ontsmettingsmiddels, 1972 (Wet No. 54 van 1972) nie;
  - (c) vry wees van organismes van fitosanit re belang soos bepaal word kragtens die Wet op Landbouplae, 1983 (Wet No. 36 van 1983);
  - (d) vry wees van swambesmette, suur- en galsterige ander graan, vreemde voorwerpe en enige ander materiaal;
  - (e) vry wees van enige ongewenste reuk, smaak of kleur wat nie eie aan ongeskonde en gesonde koring is nie;
  - (f) vry wees van dierlike reste;
  - (g) met die uitsondering van Ander Koring, vry wees van insekte;
  - (h) met die uitsondering van Ander Koring, vry wees van stinkbrandbesmetting; en
  - (i) met die uitsondering van Ander Koring, 'n voginhoud van hoogstens 13 persent h .
- (2) 'n Besending word as Sagte koring geklassifiseer indien --
- (a) die koring in die besending uit minstens 95 persent (m/m) van een of meer van die Sagte koringkultivars in die kultivarlys bestaan ; en
  - (b) dit voldoen aan die standaarde vir Graad 1 en Graad 2 in regulasie 6 uiteengesit.
- (3) 'n Besending koring word as Ander Koring geklassifiseer indien dit nie voldoen aan die standaarde vir Sagte koring nie.

**Grade koring**

5. (1) Die grade vir Sagte koring is soos volg:
- (a) Graad 1; en
  - (b) Graad 2;
- (2) Geen grade word vir Ander Koring bepaal nie.

**Standaarde vir grade koring**

6. (1) Behoudens die bepalings van subregulasies (2) word 'n besending koring gegradeer as --

- (a) Graad 1 indien die aard van afwyking, in kolom 1 van Tabel 1 van die Aanhangsel gespesifieer, in daardie besending nie die persentasie in kolom 2 van genoemde tabel teenoor die betrokke afwyking gespesifieer, oorskry nie; en
  - (b) Graad 2 indien die aard van afwyking, in kolom 1 van Tabel 1 van die Aanhangsel gespesifieer, in daardie besending nie die persentasie in kolom 3 van genoemde tabel teenoor die betrokke afwyking gespesifieer, oorskry nie;
- (2) Die minimum hektolitermassas vir die verskillende grade is soos volg:
- (a) Graad 1 - 76 kg;
  - (b) Graad 2 - 74 kg;

**DEEL II****VERPAKKINGS- EN MERKVEREISTES*****Verpakkingsvereistes***

7. Koring van verskillende klasse moet in verskillende houers verpak word.

***Merkvereistes***

8. (1) Elke houer of die meegaande verkoopsdokumente van 'n besending koring moet gemerk of geëndoseer word, met behulp van gepaste simbole in subregulasie (2) bepaal, met --
- (a) die klas van die koring; en
  - (b) die graad.
- (2) Die simbole in subregulasie (1) bedoel moet in die orde van klas en graad, aangedui word.
- (3) Die simbole gebruik as aanduiding van die verskillende --
- (a) klasse is --
    - (i) C in die geval van Sagte koring;
    - (ii) O in die geval van Ander Koring;
  - (b) grade is --
    - (i) 1 in die geval van Graad 1;
    - (ii) 2 in die geval van Graad 2.

**DEEL III****MONSTERNEMING*****Verkryging van monster***

9. (1) 'n Monster van 'n besending koring word --
- (a) in die geval van koring in sakke gelewer en behoudens regulasie 10, verkry deur minstens tien persent van die sakke, ewekansig uit daardie besending gekies, met 'n saksteker te bemonster: Met dien verstande dat minstens 25 sakke in 'n besending bemonster word en waar 'n besending uit minder as 25 sakke bestaan, al die sakke in daardie besending bemonster word; en

- (b) in die geval van koring in losmaat gelewer en behoudens regulasie 10, verkry deur daardie besending deur die volle diepte, by minstens ses verskillende plekke, ewekansig in daardie losmaathoeveelheid uitgekies, met 'n losmaatmonternemingsapparaat te bemonster.
- (2) Die gesamentlike monster in subregulasie (1)(a) of (b) verkry, moet --
- (a) 'n totale massa van minstens 10 kg hé; en
  - (b) deeglik gemeng word deur verdeling voor verdere ondersoek.

(3) Indien vermoed word dat die monster in subregulasie (1)(a) bedoel, nie verteenwoordigend van daardie besending is nie, word 'n addisionele vyf persent van die oorblywende sakke, ewekansig uit daardie besending gekies, in 'n geskikte losmaathouer uitgegooi en bemonster op die wyse in subregulasie (1)(b) beoog.

(4) Indien vermoed word dat die monster in subregulasie (1)(b) bedoel, nie verteenwoordigend van daardie besending is nie, moet 'n addisionele verteenwoordigende monster verkry word deur 'n alternatiewe monternemingspatroon, -apparaat of -metode gebruik te maak.

(5) 'n Monster ingevolge hierdie regulasies geneem, word geag verteenwoordigend te wees van die besending waaruit dit geneem is.

#### ***Monterneming indien inhoud verskil***

10. (1) Indien dit blyk, na 'n ondersoek van die koring wat ingevolge regulasie 9(1)(a) uit verskilende sakke in 'n besending geneem is, dat die inhoud van daardie sakke wesenlik verskil, word --

- (a) die onderskeie sakke van mekaar geskei;
- (b) al die sakke in die betrokke besneding met 'n saksteker bemonster ten einde sodanige skeiding te doen; en
- (c) elke groep sakke met 'n soortgelyke inhoud in daardie besending vir die doeleindes van hierdie regulasies geag 'n afsonderlike besending te wees.

(2) Indien, nadat met die aflaai van 'n besending koring in losmaat begin is, daar vermoed word dat die besending van 'n ander klas of graad kan wees as wat met behulp van die aanvanklike bemonstering bepaal is, word die aflaaioproses onmiddellik gestaak en word die deel van die besending wat in die losmaathouer oorbly asook die koring wat reeds in die opvangbak gestort is, van vooraf met 'n losmaatmonternemingsapparaat bemonster of deur minstens 20 monsters met 'n geskikte houer, met gereelde tussenposes oor die hele aflaiperiode, uit die stroom van die koring wat in losmaat vloei, op te vang.

#### ***Werkmonster***

11. 'n Werkmonster koring word verkry deur die verteenwoordigende monster van die besending volgens die ICC (International Association for Cereal Science and Technology) 101/1 metode, te verdeel.

## **DEEL IV**

### **BEPALING VAN ANDER STOWWE**

#### ***Bepaling van ongewenste reuke en skadelike stowwe***

12. 'n Besending koring of monster van 'n besending koring word sintuiglik beoordeel of skeikundig ontleed ten einde te bepaal --

- (a) of dit 'n stof bevat wat die koring ongeskik maak vir menslike verbruik of vir verwerking tot of aanwending as voedsel of voer; en

- (b) of dit 'n muwwe, suur, galsterige of ander ongewenste reuk: Met dien verstande dat 'n werkmonster ongesifte koring met 'n graanmeul tot 'n fyn meel gemaal vir die betrokke beoordeling gebruik kan word.

**DEEL V****BEPALING VAN KLAS, HEKTOLITERMASSA EN VOGINHOUD*****Bepaling van klas***

13. Die klas van 'n besending koring word soos volg bepaal:
- Verkry 'n werkmonster van minstens 500 g en sif die werkmonster op die wyse soos in regulasie 16 bepaal.
  - Neem minstens 100 g van die gesifte koring en verwijder alle ander graan, ongedorste are en vreemde stowwe met die hand.
  - Verkry 'n werkmonster van minstens 25 g nadat alle ander graan, ongedorste are en vreemde stowwe verwijder is en skei die verskillende kultivars.
  - Bepaal die massa van alle kultivars wat volgens die kultivarlys aan dieselfde klas behoort gesamentlik en druk die massa aldus bepaal uit as 'n persentasie van die werkmonster.
  - Sodanige persentasie verteenwoordig die persentasie van alle kultivars wat volgens die kultivarlys aan dieselfde klas behoort in die besending.

***Bepaling van hektolitermassa***

14. Die hektolitermassa van 'n besending koring kan volgens enige gesikte instrument bepaal word: Met dien verstande dat die instrument voldoen aan en is gekalibreer deur die spesifikasies soos uiteengesit in ISO (International Organization for Standardization) 7971-3.

***Bepaling van voginhoud***

15. Die voginhoud van 'n besending koring kan volgens enige gesikte metode bepaal word: Met dien verstande dat die resultate aldus verkry in ooreenstemming is met die maksimum toelaatbare afwyking vir 'n klas 1 vogmeter soos uiteengesit in ISO (International Organization for Standardization) 7700/1 gebaseer op die resultate van die 72 uur, 103°C oonddroogmetode [AACC (American Association for Cereal Chemists) Metode 44-15A].

**DEEL VI****BEPALING VAN PERSENTASIE AFWYKINGS*****Bepaling van die persentasie sifsels***

16. (1) Die persentasie sifsels in 'n besending koring word soos volg bepaal:
- Verkry 'n werkmonster van minstens 500 g.
  - Plaas die monster op 'n standaardsif, sif die monster deur die sif 50 stote heen en weer, beurtelings weg van en terug na die hanteerder van die sif, te beweeg in dieselfde rigting as die lengte-asse van die openings van die sif. Beweeg met elke stoot die sif, wat op 'n tafel of ander gesikte gladde oppervlak rus, 250 mm tot 460 mm weg van en terug na die hanteerder. Die voorgeskrewe 50 stote moet binne 50 tot 60 sekondes voltooi word: Met dien verstande dat die sifproses ook op die voorgeskrewe wyse in een of ander houer of 'n outomatiese sifapparaat gedoen kan word.

- (c) Bepaal die massa van die materiaal wat deur die sif gegaan het en druk dit uit 'n persentasie van die massa van die werkmonster.
- (d) Sodanige persentasie verteenwoordig die persentasie sifsels in die betrokke besending.

**Bepaling van persentasie erg rypbeskadigde koring**

17. Die persentasie erg rypbeskadigde koring in 'n besending koring word soos volg bepaal:
- (a) Verkry 'n werkmonster van minstens 25 g van 'n gesifte monster.
  - (b) Verwyder alle erg rypbeskadigde korrels met die hand en bepaal die massa daarvan.
  - (c) Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
  - (d) Sodanige persentasie verteenwoordig die persentasie erg rypbeskadigde koring in die betrokke besending.

**Bepaling van persentasie ander graan en ongedorste are**

18. Die persentasie ander graan en ongedorste are in 'n besending koring word soos volg bepaal:
- (a) Verkry 'n werkmonster van minstens 50 g van 'n gesifte monster.
  - (b) Verwyder alle ander graan en ongedorste are met die hand en bepaal die massa daarvan.
  - (c) Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
  - (d) Sodanige persentasie verteenwoordig die persentasie ander graan en ongedorste are in die besending.

**Bepaling van persentasie vreemde voorwerpe**

19. Die persentasie vreemde voorwerpe in 'n besending koring word soos volg bepaal:
- (a) Verkry werkmonster van minstens 100 g van 'n gesifte monster.
  - (b) Verwyder alle vreemde voorwerpe met die hand en bepaal die massa daarvan.
  - (c) Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
  - (d) Sodanige persentasie verteenwoordig die persentasie vreemde voorwerpe in die besending.

**Bepaling van persentasie beskadigde koring**

20. Die persentasie beskadigde koring in 'n besending koring word soos volg bepaal:
- (a) Verkry 'n werkmonster van minstens 25 g van 'n gesifte monster.
  - (b) Verwyder alle beskadigde korrels met die hand en bepaal die massa daarvan.
  - (c) Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
  - (d) Sodanige persentasie verteenwoordig die persentasie beskadigde koring in die besending.

***Bepaling van persentasie hittebeskadigde koring***

21. Die persentasie hittebeskadigde koring in 'n besending koring word soos volg bepaal:
- (a) Verkry 'n werkmonster van minstens 100 g van 'n gesifte monster.
  - (b) Verwyder alle hittebeskadigde korrels uit die werkmonster met die hand en bepaal die massa daarvan. Korrels van 'n addisionele werkmonster mag ook sintuiglik ondersoek word (deur aan korrels te ruik en te proe) om vermoede van hittebeskadiging te bevestig.
  - (c) Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
  - (d) Sodanige persentasie verteenwoordig die persentasie hittebeskadigde koring in die besending.

***Bepaling van persentasie landswambesmette koring***

22. Die persentasie landswambesmette koring in 'n besending koring word soos volg bepaal:
- (a) Verkry 'n werkmonster van minstens 25 g van 'n gesifte monster.
  - (b) Verwyder alle landswambesmette korrels met die hand en bepaal die massa daarvan.
  - (c) Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
  - (d) Sodanige persentasie verteenwoordig die persentasie landswambesmette koring in die betrokke besending.

***Bepaling van persentasie opbergingswambesmette koring***

23. Die persentasie opbergingswambesmette korrels koring in 'n besending koring word soos volg bepaal:
- (a) Verkry 'n werkmonster van minstens 100 g van 'n gesifte monster.
  - (b) Verwyder alle opbergingswambesmette korrels uit die werkmonster in met die hand en bepaal die massa daarvan.
  - (c) Druk die massa aldus uit as 'n persentasie van die massa van die werkmonster.
  - (d) Sodanige persentasies verteenwoordig die persentasie opbergingswambesmette koring in die betrokke besending.

**DEEL VII*****Oortreding en strawwe***

24. Iemand wat 'n bepaling van hierdie regulasie oortree of versuim om daaraan te voldoen, is aan 'n misdryf skuldig en by skuldigbevinding strafbaar met 'n boete van hoogstens R50 000 of met gevangenisstraf vir 'n tydperk van hoogstens twee jaar of met daardie boete sowel as daardie gevangenisstraf.

## ANNEXURE/AANHANGSEL

TABLE 1/TABEL 1

STANDARDS FOR GRADES OF SOFT WHEAT/  
STANDAARDE VIR GRADE VAN SAGTE KORING

Nature of deviation/ 1	Maximum percentage permissible deviation (m/m)/ Maksimum persentasie toelaatbare afwyking (m/m)	
	Grade 1/ Graad 1 2	Grade 2/ Graad 2 3
(a) Heavily frost-damaged kernels/ Erg rybeskadigde korrels	5	5
(b) Field fungi infected kernels/Landswambesmette korrels	2	2
(c) Storage fungi infected kernels/ Opbergingswambesmette korrels	0,5	0,5
(d) Screenings/Sifsels	3	3
(e) Other grain and unthreshed ears/ Ander graan en ongedorste are	1	1
(f) Gravel, stones, turf and glass/ Gruis, klippies, turf en glas	0,5	0,5
(g) Foreign matter including gravel, stones, turf and glass: Provided that such deviations are individually within the limits specified in item (f)/ Vreemde voorwerpe met inbegrip van gruis, klippies, turf en glas: Met dien verstande dat sodanige afwykings individueel binne die perke is in item (f) aangegee	1	1
(h) Heat-damaged kernels/Hittebeskadigde korrels	0,5	0,5

<b>Nature of deviation/</b>	<b>Maximum percentage permissible deviation (m/m)/ Maksimum persentasie toelaatbare afwyking (m/m)</b>	
	<b>Grade 1/ Graad 1</b>	<b>Grade 2/ Graad 2</b>
<b>1</b>	<b>2</b>	<b>3</b>
(i) Damaged kernels, including heat-damaged kernels: Provided that such deviations are individually within the limit specified in item (h) and provided further that the minimum falling number value prescribed in regulation 6(3) for the grade concerned is at least complied with/Beskadigde korrels met inbegrip van hittebeskadigde korrels: Met dien verstande dat sodanige afwyking individueel binne die perke is in item (h) aangegee en met dien verstande voorts dat minstens aan die minimum valgetalwaarde in regulasie 6(3) vir die betrokke graad voorgeskryf, voldoen word	2	2
(j) Deviations in items (d), (e), (g) and (i) collectively: Provided that such deviations are individually within the limits of the said items/ Afwykings in items (d), (e), (g) en (i) gesamentlik: Met dien verstande dat sodanige afwykings individueel binne die perke van genoemde items is	5	5

**No. R. 1186****17 December 2010**

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

**REGULATIONS RELATING TO THE GRADING, PACKING AND MARKING OF  
BREAD WHEAT INTENDED FOR SALE IN THE REPUBLIC OF SOUTH AFRICA**

The Minister of Agriculture, Forestry and Fisheries, acting under section 15 of the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990), has

- (a) made the regulations in the Schedule;
- (b) determined that the said regulations shall come into operations on the date of publication; and
- (c) repealed the regulations published in Government Notice No's R. 905 of 10 July 1998 as amended by R.1421 of 6 November 1998, R.876 of 14 September 2001, R.979 of 19 July 2002, and R.1210 of 29 August 2003.

**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;

**"animal rests"** means dead rodents, dead birds and dung;

**"bag"** means a bag manufactured from --

- (a) jute or phormium or a mixture of jute and phormium; or
- (b) polypropylene that complies with SABS specification CKS632;

**"bulk container"** means any vehicle or container in which bulk wheat is stored or transported;

**"consignment"** means --

- (a) a quantity of wheat of the same class, which belongs to the same owner, delivered at any one time under cover of the same consignment note, delivery note or receipt note, or delivered by the same vehicle or bulk container, or loaded from the same bin of a grain elevator or from a ship's hold; or
- (b) in the case where a quantity referred to in paragraph (a), is subdivided into different grades, each such quantity of each of the different grades;

**"container"** means a bag or bulk container;

**"cultivar list"** means the list of cultivars determined from time to time by the Executive Officer: Agricultural Product Standards and which is obtainable from the Executive Officer: Agricultural Product Standards, Private Bag X258, Pretoria, 0001;

**"damaged wheat"** means wheat --

- (a) which have been damaged by insects;
- (b) which have been distinctly discoloured (orange-brown, dark brown or black) by external heat or as a result of heating caused by internal fermentation in wheat with an excessive

moisture content, excluding wheat kernels in respect of which the discolouration is confined to the germ end;

- (c) which are immature and have a distinctly green colour; and
- (d) in which germination has proceeded to such an extent that the skin covering the embryo has been broken or the developing sprouts and/or rootlets are clearly visible;

**"ergot sclerotia"** means the sclerotia of the fungus *Claviceps purpurea*; and **"ergot"** has a corresponding meaning;

**"falling number"** means the time in seconds according to Hagberg-Perten as a measure of the degree of Alpha-Amylase activity in grain and flour;

**"field fungi infected wheat"** means wheat of which the kernels are visibly infected with fungi, and that -

- (a) clearly have greyish brush-ends that are discoloured as a whole; or where field fungi growth is present from the brush-ends into the crease;
- (b) have a dull, lifeless, chalky or pinkish and shrunken appearance as a result of *Fusarium* infection;

**"foreign matter"** means all material excluding wheat, other grain and unthreshed ears;

**"heavily frost-damaged wheat"** means --

- (a) wheat which have been damaged by severe frost during the milk to soft dough stage and which is characterised by the kernels being fairly plump but covered entirely with small blisters extending into the crease, excluding --
  - (i) kernels in which blistering is confined to the back of the kernel; and
  - (ii) immature wrinkled kernels in which wrinkling has been caused by frost while the kernels were still immature; and
- (b) kernels which have a slightly flaked-off bran coat due to frost: Provided that evidence of frost damage is present and that the bran coat had not been rubbed off due to handling;

**"hectolitre mass"** means the mass in kilogram per hectolitre;

**"insect"** in relation to wheat, means any live insect that is injurious to stored grain irrespective of the stage of development of that insect;

**"other grain"** means the kernels or pieces of kernels of barley, oats, triticale, maize, rye and sorghum;

**"poisonous seeds"** means the seeds or bits of seeds of plant species that may in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972) represent a hazard to human or animal health when consumed, including seeds of *Argemone mexicana*, *Convolvulus* spp., *Crotalaria* spp., *Datura* spp., *Ipomoea purpurea*, *Lolium temulentum*, *Ricinus communis* or *Xanthium* spp.;

**"protein content"** means the percentage protein in wheat on a 12% moisture basis;

**"screenings"** means all material that passes through the standard sieve;

**"standard sieve"** is a slotted sieve - -

- (a) with a flat bottom of metal sheet of 1,0 mm thickness with apertures 12,7 mm long and 1,8 mm wide with rounded ends. The spacing between the slots in the same row must be 2,43 mm wide and the spacing between the rows of slots must be 2,0 mm wide. The slots

must be alternately orientated with a slot always opposite the solid inter segment of the next row of slots.

- (b) of which the upper surface of the sieve is smooth;
- (c) with a round frame of suitable material with an inner diameter of between 300 mm and 310 mm maximum and at least 50 mm high;
- (d) that fits onto a tray with a solid bottom and must be at least 20 mm above the bottom of the tray;

**"stinking smut infection"** means wheat that is infected with *Tilletia spp.* with the exception of wheat infected with *Tilletia indica* (karnal bunt). Wheat is considered stinking smut infected if one or more of the following characteristics are present:

- (a) an unmistakable stinking smut odour; or
- (b) wheat kernels that are smeared with stinking smut; or
- (c) more than four stinking smut balls (or pieces of balls equal to four stinking smut balls) per 100 g of wheat;

**"storage fungi infected wheat"** means wheat that are visibly infected with fungi, and that show -

- (a) blue, green, blackish or yellow fungal growth anywhere on the kernel; or
- (b) visible mould beneath the bran;

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

**"unthreshed ears"** means ears and bits of ears of wheat, barley, triticale and rye that still contain seeds that are completely covered with glumes; and

**"wheat"** means the kernels and pieces of kernels of the species *Triticum aestivum*.

#### ***Restrictions on sale of wheat***

2. (1) No person shall sell a consignment of wheat in the Republic of South Africa --
  - (a) unless the wheat is sold according to the classes set out in regulation 3;
  - (b) unless the wheat complies with the standards for the classes set out in regulation 4;
  - (c) unless the wheat, where applicable, complies with the grades of wheat and the standards for grades set out in regulations 5 and 6 respectively;
  - (d) unless the wheat is packed in accordance with the packing requirements set out in regulation 7;
  - (e) unless the containers or sale documents, as the case may be, are marked in accordance with the marking requirements set out in regulation 8; and
  - (f) if such wheat contains a substance that renders it unfit for human consumption or for processing into or utilisation thereof as food or feed.

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

**PART I****QUALITY STANDARDS*****Classes of wheat***

3. The classes of wheat are --
- (a) Bread Wheat; and
  - (b) Other Wheat.

***Standards for classes***

4. (1) Notwithstanding the provisions of sub regulations (2) and (3), all consignments of wheat must --
- (a) be free from any toxin, chemical or other substances that renders it unsuitable for human consumption or for processing into or utilisation thereof as food or feed and may not exceed the permissible deviations regarding aflatoxin in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972);
  - (b) contain not more poisonous seeds or ergot sclerotia than permitted in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972);
  - (c) be free from organisms of phytosanitary importance as determined in terms of the Agricultural Pest Act, 1983 (Act No. 36 of 1983);
  - (d) be free from mould infected, sour and rancid other grain, foreign matter and any other matter;
  - (e) be free from any undesired odour, taste or colour not typical of undamaged and sound wheat;
  - (f) be free from animal rests;
  - (g) with the exception of Other Wheat, be free from insects;
  - (h) with the exception of Other Wheat, be free from stinking smut infection; and
  - (i) with the exception of Other Wheat, have a moisture content not exceeding 13 per cent.
- (2) A consignment shall be classified as Bread Wheat if --
- (a) the wheat in the consignment consists of at least 95 per cent (m/m) of one or more of the bread wheat cultivars specified in the cultivar list; and
  - (b) it complies with the standards for Grade 1, Grade 2, Grade 3, Grade 4 or Utility Grade set out in regulation 6.
- (3) A consignment of wheat shall be classified as Other Wheat if it does not comply with the standards for Bread Wheat.

***Grades of wheat***

5. (1) The grades for Bread Wheat shall be as follows:
- (a) Grade 1;
  - (b) Grade 2;

- (c) Grade 3;
  - (d) Grade 4; and
  - (e) Utility grade.
- (2) No grades are determined for Other Wheat.

**Standards for grades of wheat**

6. (1) Subject to the provisions of subregulations (2), (3) and (4), a consignment of wheat shall be graded as --

- (a) Grade 1 if the nature of deviation, specified in column 1 of Table 1 of the Annexure, in that consignment does not exceed the percentage specified in column 2 of the said table opposite the deviation concerned;
  - (b) Grade 2 if the nature of deviation, specified in column 1 of Table 1 of the Annexure, in that consignment does not exceed the percentage specified in column 3 of the said table opposite the deviation concerned;
  - (c) Grade 3 if the nature of deviation, specified in column 1 of Table 1 of the Annexure, in that consignment does not exceed the percentage specified in column 4 of the said table opposite the deviation concerned;
  - (d) Grade 4 if the nature of deviation, specified in column 1 of Table 1 of the Annexure, in that consignment does not exceed the percentage specified in column 5 of the said table opposite the deviation concerned; and
  - (e) Utility Grade if the nature of deviation, specified in column 1 of Table 1 of the Annexure, in that consignment does not exceed the percentage specified in column 6 of the said table opposite the deviation concerned.
- (2) The minimum hectare litre masses for the different grades are as follows:
- (a) Grade 1 - 77 kg;
  - (b) Grade 2 - 76 kg;
  - (c) Grade 3 - 74 kg;
  - (d) Grade 4 - 72 kg; and
  - (e) Utility Grade - 70 kg.
- (3) (a) Grade 1, Grade 2 and Grade 3 shall have a minimum falling number value of not less than 250 seconds;
- (b) Grade 4 shall have a minimum falling number value of not less than 200 seconds.
- (c) Utility Grade shall have a minimum falling number value of not less than 150 seconds.
- (d) Notwithstanding the provision of paragraph (a), wheat shall be deemed to comply with the requirements of the paragraph concerned if it deviates with not more than 30 seconds lower than the minimum prescribed for Grade 1, Grade 2 and Grade 3, as the case may be.

(4) The minimum protein content (on a 12 per-cent moisture basis) for the different grades shall be as follows:

- (a) Grade 1 - 12 per cent;
- (b) Grade 2 - 11 per cent;
- (c) Grade 3 - 10 per cent;
- (d) Grade 4 - 9 per cent; and
- (e) Utility Grade - 8 per cent.

## PART II

### PACKING AND MARKING REQUIREMENTS

#### *Packing requirements*

7. Wheat of different grades shall be packed in different containers, or stored separately.

#### *Marking requirements*

8. (1) Every container or the accompanying sale documents of a consignment of wheat shall be marked or endorsed by means of appropriate symbols specified in subregulation (2), with --

- (a) the class of the wheat; and
  - (b) the grade.
- (2) The symbols referred to in subregulation (1) shall appear in the order of class and grade.
- (3) The symbols used to indicate the different --
- (a) classes shall be --
    - (i) B in the case of Bread Wheat; and
    - (ii) O in the case of Other Wheat;
  - (b) grades shall be --
    - (i) 1 in the case of Grade 1;
    - (ii) 2 in the case of Grade 2;
    - (iii) 3 in the case of Grade 3;
    - (iv) 4 in the case of Grade 4; and
    - (v) UT in the case of Utility Grade.

## PART III

### SAMPLING

#### *Taking of sample*

9. (1) A sample of a consignment of wheat shall --

(a) in the case of wheat delivered in bags and subject to regulation 10, be obtained by sampling at least ten per cent of the bags, chosen from that consignment at random, with a bag probe: Provided that at least 25 bags in a consignment shall be sampled and where a consignment consists of less than 25 bags, all the bags in that consignment shall be sampled; and

(b) in the case of wheat delivered in bulk and subject to regulation 10, be obtained by sampling that consignment throughout the whole depth of the layer, in at least six different places, chosen at random in that bulk quantity, with a bulk sampling apparatus.

(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 by means of dividing before further examination.

(3) If it is suspected that the sample referred to in sub regulation (1)(a) is not representative of that consignment, an additional five per cent of the remaining bags, chosen from that consignment at random, shall be emptied into a suitable bulk container and sampled in the manner contemplated in subregulation (1)(b).

(4) If it is suspected that the sample referred to in sub regulation (1)(b) is not representative of that consignment, an additional representative sample shall be obtained by using an alternative sampling pattern, apparatus or method.

(5) A sample taken in terms of these regulations shall be deemed to be representative of the consignment from which it was taken.

#### ***Sampling if contents differ***

10. (1) If, after an examination of the wheat taken from different bags in a consignment in terms of regulation 9(1)(a), it appears that the contents of those bags differ substantially --

(a) the bags concerned shall be placed separately;

(b) all the bags in the consignment concerned shall be sampled with a bag probe in order to do such separation; and

(c) each group of bags with similar contents in that consignment shall for the purposes of these regulations be deemed to be a separate consignment.

(2) If, after the discharge of a consignment of wheat in bulk has commenced, it is suspected that the consignment could be of a class or grade other than that determined by means of the initial sampling, the discharge shall immediately be stopped and the part of the consignment remaining in the bulk container as well as the wheat already in the hopper shall be sampled anew with a bulk sampling apparatus or by catching at least 20 samples, by means of a suitable container, at regular intervals throughout the whole offloading period from the stream of wheat flowing in bulk.

#### ***Working sample***

11. A working sample is obtained by dividing the representative sample of the consignment according to the ICC (International Association for Cereal Science and Technology) 101/1 method.

**PART IV****DETERMINATION OF OTHER SUBSTANCES*****Determination of undesirable odours and harmful substances***

12. A consignment of wheat or a sample of a consignment of wheat shall be sensorial assessed or chemically analysed in order to determine --

- (a) whether it contains a substance that renders the wheat unfit for human consumption or for processing into or for utilisation as food or feed; and
- (b) whether it has a musty, sour, rancid or other undesirable odour: Provided that a working sample of unscreened wheat that is ground in a grain mill to a fine meal may be used for the determination concerned.

**PART V****DETERMINATION OF CLASS, HECTOLITRE MASS,  
MOISTURE CONTENT, PROTEIN CONTENT AND FALLING NUMBER*****Determination of class***

13. The class of a consignment of wheat shall be determined as follows:

- (a) Obtain a working sample of at least 500 g and screen the working sample in the manner prescribed in regulation 18.
- (b) Take at least 100 g of the screened wheat and remove all other grain, un threshed ears and foreign matter by hand.
- (c) Obtain a working sample of at least 25 g each after all other grain, un threshed ears and foreign matter have been removed and separate the different cultivars.
- (d) Determine the combined mass of all of the cultivars that belongs according to the cultivar list to the same class and express the mass thus determined as a percentage of the mass of the working sample.
- (e) Such percentage represents the percentage of all the cultivars that belongs according to the cultivar list to the same class in the consignment.

***Determination of the hectolitre mass***

14. The hectolitre mass of a consignment of unscreened wheat may be determined by any suitable instrument: Provided that the instrument complies with and has been calibrated to, the specifications detailed in ISO (International Organization for Standardization) 7971-3.

***Determination of moisture content***

15. The moisture content of a consignment wheat may be determined by any suitable method: Provided that the results thus obtained is in accordance with the maximum permissible deviation for a class 1 moisture meter as detailed in ISO (International Organization for Standardization) 7700/1 based on the results of the 72 hour, 103°C oven dried method [AACC (American Association of Cereal Chemists) Method 44-15A].

***Determination of protein content***

16. The percentage of protein of a consignment of wheat may be determined according to any suitable method: Provided that --

- (a) the determination shall be conducted on a sample which had been sifted using a screen with the same apertures as the standard sieve and from which other grain, un threshed ears and foreign matter had been removed by hand; and
- (b) the results thus obtained are in accordance ( $\pm$  0,3 per cent) with the results obtained by the Dumas Combustion Analysis Method [AACC (American Association of Cereal Chemists) Method 46-30].

***Determination of falling number in wheat***

17. (1) The falling number of a consignment of wheat may be determined according to any suitable method: Provided that --

- (a) the determination shall be conducted on a sample which had been sifted using a screen with the same apertures as the standard sieve and from which other grain, un threshed ears and foreign matter had been removed by hand; and
- (b) the results thus obtained are in accordance ( $\pm$  5 percent) with the results obtained by the ICC (International Association for Cereal Science and Technology) 107/1 method.

(2) If the falling number of a consignment of wheat is determined according to the ICC (International Association for Cereal Science and Technology) 107/1 method --

- (a) the sampling in the mentioned method shall be replaced with the manner prescribed in regulation 9; and
- (b) only the altitude corrected value shall be used.

**PART VI****DETERMINATION OF PERCENTAGE DEVIATIONS*****Determination of percentage screenings***

18. (1) The percentage screenings in a consignment of wheat shall be determined as follows:

- (a) Obtain a working sample of at least 500 g.
- (b) Place the sample on the standard sieve and screen the sample by moving the sieve 50 strokes to and fro, alternately away from and towards the operator of the sieve, in the same direction as the long axes of the slots of the sieve. Move the sieve, which rests on a table or other suitable smooth surface, 250 mm to 460 mm away from and towards the operator with each stroke. The prescribed 50 strokes must be completed within 50 to 60 seconds: Provided that the screening process may also be performed in some or other container or an automatic sieving apparatus.
- (c) Determine the mass of the material that has passed through the sieve and express it as a percentage of the mass of the working sample.
- (d) Such percentage represents the percentage screenings in the consignment.

***Determination of the percentage heavily frost-damaged wheat***

19. The percentage heavily frost-damaged wheat in a consignment of wheat shall be determined as follows:

- (a) Obtain a working sample of at least 25 g of a screened sample.

- (b) Remove all heavily frost-damaged kernels by hand and determine the mass thereof.
- (c) Express the mass thus determined as a percentage of the mass of the working sample.
- (d) Such percentage represents the percentage heavily frost-damaged wheat in the consignment concerned.

***Determination of the percentages other grain and unthreshed ears***

20. The percentage other grain and unthreshed ears in a consignment of wheat shall be determined as follows:

- (a) Obtain a working sample of at least 50 g from a screened sample.
- (b) Remove all other grain and unthreshed ears by hand and determine the mass thereof.
- (c) Express the mass thus determined as a percentage of the mass of the working sample.
- (d) Such percentage represents the percentage other grain and unthreshed ears in the consignment concerned.

***Determination of the percentage foreign matter***

21. The percentage foreign matter in a consignment of wheat is determined as follows:

- (a) Obtain a working sample of at least 100 g from a screened sample.
- (b) Remove all foreign matter by hand and determine the mass thereof.
- (c) Express the mass thus determined as a percentage of the mass of the working sample.
- (d) Such percentage represents the percentage foreign matter in the consignment concerned.

***Determination of the percentage damaged wheat***

22. The percentage damaged wheat in a consignment of wheat shall be determined as follows:

- (a) Obtain a working sample of at least 25 g of a screened sample.
- (b) Remove all damaged kernels by hand and determine the mass thereof.
- (c) Express the mass thus determined as a percentage of the mass of the working sample.
- (d) Such percentage represents the percentage damaged wheat in the consignment concerned.

***Determination of the percentage heat-damaged wheat***

23. The percentage heat-damaged wheat in a consignment of wheat shall be determined as follows:

- (a) Obtain a working sample of at least 100 g from a screened sample.
- (b) Remove all heat-damaged kernels by hand and determine the mass thereof. Kernels from an additional working sample may also be sensorially assessed (by smelling and tasting the kernels) to confirm suspicion of heat damage.
- (c) Express the mass thus determined as a percentage of the mass of the working sample.

- (d) Such percentage represents the percentage heat-damaged wheat in the consignment concerned.

***Determination of percentage field fungi infected wheat***

24. The percentage field fungi infected wheat in a consignment of wheat shall be determined as follows:

- (a) Obtain a working sample of at least 25 g from a screened sample.
- (b) Remove all field fungi infected kernels by hand and determine the mass thereof.
- (c) Express the mass thus determined as a percentage of the mass of the working sample.
- (d) Such percentage represents the percentage of field fungi infected wheat in the consignment concerned.

***Determination of percentage storage fungi infected wheat***

25. The percentage storage fungi infected wheat in a consignment of wheat shall be determined as follows:

- (a) Obtain a working sample of at least 100 g from a screened sample.
- (b) Remove all storage fungi infected kernels by hand and determine the mass thereof.
- (c) Express the mass thus obtained as a percentage of the mass of the working sample.
- (d) Such percentage represents the percentage storage fungi infected wheat in the consignment concerned.

**PART VII**

***Offence and penalties***

26. Any person who contravenes or fails to comply with any provision of these regulations shall be guilty of an offence and upon conviction be liable to a fine of not exceeding R50 000 or to imprisonment for a period not exceeding two years, or to both that fine or imprisonment.

**No. R. 1186****17 Desember 2010**

**WET OP LANDBOUPRODUKSTANDAARDE, 1990**  
**(WET NO. 119 VAN 1990)**

**REGULASIES MET BETREKKING TOT DIE GRADERING, VERPAKKING EN MERK VAN  
BROODKORING BESTEM VIR VERKOOP IN DIE REPUBLIEK VAN SUID-AFRIKA**

Die Minister van Landbou, Bosbou en Vissery, handelende kragtens artikel 15 van die Wet op Landbouprodukstandaarde, 1990 (Wet No. 119 van 1990),

- (a) het die regulasies in die Bylae uitgevaardig;
- (b) bepaal dat die genoemde regulasies op die datum van publikasie in werking sal tree; en
- (c) herroeping van regulasies gepubliseer deur Goewermentskennisgewing Nos. R.905 van 10 Julie 1998 gewysig deur Goewermentskennisgewing Nos. R.1421 van 6 November 1998, R.876 van 14 September 2001, R.979 van 19 Julie 2002 en R.1210 van 29 Augustus 2003.

**BYLAE**

**Woordomskrywing**

1. In hierdie regulasies het enige word of uitdrukking waaraan 'n betekenis in die Wet geheg is, daardie betekenis en tensy uit die samehang anders blyk, beteken --

**"ander graan"** die korrels of stukkies korrels van gars, hawer, triticale, mielies, rog en sorghum;

**"besending"** --

- (a) 'n hoeveelheid koring van dieselfde klas, wat aan dieselfde eienaar behoort, wat op 'n bepaalde tydstip afgelewer word onder dekking van dieselfde vragbrief, afleveringsbrief of ontvangsbewys, of gelewer word deur dieselfde voertuig of losmaathouer, of wat uit dieselfde buis van 'n graansuier of 'n skeepsruim gelaaai word; of
- (b) in die geval waar 'n hoeveelheid in paragraaf (a) bedoel, ingedeel is in verskillende grade, elke sodanige hoeveelheid van elk van die verskillende grade;

**"beskadigde koring"** koring --

- (a) wat deur insekte beskadig is;
- (b) wat deur hitte van buite of as gevolg van hitte deur binnegisting in koring met 'n oormaat vog duidelik verkleur is (oranje-bruin, donkerbruin of swart), uitgesonderd koringkorrels ten opsigte waarvan die verkleuring tot die kiem-end beperk is;
- (c) wat onryp is en 'n duidelike groen kleur het; en
- (d) waarin ontkieming tot so 'n mate gevorder het dat die vel wat die kiem bedek, gebreek is of die ontwikkelende spruitjies en/of worteltjies duidelik sigbaar is;

**"dierlike reste"** dooi knaagdiere, dooi voëls en mis;

**"die Wet"** die Wet op Landbouprodukstandaarde, 1990 (Wet No. 119 van 1990);

**"ergot sclerotia"** die sclerotia van die fungus *Claviceps purpurea*; en **"ergot"** het 'n ooreenstemmende betekenis;

**"erg rypbeskadigde koring" --**

- (a) koring wat gedurende die melk- tot sagte deegstadium deur strawwe ryp beskadig is en wat gekenmerk word deur korrels wat taamlik vet, maar heeltemal tot in die groef met klein blasies bedek is, met uitsondering van --
  - (i) korrels waarvan net die rugkant met blasies bedek is; en
  - (ii) onryp gerimpelde korrels waarin rimpeling deur ryp veroorsaak is terwyl die korrels nog onryp was; en
- (b) korrels wat 'n effens afgeskilferde semelskil het as gevolg van ryp: Met dien verstande dat bewys van rypskade teenwoordig is en dat die semelskil nie afgevryf is as gevolg van hantering nie;

**"giftige sade"** die sade of gedeeltes van sade van plantspesies wat volgens die Wet op Voedingsmiddels, Skoonheidsmiddels en Ontsmettingsmiddels, 1972 (Wet no 54 van 1972) 'n risiko vir menslike en dierlike gesondheid kan inhoud indien dit verbruik word, insluitende sade van *Argemone mexicana*, *Convolvulus* spp., *Crotalaria* spp., *Datura* spp., *Ipomoea purpurea*, *Lolium temulentum*, *Ricinus communis* of *Xanthium* spp.;

**"hektolitermassa"** die massa in kilogram per hektoliter;

**"houer"** 'n sak of losmaathouer;

**"insek"** met betrekking tot koring, enige lewende insek wat skadelik is vir opgebergde graan ongeag die stadium van ontwikkeling van daardie insek;

**"koring"** die korrels of stukkies korrels van die spesies *Triticum aestivum* ;

**"kultivarlys"** die lys van kultivars van tyd tot tyd deur die Uitvoerende Beampte: Landbouprodukstanndaarde vasgestel en wat vanaf die Uitvoerende Beampte: Landbouprodukstandaarde, Privaatsak X258, Pretoria, 0001 verkrygbaar is;

**"landswambesmette koring"** koring waarvan die korrels sigbaar met swamme besmet is, en wat --

- (a) duidelik grysagtige kwas-ente, wat as geheel verkleur is, het; of waar land swamgroeи vanaf die kwas-ent tot in die groef voorkom;
- (b) as gevolg van *Fusarium*-besmetting 'n dowie lewelose, krytagtige of pienkerige en verkrimpte voorkoms het;

**"losmaathouer"** enige vervoermiddel of houer waarin losmaatkoring opgeberg of vervoer word;

**"ongedorste are"** are en gedeeltes van are van koring, gars, triticale en rog wat nog korrels bevat wat ten volle met blomkaffies bedek is;

**"opbergingswambesmette koring"** koring wat sigbaar met swamme besmet is, en wat --

- (a) blou, groen, swartagtige, wit of geel swamgroeи enige plek op die korrel vertoon; of
- (b) sigbare swamgroeи onder die semel vertoon;

**"proteïeninhoud"** die persentasie proteïen in koring op 'n 12% vogbasis;

**"sak"** 'n sak vervaardig—

- (a) van jute of phormium of 'n mengsel van jute of phormium; of
- (b) van polipropyleen wat voldoen aan SABS spesifikasie CKS632;

"**sifsels**" alle materiaal wat deur die standaardsif gaan;

"**standaardsif**" is 'n gleufsif:

- (a) met 'n plat bodem van metaalplaat van 1,0 mm dikte met langwerpige gleuve van 12,7 mm in lengte en 1,8 mm in breedte met geronde ente. Die spasiëring tussen die gleuve in dieselfde ry moet 2,43 mm wyd wees en die spasiëring tussen die rye gleuve moet 2,0 mm wyd wees. Die gleuve moet afwisselend georiënteerd wees, met 'n gleuf altyd regoor 'n soliede tussensegment van die naasliggende ry gleuve;
- (b) waarvan die boonste oppervlak van die sif glad is;
- (c) met 'n ronde raam van geskikte materiaal met 'n binndeursnee van minstens 300 mm en maksimum 310 mm en minstens 50 mm hoog;
- (d) wat op 'n pan met 'n soliede bodem pas en moet minstens 20 mm bo die bodem van die pan wees.

"**stinkbrandbesmetting**" koring wat met *Tilletia spp.* besmet is, met uitsondering van koring wat met *Tilletia indica* (karnal bunt) besmet is. Koring word as stinkbrand besmet beskou as een of meer van die volgende eienskappe waargeneem word:

- (a) 'n onmiskenbare stinkbrand reuk; of
- (b) koringkorrels wat met stinkbrand besmeer is; of
- (c) meer as vier stinkbrandballe of stukkies bal gelyk aan vier stinkbrandballe per 100 g koring;

"**valgetal**" die tydperk in sekondes volgens Hagberg-Perten as 'n maatstaf van die graad van Alfa-Amilase aktiwiteit in graan en meel; en

"**vreemde voorwerpe**" alle materiaal uitgesonderd koring, ander graan en ongedorste are.

#### **Beperkings op verkoop van koring**

2. (1) Niemand mag 'n besending koring in die Republiek van Suid-Afrika verkoop nie --
  - (a) tensy die koring verkoop word volgens die klasse in regulasie 3 uiteengesit;
  - (b) tensy die koring voldoen aan die standaarde vir die betrokke klas in regulasie 4 uiteengesit;
  - (c) tensy die koring, waar van toepassing, voldoen aan die grade van koring en standaarde vir grade in regulasies 5 en 6 onderskeidelik uiteengesit;
  - (d) tensy die koring verpak is volgens die verpakkingsvereistes in regulasie 7 uiteengesit;
  - (e) tensy die houer of verkoopsdokumente, na gelang van die geval, gemerk is in ooreenstemming met die merkvereistes in regulasie 8 uiteengesit; en
  - (f) indien sodanige koring 'n stof bevat wat dit ongeskik maak vir menslike verbruik of vir verwerking tot of aanwending daarvan as voedsel of voer.

(2) Die Uitvoerende Beampte kan iemand skriftelik, in die geheel of gedeeltelik, op die voorwaardes wat hy of sy nodig ag, van die bepalings van subregulasie (1) vrystel.

## GEHALTESTANDAARDE

### **Klasse koring**

3. Die klasse koring is --
- (a) Broodkoring; en
  - (b) Ander Koring.

### **Standaarde vir klasse**

4. (1) Niteenstaande die bepalings van subregulasies (2) en (3) moet alle besendings koring -
- (a) vry wees van enige toksiene, chemiese of ander stowwe wat dit ongesik maak vir menslike verbruik of vir verwerking tot of aanwending daarvan as voedsel of voer en mag nie die toelaatbare afwykings ten opsigte van aflatoksiene kragtens die Wet op Voedingsmiddels, Skoonheidsmiddels en Ontsmettingsmiddels, 1972 (Wet No. 54 van 1972) oorskry nie;
  - (b) nie meer giftige sade of ergot sclerotia bevat as wat toegelaat word kragtens die Wet op Voedingsmiddels, Skoonheidsmiddels en Ontsmettingsmiddels, 1972 (Wet No. 54 van 1972) nie;
  - (c) vry wees van organismes van fitosanit re belang soos bepaal word kragtens die Wet op Landbouplae, 1983 (Wet No. 36 van 1983);
  - (d) vry wees van swambesmette, suur- en galsterige ander graan, vreemde voorwerpe en enige ander materiaal;
  - (e) vry wees van enige ongewenste reuk, smaak of kleur wat nie eie aan ongeskonke en gesonde koring is nie;
  - (f) vry wees van dierlike reste;
  - (g) met die uitsondering van Ander Koring, vry wees van insekte;
  - (h) met die uitsondering van Ander Koring, vry wees van stinkbrandbesmetting; en
  - (i) met die uitsondering van Ander Koring, 'n voginhoud van hoogstens 13 persent h .
- (2) 'n Besending word as Broodkoring geklassifiseer indien --
- (a) die koring in die besending uit minstens 95 persent (m/m) van een of meer van die broodkoringkultivars in die kultivarlys bestaan ; en
  - (b) dit voldoen aan die standaarde vir Graad 1, Graad 2, Graad 3, Graad 4 of Utiliteitsgraad in regulasie 6 uiteengesit.
- (3) 'n Besending koring word as Ander Koring geklassifiseer indien dit nie voldoen aan die standaarde vir Broodkoring nie.

### **Grade koring**

5. (1) Die grade vir Broodkoring is soos volg:
- (a) Graad 1;
  - (b) Graad 2;

- (c) Graad 3;
  - (d) Graad 4; en
  - (e) Utiliteitsgraad.
- (2) Geen grade word vir Ander Koring bepaal nie.

***Standaarde vir grade koring***

6. (1) Behoudens die bepalings van subregulasies (2), (3) en (4) word 'n besending koring gegradeer as --

- (a) Graad 1 indien die aard van afwyking, in kolom 1 van Tabel 1 van die Aanhangsel gespesifiseer, in daardie besending nie die persentasie in kolom 2 van genoemde tabel teenoor die betrokke afwyking gespesifiseer, oorskry nie;
  - (b) Graad 2 indien die aard van afwyking, in kolom 1 van Tabel 1 van die Aanhangsel gespesifiseer, in daardie besending nie die persentasie in kolom 3 van genoemde tabel teenoor die betrokke afwyking gespesifiseer, oorskry nie;
  - (c) Graad 3 indien die aard van afwyking, in kolom 1 van Tabel 1 van die Aanhangsel gespesifiseer, in daardie besending nie die persentasie in kolom 4 van genoemde tabel teenoor die betrokke afwyking gespesifiseer, oorskry nie;
  - (d) Graad 4 indien die aard van afwyking, in kolom 1 van Tabel 1 van die Aanhangsel gespesifiseer, in daardie besending nie die persentasie in kolom 5 van genoemde tabel teenoor die betrokke afwyking gespesifiseer, oorskry nie; en
  - (e) Utiliteitsgraad indien die aard van afwyking, in kolom 1 van Tabel 1 van die Aanhangsel gespesifiseer, in daardie besending nie die persentasie in kolom 6 van genoemde tabel teenoor die betrokke afwyking gespesifiseer, oorskry nie.
- (2) Die minimum hektolitermassas vir die verskillende grade is soos volg:
- (a) Graad 1 - 77 kg;
  - (b) Graad 2 - 76 kg;
  - (c) Graad 3 - 74 kg;
  - (d) Graad 4 - 72 kg; en
  - (e) Utiliteitsgraad - 70 kg.
- (3) (a) Graad 1, Graad 2 en Graad 3 moet 'n minimum valgetalwaarde hê van nie minder as 250 sekondes nie.
- (b) Graad 4 moet 'n minimum valgetalwaarde hê van nie minder as 200 sekondes nie.
- (c) Utiliteitsgraad moet 'n minimum valgetalwaarde hê van nie minder as 150 sekondes nie.
- (d) Neteenstaande die bepalings van paragraaf (a) word koring geag aan die toepaslike vereistes van die betrokke paragraaf te voldoen indien dit nie met meer as 30 sekondes laer as die minimum voorgeskryf vir Graad 1, Graad 2 en Graad 3, na gelang van die geval, afwyk nie.

(4) Die minimum proteïeninhoud (gemeet op 'n 12 per-cent vogbasis ) vir die verskillende grade is soos volg:

- (a) Graad 1 - 12 persent;
- (b) Graad 2 - 11 persent;
- (c) Graad 3 - 10 persent;
- (d) Graad 4 - 9 persent; en
- (e) Utiliteitsgraad - 8 persent.

## **DEEL II**

### **VERPAKKINGS- EN MERKVEREISTES**

#### ***Verpakningsvereistes***

7. Koring van verskillende klasse moet in verskillende houers verpak word.

#### ***Merkvereistes***

8. (1) Elke houer of die meegaande verkoopsdokumente van 'n besending koring moet gemerk of geëndoseer word, met behulp van gepaste simbole in subregulasie (2) bepaal, met --

- (a) die klas van die koring; en
  - (b) die graad
- (2) Die simbole in subregulasie (1) bedoel moet in die orde van klas en graad, aangedui word.
- (3) Die simbole gebruik as aanduiding van die verskillende --
- (a) klasse is --
    - (i) B in die geval van Broodkoring;
    - (ii) O in die geval van Ander Koring;
  - (b) grade is --
    - (i) 1 in die geval van Graad 1;
    - (ii) 2 in die geval van Graad 2;
    - (iii) 3 in die geval van Graad 3;
    - (iv) 4 in die geval van Graad 4; en
    - (v) UT in die geval van Utiliteitsgraad.

## **DEEL III**

### **MONSTERNEMING**

***Verkryging van monster***

9. (1) 'n Monster van 'n besending koring word --
- (a) in die geval van koring in sakke gelewer en behoudens regulasie 10, verkry deur minstens tien persent van die sakke, ewekansig uit daardie besending gekies, met 'n saksteker te bemonster: Met dien verstande dat minstens 25 sakke in 'n besending bemonster word en waar 'n besending uit minder as 25 sakke bestaan, al die sakke in daardie besending bemonster word; en
  - (b) in die geval van koring in losmaat gelewer en behoudens regulasie 10, verkry deur daardie besending deur die volle diepte, by minstens ses verskillende plekke, ewekansig in daardie losmaathoeveelheid uitgekies, met 'n losmaat-monternemingsapparaat te bemonster.
- (2) Die gesamentlike monster in subregulasie (1)(a) of (b) verkry, moet --
- (a) 'n totale massa van minstens 10 kg hê; en
  - (b) deeglik gemeng word deur verdeling voor verdere ondersoek.
- (3) Indien vermoed word dat die monster in subregulasie (1)(a) bedoel, nie verteenwoordigend van daardie besending is nie, word 'n addisionele vyf persent van die oorblywende sakke, ewekansig uit daardie besending gekies, in 'n geskikte losmaathouer uitgegooi en bemonster op die wyse in subregulasie (1)(b) beoog.
- (4) Indien vermoed word dat die monster in subregulasie (1) (b) bedoel, nie verteenwoordigend van daardie besending is nie, moet 'n addisionele verteenwoordigende monster verkry word deur 'n alternatiewe monternemingspatroon, -apparaat of -metode gebruik te maak.
- (5) 'n Monster ingevolge hierdie regulasies geneem, word geag verteenwoordigend te wees van die besending waaruit dit geneem is.

***Monterneming indien inhoud verskil***

10. (1) Indien dit blyk, na 'n ondersoek van die koring wat ingevolge regulasie 9(1)(a) uit verskillende sakke in 'n besending geneem is, dat die inhoud van daardie sakke wesenlik verskil, word --

- (a) die onderskeie sakke van mekaar geskei;
- (b) al die sakke in die betrokke besneding met 'n saksteker bemonster ten einde sodanige skeiding te doen; en
- (c) elke groep sakke met 'n soortgelyke inhoud in daardie besending vir die doeleindes van hierdie regulasies geag 'n afsonderlike besending te wees.

(2) Indien, nadat met die aflaai van 'n besending koring in losmaat begin is, daar vermoed word dat die besending van 'n ander klas of graad kan wees as wat met behulp van die aanvanklike bemonstering bepaal is, word die aflaiproses onmiddellik gestaak en word die deel van die besending wat in die losmaathouer oorbly asook die koring wat reeds in die opvangbak gestort is, van vooraf met 'n losmaatmonternemingsapparaat bemonster of deur minstens 20 monsters met 'n geskikte houer, met gereelde tussenposes oor die hele aflaiperiode, uit die stroom van die koring wat in losmaat vloeい, op te vang.

***Werkmonster***

11. (1) 'n Werkmonster koring word verkry deur die verteenwoordigende monster van die besending volgens die ICC (International Association for Cereal Science and Technology) 101/1 metode, te verdeel.

**DEEL IV****BEPALING VAN ANDER STOWWE*****Bepaling van ongewenste reuke en skadelike stowwe***

12. 'n Besending koring of monster van 'n besending koring word sintuiglik beoordeel of skeikundig ontleed ten einde te bepaal --

- (a) of dit 'n stof bevat wat die koring ongesik maak vir menslike verbruik of vir verwerking tot of aanwending as voedsel of voer; en
- (b) of dit 'n muwwe, suur, galsterige of ander ongewenste reuk: Met dien verstande dat 'n werkmonster ongesifte koring met 'n graanmeul tot 'n fyn meel gemaal vir die betrokke beoordeling gebruik kan word.

**DEEL V****BEPALING VAN KLAS, HEKTOLITERMASSA, VOGINHOUD, PROTEÏENINHOUD EN VALGETAL*****Bepaling van klas***

13. Die klas van 'n besending koring word soos volg bepaal:

- (a) Verkry 'n werkmonster van minstens 500 g en sif die werkmonster op die wyse soos in regulasie 18 bepaal.
- (b) Neem minstens 100 g van die gesifte koring en verwijder alle ander graan, ongedorste are en vreemde stowwe met die hand.
- (c) Verkry 'n werkmonster van minstens 25 g nadat alle ander graan, ongedorste are en vreemde voorwerpe verwijder is en skei die verskillende kultivars.
- (d) Bepaal die massa van alle kultivars wat volgens die kultivarlys aan dieselfde klas behoort gesamentlik en druk die massa aldus bepaal uit as 'n persentasie van die werkmonster.
- (e) Sodanige persentasie verteenwoordig die persentasie van alle kultivars wat volgens die kultivarlys aan dieselfde klas behoort in die besending.

***Bepaling van hektolitermassa***

14. Die hektolitermassa van 'n besending sifsels koring kan volgens enige geskikte instrument bepaal word: Met dien verstande dat die instrument voldoen aan en is gekalibreer deur die spesifikasies soos uiteengesit in ISO (International Organization for Standardization) 7971-3.

***Bepaling van voginhoud***

15. Die voginhoud van 'n besending koring kan volgens enige geskikte metode bepaal word: Met dien verstande dat die resultate aldus verkry in ooreenstemming is met die maksimum toelaatbare afwyking vir 'n klas 1 vogmeter soos uiteengesit in ISO (International Organization for Standardization) 7700/1 gebaseer op die resultate van die 72 uur, 103°C oonddroogmetode [AACC (American Association of Cereal Chemists) Metode 44-15A].

***Bepaling van proteïeninhoud***

16. Die persentasie proteïen van 'n besending koring kan volgens enige geskikte metode bepaal word: Met dien verstande dat --

- (a) die bepaling gedoen word op 'n monster wat oor 'n sif met dieselfde openinge as die standaardsif gesif is en waarvan ander graan, ongedorste are en vreemde voorwerpe met die hand verwijder is; en

- (b) die resultate aldus verkry in ooreenstemming ( $\pm 0,3$  persent) is met die resultate verkry deur die Dumas ontbrandingsanalisemetode [AACC (American Association of Cereal Chemists) Metode 46-30.]

**Bepaling van valgetal in koring**

17. (1) Die valgetal van 'n besending koring kan volgens enige gesikte metode bepaal word: Met dien verstande dat --

- (a) die bepaling op 'n monster wat oor 'n sif met dieselfde openinge as die standaardsif gesif is en waarvan ander graan, ongedorste are en vreemde voorwerpe met die hand verwijder is; en
  - (b) die resultate aldus verkry in ooreenstemming ( $\pm 5$  persent) is met die resultate verkry deur die ICC (International Association for Cereal Science and Technology) 107/1 metode.
- (2) Indien die valgetal van 'n besending koring volgens die ICC (International Association for Cereal Science and Technology) 107/1 metode bepaal word, word --
- (a) monsterneming in genoemde metode met die wyse voorgeskryf in regulasie 9, vervang; en
  - (b) slegs die waardes aangepas vir hoogte bo seevlak gebruik.

**DEEL VI**

**BEPALING VAN PERSENTASIE AFWYKINGS**

**Bepaling van die persentasie sifsels**

18. (1) Die persentasie sifsels in 'n besending koring word soos volg bepaal:

- (a) Verkry 'n werkmonster van minstens 500 g.
- (b) Plaas die monster op 'n standaardsif, sif die monster deur die sif 50 stote heen en weer, beurtelings weg van en terug na die hanteerder van die sif, te beweeg in dieselfde rigting as die lengte-asse van die openings van die sif. Beweeg met elke stoot die sif, wat op 'n tafel of ander gesikte gladde oppervlak rus, 250 mm tot 460 mm weg van en terug na die hanteerder. Die voorgeskrewe 50 stote moet binne 50 tot 60 sekondes voltooi word: Met dien verstande dat die sifproses ook op die voorgeskrewe wyse in een of ander houer of 'n outomatiese sifapparaat gedoen kan word.
- (c) Bepaal die massa van die materiaal wat deur die sif gegaan het en druk dit uit as 'n persentasie van die massa van die werkmonster.
- (d) Sodanige persentasie verteenwoordig die persentasie sifsels in die betrokke besending.

**Bepaling van persentasie erg rypbeskadigde koring**

19. Die persentasie erg rypbeskadigde koring in 'n besending koring word soos volg bepaal:

- (a) Verkry 'n werkmonster van minstens 25 g van 'n gesifte monster.
- (b) Verwyder alle erg rypbeskadigde korrels met die hand en bepaal die massa daarvan.
- (c) Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.

- (d) Sodanige persentasie verteenwoordig die persentasie erg rybeskadigde koring in die betrokke besending.

**Bepaling van persentasie ander graan en ongedorste are**

20. Die persentasie ander graan en ongedorste are in 'n besending koring word soos volg bepaal:
- (a) Verkry 'n werkmonster van minstens 50 g van 'n gesifte monster.
  - (b) Verwyder alle ander graan en ongedorste are met die hand en bepaal die massa daarvan.
  - (c) Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
  - (d) Sodanige persentasie verteenwoordig die persentasie ander graan en ongedorste are in die besending.

**Bepaling van persentasie vreemde voorwerpe**

21. Die persentasie vreemde voorwerpe in 'n besending koring word soos volg bepaal:
- (a) Verkry werkmonster van minstens 100 g van 'n gesifte monster.
  - (b) Verwyder alle vreemde voorwerpe met die hand en bepaal die massa daarvan.
  - (c) Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
  - (d) Sodanige persentasie verteenwoordig die persentasie vreemde voorwerpe in die besending.

**Bepaling van persentasie beskadigde koring, uitgesluit hitte beskadigde koring**

22. Die persentasie beskadigde koring in 'n besending koring word soos volg bepaal:
- (a) Verkry 'n werkmonster van minstens 25 g van 'n gesifte monster.
  - (b) Verwyder alle beskadigde korrels, anders as hitte beskadigde koring met die hand en bepaal die massa daarvan.
  - (c) Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
  - (d) Sodanige persentasie verteenwoordig die persentasie beskadigde koring, uitgesluit hitte beskadigde koring in die besending.

**Bepaling van persentasie hittebeskadigde koring**

23. Die persentasie hittebeskadigde koring in 'n besending koring word soos volg bepaal:
- (a) Verkry 'n werkmonster van minstens 100 g van 'n gesifte monster.
  - (b) Verwyder alle hittebeskadigde korrels uit die werkmonster met die hand en bepaal die massa daarvan. Korrels van 'n addisionele werkmonster mag ook sintuiglik ondersoek word (deur aan korrels te ruik en te proe) om vermoede van hittebeskadiging te bevestig.
  - (c) Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
  - (d) Sodanige persentasie verteenwoordig die persentasie hittebeskadigde koring in die besending.

**Bepaling van persentasie landswambesmette koring**

24. Die persentasie landswambesmette koring in 'n besending koring word soos volg bepaal:
- (a) Verkry 'n werkmonster van minstens 25 g van 'n gesifte monster.
  - (b) Verwyder alle landswambesmette korrels met die hand en bepaal die massa daarvan.
  - (c) Druk die massa aldus bepaal uit as 'n persentasie van die massa van die werkmonster.
  - (d) Sodanige persentasie verteenwoordig die persentasie landswambesmette koring in die betrokke besending.

***Bepaling van persentasie opbergingswambesmette koring***

25. Die persentasie opbergingswambesmette korrels koring in 'n besending koring word soos volg bepaal:
- (a) Verkry 'n werkmonster van minstens 100 g van 'n gesifte monster.
  - (b) Verwyder alle opbergingswambesmette korrels met die hand en bepaal die massa daarvan.
  - (c) Druk die massa aldus uit as 'n persentasie van die massa van die werkmonster.
  - (d) Sodanige persentasies verteenwoordig die persentasie opbergingswambesmette koring in die betrokke besending.

**DEEL VII**

***Oortreding en strawwe***

26. Iemand wat 'n bepaling van hierdie regulasie oortree of versuim om daaraan te voldoen, is aan 'n misdryf skuldig en by skuldigbevinding strafbaar met 'n boete van hoogstens R50 000 of met gevangenisstraf vir 'n tydperk van hoogstens twee jaar of met daardie boete sowel as daardie gevange- nisstraf.

## ANNEXURE/AANHANGSEL

TABLE 1/TABEL 1

STANDARDS FOR GRADES OF BREAD WHEAT/  
STANDAARDE VIR GRADE VAN BROODKORING

Nature of deviation/ Aard van afwyking	Maximum percentage permissible deviation (m/m)/ Maksimum persentasie toelaatbare afwyking (m/m)				
	Grade 1/ Graad 1	Grade 2/ Graad 2	Grade 3/ Graad 3	Grade 4/ Graad 4	Utility Grade/ Utiliteit- graad
1	3	4	5	6	7
(a) Heavily frost-damaged kernels/ Erg rybeskadigde korrels	5	5	5	5	10
(b) Field fungi infected kernels/Land- swambesmette korrels	2	2	2	2	2
(c) Storage fungi infected kernels/ Opbergingswambesmette korrels	0,5	0,5	0,5	0,5	0,5
(d) Screenings/Sifsels	3	3	3	4	10
(e) Other grain and unthreshed ears/ Ander graan en ongedorste are	1	1	1	1	4
(f) Gravel, stones, turf and glass/ Gruis, klippies, turf en glas	0,5	0,5	0,5	0,5	0,5
(g) Foreign matter including gravel, stones, turf and glass: Provided that such deviations are individ- ually within the limits specified in item (f)/ Vreemde voorwerpe met inbegrip van gruis, klippies, turf en glas: Met dien verstande dat sodanige afwykings individueel binne die perke is in item (f) aan- gegee	1	1	1	1	3
(h) Heat-damaged kernels/Hittebe- skadigde korrels	0,5	0,5	0,5	0,5	0,5

<b>Nature of deviation/ Aard van afwyking</b>	<b>Maximum percentage permissible deviation (m/m)/ Maksimum persentasie toelaatbare afwyking (m/m)</b>				
	<b>Grade 1/ Graad 1</b>	<b>Grade 2/ Graad 2</b>	<b>Grade 3/ Graad 3</b>	<b>Grade 4/ Graad 4</b>	<b>Utility Grade/ Utiliteit- graad</b>
<b>1</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
(i) Damaged kernels, including heat-damaged kernels: Provided that such deviations are individually within the limit specified in item (h) and provided further that the minimum falling number value prescribed in regulation 6(3) for the grade concerned is at least complied with/Beskadigde korrels met inbegrip van hittebeskadigde korrels: Met dien verstande dat sodanige afwyking individueel binne die perke is in item (h) aangegee en met dien verstande voorts dat minstens aan die minimum valgetalwaarde in regulasie 6(3) vir die betrokke graad voorgeskryf, voldoen word	2	2	2	2	5
(j) Deviations in items (d), (e), (g) and (i) collectively: Provided that such deviations are individually within the limits of the said items/ Afwykings in items (d), (e), (g) en (i) gesamentlik: Met dien verstande dat sodanige afwykings individueel binne die perke van genoemde items is	5	5	5	5	10

"