# Notice calling for claims, suggestions, views, comments etc from stakeholders within a period of 30 days on the draft notification of BIS proposed Standards.

- 2. In the Food Safety and Standards (Food Product Standards and Food Additives) Regulations, 2011:
- (A) In regulation 2.4 relating to "Cereals and Cereal Products", sub-regulation 2.4.11 after clause 2, the following clause shall be inserted, namely:-

# 3. Malt Extract

1. Malt Extract means the product prepared by digesting with water, sound malted grains, germinated whole grains of cereals (such as barley, wheat and millets) at a suitable temperature with or without adding enzymes. The water extract is then strained and evaporated into a viscous product. Malt or malt extract shall not be prepared from wheat gluten, corn grits, edible starches (such as potato or tapioca) and legume flours. It shall be a viscous liquid, amber or yellowish brown in colour and shall possess a characteristic odour and sweet taste. The material shall be free from any adulterants, off-odour, foreign flavour and impurities. Malt Extract shall be of the following three types:

Type 1- Diastatic Malt Extract

Type 2- Non Diastatic Malt Extract

Type 3- Brewery Grade Malt Extract

It shall also conform to the following standards, namely:

Sr.	Characteristic	Requirement		
No.		Type 1	Type 2	Type 3
(a)	Density at 20° C Min	1.39	1.39	1.39
(b)	Refractive Index at 20 <sup>o</sup> C, Min	1.489	1.489	1.489
(c)	Total solids (as is basis), % by weight, Min	77	77	77
(d)	Reducing sugar, on dry basis, (calculated as anhydrous maltose), % by weight, Min	55-65	55-65	55-65
(e)	Crude protein (on dry basis), % by weight, Min	35-5.5	3.5-5.5	2.5
(f)	Test for starch	Negative	Negative	Negative

#### 2. Food Additives

Only those additives permitted under Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011 shall be used.

### 3. Hygiene

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

#### 4. Contaminants, Toxins and Residues

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

The products covered in this standard shall confirm to the microbiological requirements as given in Appendix B of Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

## 5. Packaging and Labelling

The products shall comply with the packaging and labelling requirements as laid down under the Food Safety and Standards (Packaging and Labelling) Regulations, 2011.

(B) In regulation 2.4 relating to "Cereals and Cereal Products", sub- regulation 2.4.15 following clause shall be inserted, namely:

#### 2.4.16 EXPELLER PRESSED FLOUR

- 1. EXPELLER PRESSED EDIBLE GROUNDNUT FLOUR means the product obtained by expeller pressing fresh, clean degermed groundnut kernels which have been decuticled after mild roasting. The kernels shall be sorted and selected either by visual inspection, inspection under ultraviolet light, electronic sorting or by other means. The kernels shall be free from insect or fungal infestation. Expeller pressed edible groundnut flour shall be whitish to light brown in colour, uniform in composition and shall be free from insect or fungal infestation, objectionable odour and rancid taste. It shall not contain added flavouring and colouring agents or any other extraneous matter. It shall be free from castor husk or MAHUA oilcake. It shall be manufactured, packed, stored and distributed under hygienic conditions. It shall conform to the following standards namely:-
  - (a) Moisture

Not more than 9.0 per cent by weight

(b) Total ash Not more than 4.5 per cent by weight on

dry basis

(c) Ash insoluble in dilute Not more than 0.35 percent by weight on

II dry basis

(d) Protein (Nx6.25) Not less than 45 percent by weight on dry

basis

(e) Crude fibre Not more than 5.0 percent by weight on

dry basis

(f) Fat Not more than 9.0 percent by weight on

dry basis

(g) Acid value of extracted Not more than 4.0 percent

fat

#### 2. Food Additives

Only those additives permitted under Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011 shall be used.

#### 3. Hygiene

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

#### 4. Contaminants, Toxins and Residues

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

The products covered in this standard shall confirm to the microbiological requirements as given in Appendix B of Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

#### 5. Packaging and Labelling

The products shall comply with the packaging and labelling requirements as laid down under the Food Safety and Standards (Packaging and Labelling) Regulations, 2011.

(C) in regulation 3.2 relating to "STANDARDS OF ADDITIVES" after sub regulation 3.2.1, the following sub-regulation shall be inserted, namely;

## **3.2.2 Baker's Yeast** shall be of the following two types:

- (a) Baker's Yeast, Compressed; and
- (b) Baker's Yeast, Dried.

- (a) Baker's Yeast (Compressed) This shall be in the form of a block having creamy white colour, and odour characteristic of good baker's yeast (compressed) and a fine even texture. It shall not be slimy or mouldy and shall not show any sign of deterioration or decomposition. It shall be free from extraneous materials. Starch of an edible quality may, however, be added in a quantity not exceeding 7% by weight on dry basis. Permissible edible binders and fillers may be added. It shall break sharply on bending. The fresh yeast blocks shall be wrapped or packed in clean waxed paper or any other suitable food grade wrapping material or nontoxic wrappers to preserve freshness and to prevent undue deterioration during storage. The yeast blocks shall be stored at temperature between 1 to 5°C.
- **(b) Baker's Yeast (Dried)** This shall be in the form of powder small granules, pellets or flakes. It shall have an odour characteristic of good baker's yeast (dried). It shall not be mouldy and shall not show any sign of deterioration or decomposition. It shall be free from adulterants and other extraneous materials. Starch of an edible quality may, however, be added in a quantity not exceeding 10 % by weight of the material. The dried yeast shall be packed in clean, sound and suitable air-tight containers, preferably tin containers in such a manner as to prevent the absorption of moisture and to prevent undue deterioration during storage. The yeast shall be stored in a cool and dry place at a temperature of not more than 25°C.

Baker's Yeast shall conform to the following standards namely:-

Sr.	Characteristic	Requirements for		
No.		Baker's yeast Compressed	Baker's Yeast Dried	
1.	Moisture, percent by weight, max	73	8	
2.	Dispensability in water	To satisfy the test*	To satisfy the test*	
3.	Fermenting power*, Min	1000	350	
4.	Dough-rising capacity	To satisfy the test*	To satisfy the test*	

<sup>\*</sup> As per method prescribed in IS:1320.

**Note:** This parameters shall be tested within 24 hours of production of yeast.

#### 2. Food Additives

Only those additives permitted under Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011 shall be used.

#### 3. Hygiene

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

#### 4. Contaminants, Toxins and Residues

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

The products covered in this standard shall confirm to the microbiological requirements as given in Appendix B of Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

#### 5. Packaging and Labelling

The products shall comply with the packaging and labelling requirements as laid down under the Food Safety and Standards (Packaging and Labelling) Regulations, 2011.

#### 3.2.3 Lactic Acid (Food Grade)

Lactic acid shall be yellowish to colourless syrupy liquid with an acidic taste and no odour. It is obtained by lactic fermentation of sugars or prepared synthetically. It shall be miscible in water and ethanol. It shall give positive test for lactate. It shall conform to the following standards:

Sr.	Characteristic	Requirement		
No.				
(1)	(2)	(3)		
1.	Purity $(C_3H_6O_3)$ , % by weight s of the labled concentration	95.0 to 105.0		
2.	Sulphated ash, % by weight, Max	0.1		
3.	Chlorides, % by weight, Max	0.2		
4.	Sulphates (as $SO_4$ ), % by weight, Max	0.25		
5.	Citric, oxalic, phosphoric and tartaric acids	Conform to test*		
6.	Sugars	Conform to test*		
7.	Readily carbonizable substances	Conform to test*		
8.	Cyanide	Conform to test*		
9.	Methanol, % by weight, Max	0.2		
10.	Iron(as Fe), mg/kg, Max	10		
*A	*As per method prescribed in IS:9971.			

#### 2. Hygiene

The product shall be prepared and handled in accordance with the guideline provided in Schedule 4, Part-II of the Food Safety and Standards (Licensing and

Regulation of Food Businesses) Regulation, 2011 and any other such guidance provided from time to time under the provisions of Food Safety and Standards Act, 2006.

#### 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.

The products covered in this standard shall confirm to the microbiological requirements as given in Appendix B of Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

#### 4. Packaging and Labelling

The products shall comply with the packaging and labelling requirements as laid down under the Food Safety and Standards (Packaging and Labelling) Regulations, 2011.

### 3.2.4 Ascorbic Acid (Food Grade)

Ascorbic acid shall be a white or almost white odourless crystalline solid. Its melting range is  $190^{\circ}$ C to  $192^{\circ}$ C with decomposition. The material is freely soluble in water and sparingly soluble in ethanol and insoluble in ether. It shall conform to the following standards:

Sr.	Characteristic	Requirement
No.		
1.	Purity as $C_6H_8O_6\%$ by weight, Min	99
2.	Loss on drying over sulphuric acid for 24 hours, $\%$ by weight , $\mbox{\rm Max}$	0.4
3.	Sulphated ash, % by weight, Max	0.1
4.	Specific rotation, when determined in a 2 % (m/v) solution in water at $20^{\circ}\text{C}$	+20.50 - +21.50
5.	pH of 2 % (m/v) solution	2.4 - 2.8

#### 2. Hygiene

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

#### 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.

The products covered in this standard shall confirm to the microbiological requirements as given in Appendix B of Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

### 4. Packaging and Labelling

The products shall comply with the packaging and labelling requirements as laid down under the Food Safety and Standards (Packaging and Labelling) Regulations, 2011.

#### 3.2.5 Calcium Propionate (Food Grade)

Calcium propionate shall be in the form of white crystals or crystalline solid possessing a faint odour of propionic acid. The material shall be freely soluble in water. It shall conform to the following standards:

Sr. No.	Characteristic	Requirement
1.	Purity as $C_6H_{10}O_4Ca$ , % by weight on dry basis, Min	98
2.	Moisture, % by weight, Max	5.0
3.	Matter insoluble in water, % by weight, Max	0.3
4.	Iron (as Fe), mg/kg, Max	50
5.	Fluoride, mg/kg, Max	10
6.	Magnesium (as MgO)	To pass the test (about 0.4%)
7.	pH of the 10 %(m/v) solution at $25 \pm 2^{\circ}$ C	7-9

### 2. Hygiene

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

#### 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.

The products covered in this standard shall confirm to the microbiological requirements as given in Appendix B of Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

#### 4. Packaging and Labelling

The products shall comply with the packaging and labelling requirements as laid down under the Food Safety and Standards (Packaging and Labelling) Regulations, 2011.

# 3.2.6 Sodium Metabisulphite (Food Grade)

Sodium Metabisulphite shall be colourless crystals or white to yellowish crystalline powder having an odour of sulphur dioxide. The material is soluble in water but insoluble in ethanol. It shall conform to the following standards:

Sr. No.	Characteristic	Requirement
1.	Purity	
	(a) As $Na_2S_2O_5$ , % by weight, Min	95
	(b) As SO <sub>2,</sub> % by weight, Min	64
2.	Water insoluble matter, % by weight, Max	0.05
3.	Thiosulphate, % by weight, Max	0.01
4.	Iron (as Fe), mg/kg, Max	5
5.	Selenium (as Se), mg/kg, Max	30
6.	pH	Acidic to litmus

#### 2. Hygiene

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

#### 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.

The products covered in this standard shall confirm to the microbiological requirements as given in Appendix B of Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

## 4. Packaging and Labelling

The products shall comply with the packaging and labelling requirements as laid down under the Food Safety and Standards (Packaging and Labelling) Regulations, 2011.

# 3.2.7 Potassium Metabisulphite(Food Grade)

Potassium Metabisulphite shall be white or colourless, free flowing crystals, crystalline powder or granules usually having an odour of sulphur dioxide. It gradually oxidizes in air to sulphate. The material is soluble in water but insoluble in ethanol. It shall conform to the following standards:

Sr. No.	Characteristic	Requirement
1.	Purity, as $K_2S_2O_5$ , % by weight , Min	90
2.	Water insoluble matter, %by weight, Max	0.05
3.	Thiosulphate, % by weight, Max	0.1
4.	Iron (as Fe), mg/kg, Max	5
5.	Selenium (as Se), mg/kg, Max	30
6.	рН	Acidic to litmus

### 2. Hygiene

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

#### 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.

The products covered in this standard shall confirm to the microbiological requirements as given in Appendix B of Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

#### 4. Packaging and Labelling

The products shall comply with the packaging and labelling requirements as laid down under the Food Safety and Standards (Packaging and Labelling) Regulations, 2011.

(D) In the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011, in APPENDIX B relating to "Microbiological Requirements", insert the following after Table 5:

Table- 6: Microbiological Requirements of Cereal, Pulses, Legume and their products (including bakery)			
Sr. No.	Food Products	Parameters	Limits
1.	Complementary Foods for Older Infants and	Total bacterial count, CFU/g, Max	50000
	Young Children	Coliform count, CFU/g, Max	10
2.	Edible Groundnut Flour (Expeller	Total bacterial count CFU/g, Max	50000
	Pressed)	Coliform count CFU/g, Max	10
		Salmonella bacteria, CFU/g	Nil
3.	Malt Extract	Total bacterial count, CFU/g, Max	10000
		Coliform count, CFU/g	Absent
		Yeast count, CFU/g, Max	500
		Mould count, CFU/ g, Max	500

Table- 7: Microbiological Requirements of Other Products			
Sr.	Food	Parameters	Limits
No.	Products		
1.	Baker's Yeast		
	Baker's Yeast (Compressed	Total bacterial count, CFU/g (on dry basis), Max	7.5X10 <sup>5</sup>
	)	E. coli, CFU	Absent in 1
		Salmonella, Shigella species	Absent in 1
		Coliform count, CFU/g, Max	10
		Rope spore count, CFU/g, Max	10
	Baker's Yeast (Dried)	Total bacterial count, CFU/g (on dry basis),Max	8 X10 <sup>6</sup>
		E. coli, CFU	Absent in 1
		Calmanalla Chiaalla annaina	g Absortin 1
		Salmonella, Shigella species	Absent in 1
		Coliform count, CFU/g, Max	50
		Rope spore count, CFU/g, Max	100