

**Notice calling for claims, suggestions, views, comments etc from WTO-SPS Committee Members within a period of 60 days on the draft amendment of Food Safety and Standards (Food Product Standards and Food Additives) Regulations, 2011 prescribing Standards for Malt Extract, Expeller Pressed Flour, Lactic Acid, Baker's Yeast, Ascorbic Acid, Calcium Propionate, Sodium Metabisulphite and Potassium Metabisulphite.**

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. No.	Characteristic	Requirement		
		Type 1	Type 2	Type 3
(a)	Density at 20 <sup>0</sup> C Min	1.39	1.39	1.39
(b)	Refractive Index at 20 <sup>0</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



(b) Total ash	Not more than 4.5 per cent by weight on dry basis
(c) Ash insoluble in dilute HCl	Not more than 0.35 percent by weight on 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 fat	Not more than 4.0 percent

## **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 conform 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 non-toxic wrappers to preserve freshness and to prevent undue deterioration during storage. The yeast blocks shall be stored at temperature between 1 to 5<sup>o</sup> 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<sup>o</sup> C.

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

Sr. No.	Characteristic	Requirements for	
		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*

\* 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 conform 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. No.	Characteristic	Requirement
(1)	(2)	(3)
1.	Purity (C <sub>3</sub> H <sub>6</sub> O <sub>3</sub> ), % by weight of the labeled 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 <sub>4</sub> ), % 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

\*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 conform 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°C to 192°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. No.	Characteristic	Requirement
1.	Purity as C <sub>6</sub> H <sub>8</sub> O <sub>6</sub> % by weight , Min	99
2.	Loss on drying over sulphuric acid for 24 hours, % by weight , 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°C	+20.5 <sup>0</sup> - +21.5 <sup>0</sup>
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 $\text{Na}_2\text{S}_2\text{O}_5$ , % by weight, Min	95
	(b) As $\text{SO}_2$ , % 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 conform 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.	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.

(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:

<b>Table- 6: Microbiological Requirements of Cereal, Pulses, Legume and their products (including bakery)</b>			
Sr. No.	Food Products	Parameters	Limits
1.	Complementary Foods for Older Infants and Young Children	Total bacterial count, CFU/g, Max	50000
		Coliform count, CFU/g, Max	10
2.	Edible Groundnut Flour (Expeller Pressed)	Total bacterial count CFU/g, Max	50000
		Coliform count CFU/g, Max	10
		<i>Salmonella</i> 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

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

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