

DEPARTMENT OF AGRICULTURE

DRAFT

AGRICULTURAL PRODUCT STANDARDS ACT, 1990
(ACT No. 119 OF 1990)REGULATIONS RELATING TO THE GRADING, PACKING AND MARKING OF
OATS INTENDED FOR SALE IN THE REPUBLIC OF SOUTH AFRICA

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 filth” 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) polypropilene that complies with SABS sepcification CKS632;

“bulk container” means any vehicle or container in which bulk oats is stored or transported;

“black, grey or brown oats” means kernels of pieces of kernels of oats covered by glumes and is naturally black, grey or brown in colour;

“consignment” means --

- (a) a quantity of oats 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 oats” means oats --

- (a) which have been damaged by insects;
- (b) which have been distinctly discoloured (brown, dark brown or black) by external heat or as a result of heating caused by internal fermentation in oats with an excessive moisture content, excluding oat kernels in respect of which the discolouration is confined to the germ end;

(c) in which germination has proceeded to such an extent that the glume (lemma) covering the embryo has been broken or the developing rootlets and/or shoots are clearly visible; and

(d) which are immature and have a distinctly green colour;

“**dehulled oats**” means oats of which the enclosing glumes have been removed;

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

“**field fungi infected oats**” means oats of which the kernels are visibly infected with fungi and has grey discolorations on any part of the kernel;

“**foreign matter**” means all material excluding oats, other grain and unthreshed ears and black, grey, brown and wild oats;

“**hectolitre mass**” means the mass in kilogram per hectolitre;

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

“**oats**” means kernels or pieces of kernels, with or without glumes, of the species *Avena sativa* or *Avena byzantia*, with the exception of oats that is naturally black, grey or brown in colour and wild oats;

“**other grain**” means the kernels or pieces of kernels of barley, triticale, maize, rye, sorghum and wheat;

“**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.*;

“**rubbing**” means the method by which oats is rubbed and is as follows:

(a) Take at least 500g of a well-mixed representative sample of un-rubbed oats which is placed in a bag and then closed;

(b) Rub the material in the bag thoroughly by hand on a hard surface such as a table or a bench.

(c) Rubbing shall be done by holding the closed end of the bag in one hand, grasping a handful of the contents through the bag with the other hand and rubbing this against the rest of the bag’s contents.

(d) After each five or six rubs the contents shall be mixed by shaking the bag.

(e) Rubbing shall be done for one minute.

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

“**standard sieve**” is a slotted sieve - -

- (a) with a flat bottom of stainless steel metal sheet of 1,0 mm thickness with apertures 25 mm long and 1,5 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;

"storage fungi infected oats" means oats kernels that are visibly infected with fungi, and that show white, blue, green, blackish or yellow fungal growth anywhere on the kernel;

"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 oats in which the first and second kernels are still attached;

"wild oats" means kernels and pieces of kernels of the species *Avena* excluding *Avena sativa*, *A. nuda* and *A. byzantina*;

Restrictions on sale of oats

2. (1) No person shall sell a consignment of wheat in the Republic of South Africa --
 - (a) unless the oats is sold according to the classes set out in regulation 3;
 - (b) unless the oats complies with the standards for the classes set out in regulation 4;
 - (c) unless the oats, where applicable, complies with the grades of oats and the standards for grades set out in regulations 5 and 6 respectively;
 - (d) unless the oats 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 oats 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 oats

3. The classes of oats are --
- (a) Class Oats; and
 - (b) Class Other Oats.

Standards for classes

4. (1) Notwithstanding the provisions of sub regulations (2) and (3), all consignments of oats must --
- (a) be free from any toxin, chemical or other substances that renders it unsuitable for human consumption or for processing into or utilization 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 oats;
 - (f) be free from animal filth;
 - (g) may not exceed the maximum residue levels prescribed for agricultural remedies, according to the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies, 1947 (Act no 36 of 1947) permissible for the control of pests and deceases on oats;
 - (h) be free from fire damaged oats;
 - (i) with the exception of Class Other Oats, be free from insects;
 - (j) with the exception of Class Other Oats, be free from oats and other grain kernels smeared by smut and may not contain more than four smut masses per 100 g oats; and
 - (k) with the exception of Class Other Oats, have a moisture content not exceeding 12.5 per cent.
- (2) A consignment of oats shall be classified as Class Other Oats if it does not comply with the standards for Class Oats.

Grades of oats

5. (1) The grades for Class Oats shall be as follows:

- (a) Grade 1;
 - (b) Grade 2; and
 - (c) Grade 3;
- (2) No grades are determined for Class Other Oats.

Standards for grades of oats

6. (1) Subject to the provisions of sub regulation (2), a consignment of oats 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;
- (2) (a) The minimum hectolitre masses for the different grades are as follows:
- (i) Grade 1 – 50 kg;
 - (ii) Grade 2 – 46 kg; and
 - (iii) Grade 3 – 38 kg;

PART II PACKING AND MARKING REQUIREMENTS

Packing requirements

7. Oats 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 oats shall be marked or endorsed by means of appropriate symbols specified in subregulation (2), with --
- (a) the class of the oats; 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) H in the case of Class Oats; and
 - (ii) O in the case of Class Other Oats;
 - (b) grades shall be --
 - (i) 1 in the case of Grade 1;
 - (ii) 2 in the case of Grade 2; and
 - (iii) 3 in case of Grade 3;

PART III SAMPLING

Taking of sample

- 9. (1) A sample of a consignment of oats shall --
 - (a) in the case of oats 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 oats 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 5 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 oats 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 oats 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 oats 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 oats 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 Chemistry) 101/1 method.

PART IV DETERMINATION OF OTHER SUBSTANCES

Determination of undesirable odours and harmful substances

12. A consignment of oats or a sample of a consignment of oats shall be sensorial assessed or chemically analysed in order to determine --
- (a) whether it contains a substance that renders the oats unfit for human consumption or for processing into or for utilisation as food or feed; and
 - (c) whether it has a musty, sour, rancid or other undesirable odour: Provided that a working sample of unscreened oats that is ground in a grain mill to a fine meal may be used for the determination concerned.

PART V DETERMINATION OF HECTOLITRE MASS AND MOISTURE CONTENT

Determination of the hectolitre mass

13. The hectolitre mass of a consignment of oats may be determined by any suitable instrument: Provided that the instrument comply with the specifications detailed in ISO 7971-3.

Determination of moisture content

14. The moisture content of a consignment oats 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 7700/1 based on the results of the 72 hour, 103°C oven dried method [AACC (American Association for Cereal Chemistry) Method 44-15A].

**PART VI
DETERMINATION OF PERCENTAGE DEVIATIONS*****Determination of the percentage black, grey or brown oats and wild oats***

15. The percentage black, gray or brown oats and wild oats in a consignment of oats shall be determined as follows:
- (a) Obtain a working sample of at least 50 g of a screened un-rubbed sample.
 - (b) Remove all black, grey or brown oats and wild oats by hand and determine the mass thereof.
 - (c) Express the mass thus determined as a percentage of the working sample.
 - (d) Such percentage represents the percentage black, grey or brown oats and wild oats in the consignment.

Determination of the percentage dehulled oats

16. The percentage dehulled oats in a consignment of oats shall be determined as follows:
- (e) Obtain a working sample of at least 25 g of a screened un-rubbed sample.
 - (f) Remove all dehulled oats by hand and determine the mass thereof.
 - (g) Express the mass thus determined as a percentage of the working sample.
 - (h) Such percentage represents the percentage dehulled oats in the consignment.

Determination of percentage screenings

17. The percentage screenings in a consignment of oats shall be determined as follows:
- (a) Obtain a working sample of at least 400 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 foreign matter

18. The percentage foreign matter in a consignment of oats shall be determined as follows:

- (a) Obtain a working sample of at least 50 g of a screened un-rubbed sample.
- (b) Remove all foreign matter by hand and determine the mass thereof.
- (c) Express the mass thus determined as a percentage of the working sample.
- (d) Such percentage represents the percentage foreign matter in the consignment.

Determination of the percentage sand, gravel and stones

19. The percentage sand, gravel and stones in a consignment of oats shall be determined as follows:

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

Determination of the percentage damaged oats

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

- (a) Obtain a working sample of at least 25 g of a screened un-rubbed sample.
- (b) Remove all damaged oats by hand and determine the mass thereof.

- (c) Express the mass thus determined as a percentage of the working sample.
- (d) Such percentage represents the percentage damaged oats in the consignment.

Determination of the percentage heat damaged oats

21. The percentage heat damaged oats in a consignment of oats shall be determined as follows:
- (a) Obtain a working sample of at least 100 g of a screened un-rubbed sample.
 - (b) Remove all heat damaged oats by hand and determine the mass thereof.
 - (c) Express the mass thus determined as a percentage of the working sample.
 - (d) Such percentage represents the percentage heat damaged oats in the consignment.

Determination of the percentage other grain and un-threshed ears

22. The percentage other grain and un-threshed ears in a consignment of oats shall be determined as follows:
- (a) Obtain a working sample of at least 50 g of a screened un-rubbed sample.
 - (b) Remove all other grain and un-threshed ears by hand and determine the mass thereof.
 - (c) Express the mass thus determined as a percentage of the working sample.
 - (d) Such percentage represents the percentage other grain and un-threshed ears in the consignment.

Determination of the percentage storage fungi infected oats

23. The percentage storage infected oats in a consignment of oats shall be determined as follows:
- (a) Obtain a working sample of at least 25 g of a screened un-rubbed sample.
 - (b) Remove all storage fungi infected oats by hand and determine the mass thereof.

- (c) Express the mass thus determined as a percentage of the working sample.
- (d) Such percentage represents the percentage storage fungi infected oats in the consignment.

Determination of the percentage field fungi infected oats

24. The percentage storage infected oats in a consignment of oats shall be determined as follows:
- (a) Obtain a working sample of at least 25 g of a screened un-rubbed sample.
 - (b) Remove all field fungi infected oats by hand and determine the mass thereof.
 - (c) Express the mass thus determined as a percentage of the working sample.
 - (e) Such percentage represents the percentage field fungi infected oats in the consignment.

PART VII

Offence and penalties

25. 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 R8 000 or to imprisonment for a period not exceeding two years, or to both that fine or imprisonment.

**ANNEXURE/AANHANGSEL
TABLE 1/TABEL 1**

***STANDARDS FOR GRADES OF CLASS OATS/
STANDAARDE VIR GRADE VAN KLAS HAWER***

<i>Nature of deviation/ Aard van afwyking</i>	Maximum percentage permissible deviation (m/m)/ Maksimum persentasie toelaatbare afwyking (m/m)		
	Grade 1/ Graad 1	Grade 2/ Graad 2	Feed grade/ Voergraad
1	2	3	4

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	Feed grade/ Voergraad
1	2	3	4
(a) Black, gray or brown oats or wild oats/Swart, grys of bruin hawer en wilde hawer [Reg. 15]	1	2	4
(b) Storage fungi infected oats /Opberging swambesmette hawer [Reg. 23]	0,5	0,5	0,5
(c) Field fungi infected oats/ Land swambesmette hawer [Reg. 24]	3	3	6
(d) Dehulled oats/Uitgedopte hawer [Reg. 16]	2	5	*
(e) Screenings/Sifsels [Reg. 17]	2	2	20
(f) Sand, gravel and stones/Sand, gruis en klippies [Reg. 18]	0,5	0,5	0,5
(g) Foreign matter including sand, gravel and stones: Provided that such deviations are individually within the limits specified in item (f)/ Vreemde voorwerpe met inbegrip van sand, gruis en klippies: Met dien verstande dat sodanige afwykings individueel binne die perke is in item (f) aangegee [Reg. 18]	1	1	10
(h) Heat-damaged kernels/Hittebeskadigde korrels [Reg. 21]	0,5	0,5	20
(i) Damaged kernels, including heat-damaged kernels: Provided that such deviations are individually within the limit specified in item (h) /Beskadigde korrels met inbegrip van hittebeskadigde korrels: Met dien verstande dat sodanige afwyking individueel binne die perke is in item (h) aangegee [Reg. 20]	3	3	20

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	Feed grade/ Voergraad
1	2	3	4
(j) Other grain and unthreshed ears/ Ander graan en ongedorste are [Reg. 22]	2	2	15
(j) Deviations in items (g), (i) and (j) collectively: Provided that such deviations are individually within the limits of the said items/ Afwykings in items (g), (i) en (j) gesamentlik: Met dien verstande dat sodanige afwykings individueel binne die perke van genoemde items is	3	3	20

*No maximum applicable