

**Notice Calling for suggestions, views, comments etc from stakeholders within a period of 30 days on the draft notification related to standards of Sorghum Flour, Soybean, Soy Protein Products, Whole Maize (Corn) Flour, Wheat Protein Products Including Wheat Gluten, Durum Wheat Semolina and Whole durum wheat semolina, Durum Wheat, Finger Millet (Ragi) and Amaranth.**

**F.No. Stds/CPL&CP/Notification/FSSAI-2016** - In the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011, in regulation 2.4 relating to “Cereals & Cereal Products”.

**(a)** after sub-regulation 2.4.17, the following sub regulations shall be inserted, namely-

**2.4.18. Sorghum Flour**

Sorghum flour is the product obtained from grains of *Sorghum bicolor* (L.) Moench through a process of milling. It shall be free from abnormal flavours, odours, and living insects. It shall be free from filth (impurities of animal origin, including dead insects). It shall conform to the following standards:

<b>Parameters</b>	<b>Limits</b>
Moisture (percent by weight), Max.	12.0
Total Ash (on dry matter basis ), Max %	1.5
Protein (N 6.25)(on dry matter basis), Min %	8.5
Crude Fat (on dry matter basis), Max %	4.7
Particle Size	Max 80 % shall pass through a 180 micron sieve (80 mesh)

**2. Food Additives**

The product may contain Food Additives permitted in Appendix A of the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

**3. Contaminants, Toxins and Residues**

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011

**4. Food Hygiene**

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4, of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standard Act, 2006.

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

### 5. Packaging & Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

### 6. Method of Analysis

As provided in the relevant FSSAI Manual on Analysis of Food.

#### “2.4.19. Soybean

Soybean shall be obtained from the plants of *Glycine max* (L.) Merr. Soybean shall be mature, clean and dried seeds free from mould and musty odour. It shall also be free from non edible and toxic seeds.

It shall conform to the following standards-

Parameters	Limits
Moisture (percent by weight), Max.	12.0
Extraneous Matter	Not more than 1.0 per cent by weight of which not more than 0.25 per cent by weight shall be mineral matter and not more than 0.10 per cent. by weight shall be impurities of animal origin.
Organic % (Max. %)	
Inorganic (Max. %)	
Other edible grains (percent by weight), Max.	1.0
Immature, Shriveled and green seeds (percent by weight), Max.	6.0
Weevilled Seeds by count (no. of grains/100g) (Max. %)	2
Damaged or Split or Cracked seed (percent by weight), Max.	4.0

Oil content (percent on dry basis),Min. %	13.0
Acid Value of extracted oil (Max.)	2.5

## 2. Food Additives

The product may contain Food Additives permitted in Appendix A of the Food Safety and Standards (Food products Standards and Food Additives) Regulations, 2011.

## 3. Contaminants, Toxins and Residues

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.

## 4. Food Hygiene

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4, of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standard Act, 2006.

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

## 5. Packaging & Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

## 6. Method of Analysis

As provided in the relevant FSSAI Manual on Analysis of Food.

### “2.4.20. Soy Protein Products

Soy Protein Products (SPP) means the food products obtained by the reduction or removal from soybeans of the major non-protein constituents (water, oil, carbohydrates). The soybean used shall be clean, sound, mature and dry seeds. The Soy Protein Products so obtained shall be of following 3 types:

- i. Soy Protein Flour (SPF)
- ii. Soy Protein Concentrate (SPC)
- iii. Soy Protein Isolate (SPI)

They shall conform to the following standards:

Parameters:	Limits
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	<b>SPF</b>	<b>SPC</b>	<b>SPI</b>
Moisture (percent by weight), Max.	10.0	10.0	10.0
Crude Protein (percent on dry weight basis)	more than 65.0 and less than 90.0	more than 65.0 and less than 90.0	More than 90.0
Total Ash (percent on dry weight basis)	8.0	8.0	8.0
Crude Fibre (percent on dry weight basis) Max	5.0	6.0	0.50

## **2. Food Additives**

The product may contain Food Additives permitted in Appendix A of the Food Safety and Standards (Food products Standards and Food Additives) Regulations, 2011.

## **3. Contaminants, Toxins and Residues**

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.

## **4. Food Hygiene**

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4, of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standard Act, 2006.

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

## **5. Packaging & Labelling**

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

## **6. Method of Analysis**

As provided in the relevant FSSAI Manual on Analysis of Food.

### **“2.4.21. Whole Maize (Corn) Flour**

Whole Maize (Corn) Flour is prepared from fully mature, sound, ungerminated, whole kernels of maize, *Zea mays* L., by a grinding process in which the entire grain is comminuted to a suitable degree of fineness. In its preparation coarse particles of the ground maize kernel may be separated, reground and recombined with all of the material from which they were separated.

It shall be free from abnormal flavours, odours, living insects and filth (impurities of animal origin, including dead insects).

It shall conform to the following standards-

<b>Parameters</b>	<b>Limits</b>
Moisture (percent by weight), Max.	13.0
Ash (percent on dry weight basis), Max.	3.0
Protein (Nx6.25) (percent on dry weight basis), Min.	8.0
Crude Fat (percent on dry weight basis), Min.	3.1
Particle Size	95% or more of the whole maize flour shall pass through a 1.19 mm sieve (16 mesh)

## **2. Food Additives**

The product may contain Food Additives permitted in Appendix A of the Food Safety and Standards (Food products Standards and Food Additives) Regulations, 2011.

## **3. Contaminants, Toxins and Residues**

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.

## **4. Food Hygiene**

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4, of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standard Act, 2006.

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

## 5. Packaging & Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

## 6. Method of Analysis

As provided in the relevant FSSAI Manual on Analysis of Food.

### “2.4.22. Wheat Protein Products Including Wheat Gluten

Wheat Protein Products (WPP) are produced from wheat or wheat flour by separation of certain non-protein constituents such as starch and other carbohydrates.

Vital wheat gluten is characterized by its property of high viscoelasticity as hydrated.

Devitalized wheat gluten is characterized by its reduced property of viscoelasticity as hydrated due to denaturation.

Solubilized wheat proteins are characterized by their reduced property of viscoelasticity as hydrated due to partial hydrolysis of wheat gluten.

2. Optional Ingredients for Solubilised wheat proteins –

Carbohydrates, including sugars, edible fats and oils, other protein products, amino acids, vitamins and minerals, salt, herbs and spices and enzymes may be added.

3. It shall conform to the following standards:

Parameters	Limits
Moisture (percent by weight), Max.	10.0
Crude Protein (N 6.25)(percent on dry weight basis) ,Min	
i. Vital and devitalized wheat gluten	80.0
ii. Solubilized wheat proteins	60.0
Total Ash (percent on dry weight basis ), Max	
i. Vital and devitalized wheat gluten	2.0
ii. Solubilized wheat proteins	10.0

## 2. Food Additives

The product may contain Food Additives permitted in Appendix A of the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

### 3. Contaminants, Toxins and Residues

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.

### 4. Food Hygiene

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4, of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standard Act, 2006.

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

### 5. Packaging & Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

### 6. Method of Analysis

As provided in the relevant FSSAI Manual on Analysis of Food.

#### “2.4.23. Durum Wheat Semolina and Whole durum wheat semolina

Durum wheat semolina is the product prepared from grain of durum wheat (*Triticum durum* Desf.) by grinding or milling processes in which the bran and germ are essentially removed and the remainder is comminuted to a suitable degree of fineness. Whole durum wheat semolina is prepared by a similar comminuting process, but the bran and part of the germ are retained.

It shall conform to the following standards:

Parameters	Limits	
	Durum Wheat Semolina	Whole Durum Wheat Semolina
Moisture (percent by weight), Max.	12.0	12.0
Total Ash (percent on dry basis), Max.	1.3	2.1

Acid insoluble ash (percent on dry basis), Max.	0.1	0.1
Protein (N x 5.7) (percent on dry matter basis), Min.	10.5	11.5
Alcoholic Acidity (with 90 percent alcohol expressed as H <sub>2</sub> SO <sub>4</sub> ) (Max. %)	0.18	0.18
Particle Size	Max 80 % shall pass through a 500 micron silk guaze or man made textile sieve	Max 80 % shall pass through a 500 micron silk guaze or man made textile sieve -

## 2. Food Additives

The product may contain Food Additives permitted in Appendix A of the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

## 3. Contaminants, Toxins and Residues

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.

## 4. Food Hygiene

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4, of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standard Act, 2006.

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

## 5. Packaging & Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

## 6. Method of Analysis

As provided in the relevant FSSAI Manual on Analysis of Food.

**(b)** In sub-regulation 2.4.6, relating to “Food Grains”, after clause 18 the following sub regulations shall be inserted, namely-



### **“19. Durum Wheat**

Durum wheat shall be dried mature grains obtained from varieties of the species *Triticum durum* Desf. Durum wheat shall be free from abnormal flavours, odours, living insects and mites.

It shall conform to the following standards:

<b>Parameters</b>	<b>Limits</b>
Moisture (percent by weight), Max.	13.0
Protein (percent on dry matter basis)	Not less than 11.0
Yellow pigment	Not less than 5.0 ppm
Extraneous matter	Not more than 1 % by weight out of which not more than 0.25% by weight shall be mineral matter and not more than 0.10% by weight shall be impurities of animal origin
Other edible grains (Not more than percent by weight)	3.0
Damaged grains ( Not more than percent by weight)	4.0
Weevil Affected Grains (No. of Grains /100 g)	Not more than 4
Minimum Test weight (weight of 100 litre volume expressed in Kg	70
Shrunken and broken kernels (Not more than percent by weight)	6.0
Ergot ( Not more than percent by weight )	0.5
Uric acid (Not more than)	100 mg per Kg

### **2. Food Additives**

The product may contain Food Additives permitted in Appendix A of the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

### **3. Contaminants, Toxins and Residues**

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.

#### 4. Food Hygiene

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4 of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standard Act, 2006.

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

#### 5. Packaging & Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

#### 6. Method of Analysis

As provided in the relevant FSSAI Manual on Analysis of Food

#### “20. Finger Millet (Ragi)

Ragi shall be the dried mature grains of *Eleusine coracana L. Gaertn.* It should be free from added colouring matter, moulds, weevils, obnoxious substances, discolouration, poisonous seeds and all other impurities except to the extent indicated in the table below. It shall be free from rodent hair and excreta.

It shall conform to the following standards:

Parameters	Limits
Moisture (percent by weight), Max.	12.0
Extraneous Matter (percent by weight), Max.	Not more than 1.0 per cent by weight of which not (Extraneous matter) more than 0.25 per cent by weight shall be mineral matter and not more than 0.10 per cent by weight shall be impurities of animal origin.
Other edible grains (percent by weight), Max.	2.0
Damaged grains (percent by weight), Max.	2.0
Immature and Shrivelled Grains (percent by weight), Max.	3.0
Weevilled grains (percent by Count), Max.	2
Uric acid (Max.)	100 mg/kg

#### 2. Food Additives

The product may contain Food Additives permitted in Appendix A of the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

### 3. Contaminants, Toxins and Residues

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.

### 4. Food Hygiene

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4 of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standard Act, 2006

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

### 5. Packaging & Labelling

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

### 6. Method of Analysis

As provided in the relevant FSSAI Manual on Analysis of Food

## “21. Amaranth

Amaranth shall be the dried mature grains of *Amaranthus caudatus*, *Amaranthus cruentus* and *Amaranthus hypochondriacus*. It should be free from added colouring matter, moulds, weevils, obnoxious substances, discolouration, poisonous seeds and all other impurities except to the extent indicated in the table below. It shall be free from rodent hair and excreta.

It shall conform to the following standards:

Parameters	Limits
Moisture (percent by weight), Max.	12.0
Other edible grains (percent by weight), Max.	1.0
Damaged grains (percent by weight), Max.	2.0
Extraneous matter (percent by weight), Max.	Not more than 1.0 per cent by weight of which not (Extraneous matter) more than 0.25 per cent by weight shall be mineral matter and not more than 0.10 per cent by weight shall be impurities of animal origin.

Immature and Shrivelled Grains (percent by weight), Max.	3.0
Weevilled grains (percent by Count), Max.	2
Uric acid (Max.)	100 mg/kg

## **2. Food Additives**

The product may contain Food Additives permitted in Appendix A of the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

## **3. Contaminants, Toxins and Residues**

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.

## **4. Food Hygiene**

The product shall be prepared and handled in accordance with the guidance provided in the Schedule 4, of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standard Act, 2006.

The product shall conform to the microbiological requirement given in Appendix B of the Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011.

## **5. Packaging & Labelling**

The product covered by this Standard shall be labelled in accordance with the Food Safety and Standards (Packaging & Labelling) Regulation, 2011.

## **6. Method of Analysis**

As provided in the relevant FSSAI Manual on Analysis of Food.