# MINISTRY OF AGRICULTURE DEPARTMENT OF AGRICULTURE AND CO-OPERATION

#### NOTIFICATION

New Delhi, dated the 31st January, 2011

G.S.R. 55(E).- Whereas the draft of Guar Grading and Marking Rules, 2010, in exercise of the powers conferred by section 3 of the Agricultural Produce (Grading and Marking) Act, 1937 (1 of 1937) was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i) vide notification number G.S.R.658(E) dated the 4<sup>th</sup> August,2010 inviting objections and suggestions from all persons likely to be affected thereby within forty five days from the date on which copies of the said notification published in the Gazette of India were made available to the public.

And whereas copies of the said notification were made available to the public on the 17<sup>th</sup> August, 2010 and whereas the objections and suggestions received from the public in respect of the said draft rules have been duly considered.

Now, therefore, in exercise of the powers conferred by section 3 of the Agricultural Produce (Grading and Marking) Act, 1937 (1 of 1937), the Central Government hereby makes the following rules, namely:-

#### Rules

- 1. Short title and application (1) These rules may be called the Guar Grading and Marking Rules, 2011.
  - (2) They shall apply to Guar seeds, Guar Gum and Guar Gum Powder obtained from Guar pods or beans of Cyamopsis *tetragonolobus* (*L.*) of family *Leguminosae*.
  - (3) They shall come into force on the date of their publication in the Official Gazette.
- 2. Definitions. In these rules, unless the context otherwise requires,-
- (a) "Agricultural Marketing Adviser" means the Agricultural Marketing Adviser to the Government of India.
- (b) "authorized packer" means a person or a body of persons who has been granted a certificate of authorization to grade and mark Guar seeds, Guar Gum and Guar Gum Powder in accordance with the grade, standard and procedure specified under these rules;
- (c) "certificate of authorization" means a certificate issued under the provisions of the General Grading and Marking Rules, 1988 authorizing a person or a body of persons to grade and mark guar seeds, guar gum and guar gum powder with the grade designation mark;
- (d) "General Grading and Marking Rules" means the General Grading and Marking Rules, 1988 made under section 3 of the Agricultural Produce (Grading and Marking) Act, 1937 (1 of 1937);
- (e) "grade designation mark" means the "Agmark Insignia" referred to in rule 5:
  - (f) "Schedule" means a Schedule appended to these rules.
- 3. Grade designations. The Grade designations to indicate the quality of guar seeds, guar gum and guar gum powder shall be as set out in column I of Schedules II to V.
- 4. Quality. The quality of guar seeds, guar gum and guar gum powder shall be as specified in Schedules II to V.
- 5. Grade designation mark.- There shall be a grade designation mark which shall include "AGMARK insignia" consisting of a design incorporating the certificate of authorization number, the word "AGMARK", the name of commodity and the grade designation resembling the design as specified in Schedule- I.

- 6. Method of packing. (1) Guar seeds, guar gum and guar gum powder shall be packed in gunny bag or jute bag, or cloth bag, new or un-mended B-Twill bag with suitable inner lining of food grade quality and polywoven bags, poly pouches, High Density Poly Ethylene laminated paper bags, or any other suitable food grade packaging material duly approved by the Agricultural Marketing Adviser or any other officer authorized by him in this behalf.
- (2) The packing material shall be clean, sound and free from insect, fungal infestation.
- (3) The packaging material shall be made of substances which are safe and suitable for their intended use and shall not impart any toxic substance or undesirable odour or flavour to the product.
- (4) Guar seeds, guar gum and guar gum powder shall be packed in the pack size in accordance with the Standards of Weights and Measures (Packaged Commodities) Rules, 1977.
- (5) Each package containing either guar seeds or guar gum or guar gum powder shall be of the same grade designation.
- (6) Graded material of small pack sizes of the same lot or batch and grade may be packed in a master container with complete details thereon along with grade designation mark.
- (7) Each package shall be properly and securely closed and sealed in such manner as to disallow sweating or spilling.
- 7. Method of marking.- (1) The grade designation mark shall be securely affixed to or printed on each package in a manner approved by the Agricultural Marketing Adviser or an officer authorized by him in this behalf in accordance with rule 11 of the General Grading and Marking Rules, 1988.
- (2) In addition to the grade designation mark, the following particulars shall be clearly and indelibly marked on each package, namely:-
  - (a) Name and address of the packer;
  - (b) Place of packing or manufacturing;
  - (c) Date of packing;
  - (d) Lot or batch number;
  - (e) Variety or trade name; (optional)

- (f) Grade;
- (g) Net weight;
- (h) Maximum retail price (inclusive of all taxes);
- (i) Best before \_\_\_\_\_month \_\_\_\_year;
- (j) Colour or size or any other local name denoting the form (optional);
- (k) Texture; (optional)
- (I) Mesh size (in micron);
- (m) Other information, if any, as specified in the Prevention of Food Adulteration Rules, 1955 and the Standards of Weights and Measures (Packaged Commodities) Rules, 1977.
- (3) The ink used for marking on package shall be of such quality which shall not contaminate the product.
- (4) The authorized packer may, after obtaining the prior approval of the Agricultural Marketing Adviser or an officer authorized by him in this behalf, mark his private trade mark or trade brand on the graded package provided that the same does not indicate quality other than that indicated by the grade designation mark affixed to the graded package in accordance with these rules.
- 8. Special conditions of certificate of authorization. In addition to the conditions specified in sub-rule (8) of rule 3 of the General Grading and Marking Rules, 1988, every certificate of authorization issued for the purpose of these rules shall have the following conditions, namely:-
- (1) The authorized packer shall either set up his own laboratory or have access to an approved grading laboratory for testing of the product.
- (2) The premises shall be hygienic and sanitary with proper ventilations and lightings and the personnel engaged in operation shall be in sound health and free from any infectious, contagious or communicable disease.
- (3) The premises shall have adequate storage facilities with pucca floor and free from rodent and insect infestation.
- (4) The authorized packer and the approved chemist shall observe all instructions regarding testing, grading, packing, marking, sealing and maintenance of records which may be issued by the Agricultural Marketing Adviser or any other officer authorized by him in this behalf from time to time.

#### SCHEDULE-I [See rule 5]

(Design of Agmark insignia)



Name of the Commodity  $\tilde{0}$   $\tilde{0}$ 

# SCHEDULE . II (See rules 3 and 4)

#### GRADE DESIGNATION AND QUALITY OF GUAR SEED

- 1. Guar seed shall be obtained from clean, healthy and mature pod or bean of Cyamopsis *tetragonolobus* ( *L.*) of family *Leguminosae*.
  - 2. Minimum requirements:
  - (i) Guar seeds shall be.-
    - (a) wholesome, mature and dried seeds;
    - (b) of characteristic size, shape and colour,
    - (c) free from live and dead insects, insect fragments, mites, larvae;
    - (d) free from fungal infestation;
    - (e) free from added colouring matter;
    - (f) free from rodent contamination;
    - (g) free from the seeds of Argemone mexicana (Linn.) and other weeds;
    - (h) free from rancidity and mustiness;
    - (i) the odour and flavour of the seeds when ground and moistened shall be fresh;
    - (j) free from objectionable taste and flavour;
    - (k) free from kesari dal.
  - (ii) Guar seeds shall be white to whitish in colour and shall have at least ninety percent ninety percent of whitish colour.
  - (iii) Guar seeds shall comply with the residual limits of heavy metals, pesticides and other food safety requirements as laid down by the Codex Alimentarius Commission or the requirement for exports of the importing country.
  - (iv) Guar seeds shall comply with the restrictions in regard to residual levels of metal contaminants, insecticides and pesticides, crop contaminants, naturally occurring toxic substances and other food safety requirements as specified under the Prevention of Food Adulteration Rules, 1955.

#### 3. CRITERIA FOR GRADE DESIGNATION OF GUAR SEED

| Grade     | Special requirements |                                       |                 |  |                              |        |                          |                   |                          |                                |  |  |
|-----------|----------------------|---------------------------------------|-----------------|--|------------------------------|--------|--------------------------|-------------------|--------------------------|--------------------------------|--|--|
| designati |                      | Limit of tolerance percentage by mass |                 |  |                              |        |                          |                   |                          |                                |  |  |
| on        | Extraneous matter    |                                       | Other           | Damag  | Immatu                       | Moistu | Gum                      | Protein           | Total                    | Resid                          |  |  |
|           | Organic              | Inorganic<br>*                        | edible<br>seeds | ed<br>seeds<br>includin<br>g<br>mecha<br>nical<br>injuries | re<br>Shrivel<br>ed<br>seeds | re     | % (by<br>differ<br>ence) | (on dry<br>basis) | ash (on<br>dry<br>basis) | ue<br>insolu<br>ble in<br>acid |  |  |
|           | (Max.)               | (Max.)                                | (Max.)          | (Max.)   | (Max.)                       | (Max.) | (Min.)                   | (Max.)            | (Max.)                   | (Max.)                         |  |  |
| (1)       | (2)                  | (3)                                   | (4)             | (5)  | (6)                          | (7)    | (8)                      | (9)               | (10)                     | (11)                           |  |  |
| Special   | 0.10                 | 0.05                                  | Nil             | 0.30   | 1.0                          | 7.00   | 40                       | 33.0              | 4.0                      | 16.0                           |  |  |
| Standard  | 0.50                 | 0.30                                  | 0.50            | 1.00   | 3.00                         | 8.00   | 35                       | 35.0              | 5.0                      | 18.0                           |  |  |
| General   | 1.00                 | 0.60                                  | 1.0             | 2.50   | 5.00                         | 9.00   | 30                       | 37.0              | 6.0                      | 20.0                           |  |  |

\*Note: Impurities of animal origin shall not be more than 0.10%.

#### 4. Other requirements:

- (i) The guar seeds shall be in such condition to enable it to withstand transport and handling and to arrive in satisfactory condition at the place of destination.
- (ii) Guar seeds shall be stored in appropriate cool and dry place maintained in a clean and hygienic condition.
- (iii) In special grade, ninety eight percent by weight of guar seeds shall be of whitish colour.

Explanation. - For the purposes of these rules,-

- (a) %extraneous matter+means any extraneous matter comprising of .-
- (i) organic matter consisting of husk, straws, weed seeds and other in-edible seeds.
- (ii) inorganic matter consisting of metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filths.
- (b) %mmature shrivelled seeds+means seeds which are not properly developed.
- (c) %damaged seeds" means seeds or pieces of seeds that are sprouted or internally damaged as a result of heat, weather and moisture.

#### -8-SCHEDULE . III [See rules 3 and 4]

## GRADE DESIGNATION AND QUALITY OF UNDEHUSKED SPLIT (CRUDE) GUAR GUM

1. Guar gum un-dehusked split (crude) shall be obtained from clean, wholesome and healthy Guar seeds obtained from Guar pods or beans of Cyamopsis *tetragonolobus* (*L.*) of family *Leguminosae* by milling in a hygienic condition.

#### 2. Minimum requirements:

- (i) Guar gum un-dehusked split (crude) shall be -
  - (a) of characteristic size, shape and colour,
  - (b) free from living and dead insects, insect fragments, mites, larvae;
  - (c) free from fungus infestation and visible mould growth;
  - (d) free from added artificial colouring and bleaching matter;
  - (e) free from rodent hairs and excreta and animal filth;
  - (f) free from cobweb;
  - (g) free from the seeds of Argemone mexicana (Linn.) and kesari dal;
  - (h) free from rancidity and mustiness;
  - (i) free from objectionable taste and flavour;
  - (i) free from added starch and stabilizing agents.
- (ii) The odour and flavour shall be fresh when ground and moistened.
- (iii) Guar gum un-dehusked split (crude) shall be of white to grayish whiwhite in colour.
- (iv) Guar gum un-dehusked split (crude) shall comply with the residual limits of heavy metals, pesticides and other food safety requirements as laid down by the Codex Alimentarius Commission or the requirement of the importing country or as per buyersgrequirement for exports.
- (v) Guar gum un-dehusked split (crude) shall comply with the restrictions in regard to residual levels of metal contaminants, insecticides and pesticides, crop contaminants, naturally occurring toxic substances and other food safety requirements as specified under the Prevention of Food Adulteration Rules. 1955

## 3. CRITERIA FOR GRADE DESIGNATION OF UNDEHUSKED SPLIT (CRUDE) GUAR GUM

| Grade        |   | Special requirements |          |                                     |  |                                   |                             |  |  |   |             |  |  |  |
|--------------|---|----------------------|----------|-------------------------------------|--|-----------------------------------|-----------------------------|--|--|---|-------------|--|--|--|
| design ation | Limit of tolerance % by mass  Extraneous matter |                      |          |                                     |  |                                   |                             |  |  |   | 1           |  |  |  |
| dion         | Organic   | Inorganic            | Moisture | Total<br>ash ,<br>(on dry<br>basis) | Acid<br>insoluble<br>Ash (on<br>dry basis) | Protein<br>, (on<br>dry<br>basis) | Gum<br>% (by<br>difference) | Black,<br>brown<br>and red<br>colour<br>splits | Crude<br>fibre<br>(on<br>dry<br>basis) | Resid<br>ue<br>insolu<br>ble in<br>acid | рН          |  |  |  |
|              | Max.  | Max.                 | Max.     | Max.                                | Max.                                       | Max                               | Min.                        | Max.   | Max.                                   | Max                                     |             |  |  |  |
| (1)          | (2)   | (3)                  | (4)      | (5)                                 | (6)  | (7)                               | (8)                         | (9)  | (10)                                   | (11)                                    | (12)        |  |  |  |
| Special      | 0.10  | Nil                  | 8.00     | 3.0                                 | 0.4  | 22.0                              | 50.00                       | 3.0  | 10.5                                   | 13.0                                    | 5.5-<br>7.5 |  |  |  |
| Standar<br>d | 0.50  | 0.30                 | 9.00     | 3.5                                 | 0.5  | 24.0                              | 45.00                       | 5.0  | 11.0                                   | 14.0                                    | 5.5-<br>7.5 |  |  |  |
| General      | 0.70  | 0.60                 | 10.00    | 4.0                                 | 0.6  | 26.0                              | 40.00                       | 7.0  | 11.5                                   | 16.0                                    | 5.5-<br>7.5 |  |  |  |

#### 4.0 Other requirements.

- (i) The guar gum undehusked split (Crude) shall be in such condition to enable it to withstand transport and handling and to arrive in satisfactory condition at the place of destination.
- (ii) It shall be stored in appropriate cool and dry place maintained in a clean and hygienic condition.
- (iii) It shall be kept away from direct sunlight and moisture.
- (iv) The mesh or sieve size in micron may be marked on the packages (optional).

**Explanation**.- For the purposes of these rules, %extraneous matter+means any extraneous matter comprising of :-

- (a) Organic matter consisting of husk, straws, weed seeds and other inedible seeds.
- (b) Inorganic matter consisting of metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay and mud.

# SCHEDULE . IV [see rules 3 and 4] GRADE DESIGNATION AND QUALITY OF DEHUSKED SPLIT (REFINED) GUAR GUM

- 1. Guar gum dehusked split (Refined) shall be obtained by milling clean, wholesome and healthy Guar seeds obtained from Guar pod or bean of *Cyamopsis tetragonolobus (L.)* of family *Leguminosae* in a hygienic condition.
- 2. Minimum requirements:
  - (i) Guar gum dehusked split (refined) shall be:-
    - (a) of characteristic size, shape and colour,
    - (b) free from living and dead insects, insect fragments, mites, larvae;
    - (c) free from fungus infestation, visible mould growth;
    - (d) free from added artificial colouring and bleaching matter;
    - (e) free from rodent hair and excreta and animal filth;
    - (f) free from cobweb;
    - (g) free from the seeds of Argemone mexicana (Linn.) and kesari dal;
    - (h) free from rancidity and mustiness;
    - (i) free from objectionable taste and flavour;
    - (j) free from added starch and stabilizing agents.
- (ii) The odour and flavour of the Guar gum de-husked split (refined) shall be fresh when grind and moistened;
  - (iii) Guar gum de-husked split (refined) shall be white to whitish in colour.
  - (iv) Guar gum de-husked split (refined) shall comply with the residual limits of heavy metals, pesticides and other food safety parameters as laid down by the Codex Alimentarius Commission or the requirement of the importing country for exports.
  - (v) Guar gum de-husked split (refined) shall comply with the restrictions in regard to residual levels of metal contaminants, insecticides and pesticides, crop contaminants, naturally occurring toxic substances and other food safety requirements as specified under the Prevention of Food Adulteration Rules, 1955.

# 3. CRITERIA FOR GRADE DESIGNATION OF DEHUSKED SPLIT (REFINED) GUAR GUM

| Grade           | Special requirements |               |          |                                    |  |                                 |   |                                     |  |                                 |         |  |
|-----------------|----------------------|---------------|----------|------------------------------------|--|---------------------------------|---|-------------------------------------|--|---------------------------------|---------|--|
| design<br>ation |                      |               |          | L                                  | imit of tolerar                            | nce % by n                      | nass  |                                     |  |                                 |         |  |
|                 | Extraneous matter    |               |          |                                    |  |                                 |   |                                     |  |                                 |         |  |
|                 | Organic              | Inorga<br>nic | Moisture | Total<br>Ash, (on<br>dry<br>basis) | Acid<br>insoluble<br>Ash (on<br>dry basis) | Gum<br>% (by<br>differe<br>nce) | Protein<br>% by<br>mass,<br>(on dry<br>basis) | Crude<br>Fibre<br>(on dry<br>basis) | Black,<br>Brown,<br>Red<br>Splits,<br>% by<br>mass | Residue<br>Insoluble in<br>Acid | рН      |  |
|                 | Max.                 | Max.          | Max.     | Max.                               | Max.                                       | Min.                            | Max.  | Max.                                | Max.   | Max.                            |         |  |
| (1)             | (2)                  | (3)           | (4)      | (5)                                | (6)  | (7)                             | (8)   | (9)                                 | (10)   | (11)                            | (12)    |  |
| Special         | Nil                  | Nil           | 8.00     | 0.50                               | 0.15                                       | 83.00                           | 5.0   | 2.0                                 | 1.0  | 4.0                             | 5.5-7.5 |  |
| Standa<br>rd    | 0.50                 | 0.10          | 9.00     | 1.0                                | 0.15                                       | 80.00                           | 6.0   | 3.0                                 | 2.0  | 5.0                             | 5.5-7.5 |  |
| Gener<br>al     | 1.00                 | 0.50          | 10.00    | 1.50                               | 0.15                                       | 78.00                           | 8.0   | 4.0                                 | 2.5  | 6.0                             | 5.5-7.5 |  |

- 4. **Other requirements.-** (i)The de-husked split Guar Gum (refined) shall be in such condition to enable it to withstand transport and handling and to arrive in satisfactory condition at the place of destination.
  - (ii) Guar gum de-husked split (refined) shall be stored in appropriate cool and dry place maintained in a clean and hygienic condition.
  - (iii) Guar gum de-husked split (refined) shall be kept away from direct sunlight and moisture.
  - (iv) The mesh or sieve size in microns may be marked on the packages (optional).

**Explanation**: For the purposes of these rules, %extraneous matter+means any extraneous matter comprising of.-

- (a) Organic matter consisting of husk, straws, weed seeds and other inedible seeds.
- (b) Inorganic matter consisting of metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay and mud.

#### SCHEDULE -V

## [see rules 3 and 4] GRADE DESIGNATION AND QUALITY OF GUAR GUM (POWDER)

1. Guar gum Powder shall be obtained by multistage grinding, milling or pulverization of clean, wholesome and healthy Guar seeds from Guar pods/beans of *Cyamopsis tetragonolobus (L.)* of family *Leguminosae* or Guar Gum (refined) or Guar Gum (crude) in appropriate hygienic condition.

#### 2. Minimum requirements:

- (i) Guar gum powder shall be of off-white to pale white in colour.
- (ii) Guar gum powder shall be -
  - (a) free from living and dead insects, insect fragments, mites, larvae;
  - (b) free from fungus infestation and visible mould growth;
  - (c) free from added artificial colouring matter and bleaching matter;
  - (d) free from rodent hair and excreta and animal filth;
  - (e) free from cobweb;
  - (f) free from rancidity and mustiness;
  - (g) free from objectionable taste and flavour;
  - (h) free from added starch and stabilizing agents;
  - (i) free from extraneous matter.
- (iii) Guar gum powder shall comply with the residual limits of heavy metals, pesticides and other food safety parameters as laid down by the Codex Alimentarius Commission or the requirement of the importing country for exports.
- (iv) Guar gum powder shall comply with the restrictions in regard to residual levels of metal contaminants, insecticides and pesticides, crop contaminants, naturally occurring toxic substances and other food safety requirements as specified under the Prevention of Food Adulteration Rules, 1955.

#### 3. CRITERIA FOR GRADE DESIGNATION OF GUAR GUM (POWDER)

| Grade       |                              |                                   |   |                                      |   |                                 |   |  |         |
|-------------|------------------------------|-----------------------------------|---|--------------------------------------|---|---------------------------------|---|--|---------|
| designation | Limit of tolerance % by mass |                                   |   |                                      |   |                                 |   |  |         |
|             |                              |                                   |   |                                      |   |                                 |   |  |         |
|             | Moistur<br>e                 | Total<br>Ash (on<br>dry<br>basis) | Acid<br>insoluble<br>Ash ( on<br>dry basis) | Crude<br>Fibre<br>( on dry<br>basis) | Protein,<br>% by<br>mass, (on<br>dry basis) | Gum<br>% (by<br>differe<br>nce) | Viscosity<br>at 25deg.<br>centigrad<br>e in<br>centipois<br>e | Residue<br>Insolubl<br>e in<br>Acid , %<br>by mass | Ηq      |
|             | Max.                         | Max.                              | Max.  | Max.                                 | Max.  | Min.                            | Min.  | Max.   |         |
| (1)         | (2)                          | (3)                               | (4)   | (5)                                  | (6)   | (7)                             | (8)   | (9)  | (10)    |
| Special     | 8.0                          | 0.5                               | 0.10  | 1.50                                 | 3.5   | 83.0                            | 5500  | 3.0  | 5.5-7.5 |
| Standard    | 9.0                          | 1.0                               | 0.15  | 2.00                                 | 4.5   | 80.0                            | 4500  | 4.0  | 5.5-7.5 |
| General     | 10.0                         | 1.5                               | 0.25  | 2.50                                 | 5.5   | 78.0                            | 3500  | 5.0  | 5.5-7.5 |

- 4. **Other requirements.-** (i) Guar gum powder shall be stored in appropriate cool and dry place maintained in a clean and hygienic condition.
  - (ii) Guar gum powder shall be kept away from direct sunlight and moisture.
  - (iii) The gum percentage in the guar gum shall be marked on the package.
  - (iv) It shall be marked on the package guar gum powder **£** ood Grade.q
  - (v) The mesh or sieve size in microns or IS number, if any, may be marked on the packages.
    - (a) 100 Mesh . 95% of guar gum powder shall pass through 100 Mesh
    - (b) 200 Mesh . 95% of guar gum powder shall pass through 200 Mesh.
    - (c) 300 Mesh . 90% of guar gum powder shall pass through 300 Mesh. or as per specific requirements of the buyer.

**Explanation.** - For the purposes of these rules, %extraneous matter+ means any extraneous matter comprising of -

- (a) Organic matter consists of husk, straws, weed seeds and other indelible grains.
- (b) Inorganic matter consists of metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay and mud, animal filth.

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