

Appendix A : List of Food Additives

Use of Food Additives in Food Products: Food products may contain additives as specified in the Regulations and in the following tables

Table 1

List of food additives for use in bread and biscuits

Sl. No.	Name of additive	Bread	Biscuits
1	2	3	4
A. Acidity regulators			
1	Sodium fumarate	GMP	GMP
2	Potassium malate	GMP	GMP
3	Sodium hydroxide	GMP	GMP
4	Acetic acid or Lactic acid	2500 ppm max	GMP
5	Citric acid	-	GMP
6	Malic acid	-	GMP
7	Tartaric acid	-	GMP
B. Emulsifying and stabilizing agents singly or in combination		-	Emulsifying and stabilizing agents listed in regulation 3.1.6 suitable for this product may be used.
1	Sucroglycerides	-	1000 ppm max
2	Hydroxy Propyl methyl cellulose	GMP	GMP
3	Sucrose esters of fatty acids	GMP	GMP
4	Di- Acetyl tartaric acid esters of mono and di- glycerides	GMP	10000 ppm max
5	Guar gum	5000 ppm max	—
6	Sorbitol	GMP	—
7	Lecithin	GMP	—
8	Glycerine	GMP	—
9	Glycerol monostearate	GMP	—
10	Sodium steroyl 2 lactylate of Calcium steroyl 2 lactylate (Singly or in combination)	5000 ppm max	—
11	Polyglycerol esters of fatty acids and polyglycerol esters of interesterified ricinoleic acid	2000 ppm max	—
C. Improver			
1	Fungal alpha amylase	100 ppm max (on flour mass basis)	—
2	Bacterial amylase	GMP	GMP
3	Amylases and other enzymes	-	GMP
4	Ammonium persulphate	2500 ppm max (on flour mass basis)	—
5	Calcium phosphate	2500 ppm max (on flour mass basis)	—
6	Calcium carbonate	5000 ppm max (on flour mass basis)	—

1	2	3	4
	7 Potassium bromate and/or Potassium iodate	50 ppm max (On flour mass basis)	—
D.	Flour treatment agent		
	1 Ammonium chloride	500 ppm max (on flour mass basis)	—
	2 L- cystein mono hydrochloride	90 ppm max (on flour mass basis)	—
	3 Ammonium phosphate	2500 ppm max (on flour mass basis)	—
	4 Benzoyl peroxide	40 ppm max	40 ppm max
E.	Antioxidant	-	As per regulation 3.1.5
	1 Ascorbic acid	GMP	GMP
F.	Preservatives/ Mould inhibitors singly or in combination		
	1 Calcium or sodium propionate	5000 ppm max	—
	2 Sorbic acid or its Sodium, Potassium or Calcium salts (calculated as sorbic acid)	1000 ppm max	—
	3 Acid calcium phosphate	10000 ppm max	—
	4 Sodium diacetate	4000 ppm max	—
	5 Acid sodium pyrophosphate	5000 ppm max	—
G	Colours (can be used singly or in combination within the specified limits)		
a.	Natural		
	1 Chlorophyll	-	GMP
	2 Caramel	—	
	3 Curcumin or turmeric	—	
	4 Beta carotene	—	
	5 Beta apo-8 carotenal	—	
	6 Methyl ester of Beta apo-8 carotenic acid	—	
	7 Ethyl ester of Beta apo-8 carotenic acid	—	
	8 Canthaxanthin	—	
	9 Riboflavin, Lactoflavin	—	
	10 Annato	—	
	11 Saffron	—	
b.	Synthetic		
	1 Ponceau 4R	-	100 ppm max (singly or in combination)
	2 Carmoisine	—	
	3 Erythrosine	—	
	4 Tartrazine	—	
	5 Sunset Yellow FCF	—	
	6 Indigo carmine	—	
	7 Brilliant blue FCF	—	
	8 Fast green FCF	—	

1	2	3	4
H. Artificial sweeteners (Singly)			
1	Aspartame	2200 ppm max	2200 ppm max
2	Acesulphame K	1000 ppm max	1000 ppm max
3	Sucralose	750 ppm max	750 ppm max
I. Leavening agents			
1	Baking powder	GMP	GMP
2	Ammonium bi-carbonate	GMP	GMP
3	Ammonium carbonate	5000 ppm max	5000 ppm max
J. Flavours			
1	Natural flavours and natural flavouring substances/ Nature identical flavouring substances/ Artificial flavouring substances	-	GMP
K. Flavour improver/ enhancer			
		-	GMP
L. Nutrient			
1	Calcium and ferrous salts	-	GMP
2	Potassium iodate	-	GMP
M. Dough conditioners			
1	Sodium bisulphite	-	GMP
2	Sodium metabisulphite	-	GMP
N. Yeast			
		GMP	GMP
O. Jellifying agents			
		-	GMP

Table 2
List of Food Additives for use in Foods

Sl. No.	Additives	Snacks/ Savouries (Fried Products):- Chiwda, Bhujia, Dalmoth, Kadubale, Kharaboondi, Spiced & Fried dals, banana chips and similar fried products sold by any name	Sweets (Carbohydrates based and Milk product based):- Halwa, Mysore Pak, Boondi Ladoo, Jalebi, Khoya Burfi, Peda, Gulab Jamun, Rasogolla and Similar milk product based sweets sold by any name	Istant mixes such as idli mix, dosa mix, upma mix, pongal mix, puliyogare mix, gulab jamun mix, jalebi mix, vada mix, etc.	Rice and Pulses based Papads	Ready-to-Serve Beverages Tea/Coffee based	Chewing gum/ Bubble gum	Sugar based/ Sugar free confectionery	Chocolates	Synthetic syrup for dispensers	Lozenges
1	2	3	4	5	6	7	8	9	10	11	12
A Antioxidants											
1	Tocopherol	GMP	GMP	-	-	-	-	-	-	-	-
2	Lecithin	GMP	GMP	-	-	-	-	-	-	-	-
3	Butylated hydroxy anisole (BHA)	200 ppm max	200 ppm max	-	-	-	250 ppm max	-	-	-	-
4	Tertiary butyl hydro quinone (TBHQ)	200 ppm max	200 ppm max	-	-	-	-	-	-	-	-
B Emulsifier/ Stabiliser											
1	Methyl cellulose	0.5% max	0.5% max	-	-	-	-	-	-	-	-
2	Carboxymethyl cellulose	0.5% max	0.5% max	-	-	-	-	-	-	-	-
3	Gellan gum	-	-	-	-	-	-	2% max (in sugar boiled confec- tionery only)	-	-	-
C Preservatives											
1	Sorbic acid and its sodium, potassium and calcium salts (calculated) as sorbic acid	-	1000 ppm max	0.5% max	0.1% max	300 ppm max	-	-	-	-	-
2	Benzoic acid	-	300 ppm max	-	-	-	-	-	-	-	-
D Anticaking agents											
1	Carbonates of calcium and Magnesium	-	-	Not more than 2.0%	-	-	-	-	-	-	-

Table 3
Food Additives in Foods not specified

S. No.	Name of the product	Colours	Preservatives	Emulsifiers/ Stabilisers	Flavour enhancers	Anti- caking agents	Acid regu- lators	Impro- ver/ Leave- ning agents	Anti- oxi- dants
1	2	3	4	5	6	7	8	9	10
1	Desert jelly			Carageenan GMP	-	-	-	-	-
2	Dairy based drinks, flavoured and/ or fermented (e.g chocolate, milk, cocoa, eggnog) UHT sterilized milk shelf life more than three months	-	-	Carageenan- Singly- GMP Pectin- Singly- GMP Mono diglycerides of fatty acids - Singly - GMP lecithin - Singly GMP sodium alginate and calcium alginate- singly GMP, Xantham Gum, singly- GMP, Microcrystalline cellulose singly GMP, Guar Gum- Singly - GMP	-	-	-	-	-
3	Powdered Soft Drink concentrate mix/ fruit beverage drink	Titanium Dioxide 100 ppm maximum, Ponceau 4R carmoisine/ Erythrosine/ Tartrazine/ Sunset Yellow FCF/ Indigo Carmine/ Brilliant Blue FCF/ fast green FCF 100 ppm maximum	-	-	-	Sodium Aluminium Silicate - 0.5% maximum	-	-	-
4	Soups, Bullions and Taste Makers	-	-	-	Di- Sodium 5 Guanalate (Di-Sodium 5- Inosinate)- GMP	-	-	-	-
5	Custard Powder, Jelly Crystal, icecandy, Thread, Candies, Wafers	Ponceau 4R/ carmoisine/ Erythrosine/ Tartrazine/Sunset Yellow FCF/ Indigo Carmine/ Brilliant Blue FCF/	-	-	-	-	-	-	-

1	2	3	4	5	6	7	8	9	10
		fast green FCF-100 ppm maximum							
6	Flavour Emulsion, Flavour Paste (for carbonated and non carbonated water only)	Ponceau 4R/carmoisine/ Erythrosine/ Tartrazine/ Sunset Yellow FCF/ Indigo Carmine/ Brilliant Blue FCF/ fast green FCF 100 ppm maximum as per instructions on the label	Benzoic Acid including salt thereof GMP	Edible Gums (Arabic and Gum ghatti), glycerols esters of wood resins (ester gum) - GMP	-	-	-	-	TBHQ (tertiary butyl hydro quinine and BHA (butylated hydroxyl anisole) - max 0.01%
7	Sausages and Sausage meat containing raw meat, cereals and condiments	-	Sulphur dioxide- 450 ppm max	-	-	-	-	-	-
8	Corn flour and such like starches	-	Sulphur dioxide- 100 ppm max	-	-	-	-	-	-
9	Corn syrup	-	Sulphur dioxide- 450 ppm max	-	-	-	-	-	-
10	Canned rasgolla (the cans shall be internally lacquered with sulphur dioxide resistant lacquer)	-	Nisin-5 ppm maximum	-	-	-	-	-	-
11	Gelatin	-	Sulphur dioxide- 1000 ppm max	-	-	-	-	-	-
12	Beer	-	Sulphur dioxide-- 70 ppm max	-	-	-	-	-	-
13	Cider	-	Sulphur dioxide- 200 ppm max	-	-	-	-	-	-
14	Alcoholic wines	-	Sulphur dioxide- 450 ppm max	-	-	-	-	-	-
15	Non Alcoholic wines	-	Sulphur dioxide- 350 ppm max	-	-	-	-	-	-
16	Ready-to-serve beverages	-	Sulphur dioxide- 70 ppm max or Benzoic acid- 120 ppm max	-	-	-	-	-	-
17	Brewed ginger beer	-	Benzoic acid- 120 ppm max	-	-	-	-	-	-
18	Coffee extract	-	Benzoic Acid- 450 ppm maximum	-	-	-	-	-	-
19	Danish tinned caviar	-	Benzoic Acid- 50 ppm maximum	-	-	-	-	-	-
20	Dried ginger	-	Sulphur dioxide- 2000 ppm maximum	-	-	-	-	-	-
21	Flour confectionery	-	Sorbic Acid including Sodium, Potasium and						

1	2	3	4	5	6	7	8	9	10
			Calcium Salt Calculated as Sorbic Acid)- 1500 ppm maximum	-	-	-	-	-	-
22	Smoked fish (in wrappers)	-	Sorbic Acid- only wrapper may be impregnated with Sorbic Acid	-	-	-	-	-	-
23	Dry mix of rasogollas	-	Sulphur dioxide- 100 ppm maximum	-	-	-	-	-	-
24	Preserved chapatis	-	Sorbic Acid- 1500 ppm maximum	-	-	-	-	-	-
25	fat spread	-	Sorbic acid and its sodium potassium and calcium salts (calculated as sorbic acid)- 1000 ppm maximum or Benzoic Acid and its sodium and potassium salts (Calculated as benzoic acid) or both-1000 ppm maximum	-	-	-	-	-	-
26	Prunes	-	Potassium Sorbate (Calculated as Sorbic Acid)- 1000 ppm maximum	-	-	-	-	-	-
27	Bakes food confections and bakes foods	-	Ammonia Carbonate— 5000ppm maximum Ammonium Bi-carbonate- GMP, Baking powder-GMP	-	-	-	-	-	-
28	Flour for baked foods	-	Sodium Diacetate- 2500 ppm maximum or Methyl propyl hydroxy Benzoate- 500 ppm maximum	-	-	-	-	-	-
29	Fruit, fruit pulp or juice (not dried) for conversion into jam or crystallised	-		-	-	-	-	-	-

1	2	3	4	5	6	7	8	9	10
	glace or cured fruit or other products								
	(a) Cherries	-	Sulphur dioxide- 2000 ppm maximum						
	(b) Strawberries and Raspberries	-	Sulphur dioxide- - 2000 ppm maximum		-	-	-	-	-
	(c) Other fruits	-	Sulphur dioxide- - 1000 ppm maximum—		-	-	-	-	-
	(d) Dehydrated Vegetables	-	Sulphur dioxide- - 2000 ppm maximum		-	-	-	-	-
30	Paneer	-	Nisin-12.5 ppm - maximum		-	-	-	-	-
31	Cakes and Pastries	-	Sorbic Acid Sucroglycerides - including Sodium, (only In cakes), Potassium and (only In cakes), Calcium Salt Hydroxypropyl (Calculated as Methyl Cellulose, Sorbic Acid)- Sucrose esters 1500 ppm of fatty acids- maximum GMP			-	-	Sodium Bacterial - fumarate, Amylase Potassium Baking Malate, Powder, Sodium Ammo- hydro- nium xide- bicarbo- GMP nate- GMP, GMP, Ammo- nium Carbo- nate-500 ppm maximum	
32	Prepacked Coconut Water	-	Nisin-5000 IU - maximum		-	-	-	-	-
33	Canned Rasogula	-	Nisin-5.0 ppm - maximum		-	-	-	-	-

Table 4
List of food additives for use in edible oils and fats

Name of food additive		Tallow	Lard	Edible vegetable oils and fats	Table margarine/ Bakery and industrial Margarine/ Fat spread
1	2	3	4	5	6
A. Antioxidant (Singly or in combination)					
1	Lecithin	GMP	GMP	GMP	GMP
2	Ascorbic acid	GMP	GMP	GMP	GMP
3	Propyl gallate, ethyl gallate, Octyl gallate, Dodecyl gallate or a mixture thereof	100 ppm max	100 ppm max	100 ppm max	200 ppm max
4	Butylated Hydroxy Anisole (BHA)	200 ppm max	200 ppm max	200 ppm max	200 ppm max
5	Any combination of propyl gallate, BHA within limits of gallate and BHA	200 ppm max	200 ppm max	200 ppm max	200 ppm max
6	Natural and synthetic tocopherols	GMP	GMP	GMP	GMP
7	Ascorbyl palmitate/ stearate singly or in combination	500 ppm max	500 ppm max	500 ppm max	500 ppm max
8	Citric acid, Tartaric acid, Gallic acid	GMP	GMP	GMP	GMP
9	Resin guinace	100 ppm max	100 ppm max	100 ppm max	500 ppm max
10	TBHQ	200 ppm max	200 ppm max	200 ppm max	200 ppm max
B. Antioxidant Synergist					
1	Sodium citrate	GMP	GMP	GMP	GMP
2	Isopropyl citrate mixture	100 ppm max, Singly or in combination	100 ppm max, Singly or in combination	100 ppm max, Singly or in combination	100 ppm max, Singly or in combination
3	Phosphoric acid				
4	Monoglyceride citrate				
C. Antifoaming agents					
1	Dimethyl polysiloxane singly or in combination with silicon dioxide	10 ppm max	10 ppm max	10 ppm max	—
D. Emulsifying agents					
1	Mono and di glycerides of fatty acids	-	-	-	GMP
2	Mono and di glycerides of fatty acids esterified with acetic, acetyl tartaric, citric, lactic, tartaric acids and their sodium and calcium salts	-	-	-	10g/kg max
3	Lecithin	-	-	-	GMP
4	Polyglycerol esters of fatty acids	-	-	-	5g/kg max
5	1,2- Propylene glycol esters of fatty acids	-	-	-	20g/kg max
6	Sorbitan monopalmitate/ Sorbitan monostearate/ Tristearate	-	-	-	10g/kg max
7	Sucrose esters of fatty acids	-	-	-	10g/kg max
E. Preservatives (Singly or in combination)					
1	Sorbic acid	-	-	-	1000 mg/kg max:
2	Sodium/ Potassium/ Calcium sorbate expressed as Sorbic acid	-	-	-	Table margarine/ Fat spread

1	2	3	4	5	6
3	Benzoic acid	-	-	-	-
4	Sodium/ Potassium/ benzoate expressed as Benzoic acid	-	-	-	-
F. Natural colours					
1	Beta carotene	-	-	-	25 mg/kg max: Table margarine/ Fat spread
2	Annatto extracts (as bixin/ norbixin)	-	-	-	20 mg/kg max: Table margarine/ Fat spread
3	Curcumin or turmeric (As curcumin)	-	-	-	5 mg/kg max: Table margarine/ Fat spread
4	Beta - apo - 8' - carotenal	-	-	-	25 mg/kg max: Table margarine/ Fat spread
5	Methyl and ethyl esters of beta - apo - 8' -	-	-	-	25 mg/kg max: carotenoic acid Table margarine/ Fat spread
G. Acidity regulators					
1	Citric acid	-	-	-	GMP: Table margarine/ Fat spread
2	Lactic acid	-	-	-	GMP: Table margarine/ Fat spread
3	Sodium and potassium salt of citric and lactic acid	-	-	-	GMP: Table margarine/ Fat spread
4	Calcium disodium ethylene diamine tetra acetate	-	-	-	50 mg/kg max: Table margarine/ Fat spread
H. Flavours					
1	Natural flavours and natural flavouring substances/ Nature identical flavouring substances/ Artificial flavouring substances	-	-	-	GMP: Table margarine/ Fat spread
2	Diacetyl	-	-	-	4 mg/kg max: Table margarine/ Fat spread

Table 5
List of Food Additives for use in Fish and Fish Products

Name of the Additive	Frozen shrimps	Frozen Lobsters	Salted Fish	Frozen finfish	Canned finfish	Canned Shrimps	Canned Sardines	Canned Tuna and Bonito	Canned Crab meat	Frozen Fish Fillets
1	2	3	4	5	6	7	8	9	10	11
A Antioxidants										
1 Ascorbic Acid	GMP	-	-	-	-	-	-	-	-	-
2 Sodium and Potassium Associate singly or in combination expressed as Ascorbic acid	-	1gm/kg maximum	-	1 gm/kg maximum	-	-	-	-	-	1 gm / kg maximum
B Acidifying Agents										
1 Acetic Acid	-	-	-	-	GMP	-	GMP	GMP	-	-
2 Citric acid	GMP	-	-	-	GMP	GMP	GMP	GMP	GMP	1 gm/kg maximum in minced fish flesh only
3 Lactic Acid	-	-	-	-	GMP	-	GMP	GMP	-	-
C Moisture Retention Agents singly or in combination including natural phosphate expressed as P2O5										
1 Sodium polyphosphate expressed as P2O5	-	-	-	-	-	-	-	100gms/kg maximum expressed as P2O5	100gms/kg maximum expressed as P2O5	100gms/kg maximum expressed as P2O5
2 Potassium Polyphosphate expressed as P2O5	10 gms/kg maximum	-	10 gms/kg maximum	-	-	-	-	(including natural phosphate)	(including natural phosphate)	(including natural phosphate)
3 Calcium polyphosphate expressed as P2O5	-	-	-	-	-	-	-	-	-	-
4 Orthophosphoric acid	-	-	-	-	-	850 mg/kg maximum	-	-	-	-
D Preservatives										
1 Potassium bisulphate expressed as sulphur dioxide	100mg/kg maximum raw edible	100mg/kg maximum raw edible	-	-	-	-	-	-	-	-
2. Potassium Sulphite expressed as sulphur dioxide	30mg/kg maximum cooked	30mg/kg maximum cooked	-	-	-	-	-	-	-	-
3. Sodium metabisulphate expressed as sulphur dioxide	product. Singly or in combination expressed as SO2	product. Singly or in combination expressed as product SO2	-	-	-	-	-	-	-	-
4. Sodium sulphite expressed as sulphur dioxide	-	-	-	-	-	-	-	-	-	-
5. Sodium sorbate expressed as sorbic acid	-	-	200 mg/kg maximum singly or in combi-	-	-	-	-	-	-	-

	1	2	3	4	5	6	7	8	9	10	11
H	Natural Flavours										
1	Natural flavours and natural flavouring substances	-	-	-	-	GMP	-	GMP	GMP	-	-
I	Flavour Enhancers										
1	Monosodium Glutamate	-	-	-	-	-	-	-	-	500 mg/kg - maximum	-
J	Sequestering Agents										
1.	Calcium Disodium EDTA	-	-	-	-	-	250 mg/kg maximum-	-	-	250 mg/kg - maximum	-

Table 6

List of Food Additives for use in Thermally Processed Fruits

S.No.	Name of Additives	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
		Peaches	Grape Fruits	Pineapple	Plums	Raspberries	Peas	Strawberries	Orange	Fruit Cocktail/ Tropical Fruit	Apricot	Palmito	Mangoes	Guava	Chicu	Papaya	Lichi	Kenu	Pomegranate	Custard Apple	Fruits not specified	
A	Acidifying Agents (Singly or in Combination)																					
1	Acetic Acid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Citric Acid	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP
3	Fumaric Acid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Lactic Acid	-	-	-	-	-	GMP	GMP	-	-	GMP	-	-	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP
B	Ant-cloaking Agent																					
1	Methyl Cellulose	10 ppm maximum	10 ppm maximum	-	-	-	-	-	10 ppm maximum	-	-	-	-	-	-	-	-	-	-	-	-	-
C	Antifoaming Agents																					
1	Dimethyl Polisiloxane	-	-	10 ppm maximum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D	Antioxidant																					
1	Ascorbic Acid	550 ppm maximum	550 ppm maximum	-	-	-	550 ppm maximum	-	550 ppm maximum	550 ppm maximum	550 ppm maximum	550 ppm maximum	550 ppm maximum	550 ppm maximum	550 ppm maximum	550 ppm maximum	550 ppm maximum	550 ppm maximum	550 ppm maximum	550 ppm maximum	550 ppm maximum	550 ppm maximum
E	Colours (can be used singly or in combination within the specified limits)																					
(a)	Natural:																					
1	Chlorophyll	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Caramel	-	-	-	-	-	-	-	200	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Curcumin or turmeric	-	-	-	-	-	-	-	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Beta-carotene	-	-	-	-	-	-	-	maxi-mum	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Beta apo-8 carotenal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2	Alginates (singly or in combination)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
i	Ammonium Alginates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ii	Calcium aligates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
iii	Potassium Alginates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
iv	Sodium Alginates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
v	Propyl glycol Alginate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
vi	Pectines	-	-	-	-	-	-	GMP	GMP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G	Calcium Disodium ethylenedia- mine	-	-	-	200 ppm maximum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H	Softening Agents (Singly or in combination)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.	Sodium bi-carbonate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.	Sodium Citrate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

150ppm max. as Sodium

1	2	3	4	5	6	7	8	9	10	11	12	13
4	Beta-carotene	-	-	-	-	-	-	-	-	-	-	-
5	Beta apo-8 carotenal	-	-	-	-	-	-	-	-	-	-	-
6	Methylester of Beta-apo-8 carotenic acid	-	-	-	-	-	-	-	-	-	-	-
7	Ethylester of Beta-apo-8 carotenic acid	-	-	-	-	-	-	-	-	-	-	-
8	Canthaxanthin	-	-	-	-	-	-	-	-	-	-	-
9	Riboflavin, Lactoflavin	-	-	-	-	-	-	-	-	-	-	-
10	Annatto	-	-	-	-	-	-	-	-	-	-	-
11	Saffron	-	-	-	-	-	-	-	-	-	-	-
(b)	Synthetic											
1	Ponceau 4R	-	200 ppm maximum	-	-	100 ppm maximum	-	100 ppm maximum	-	-	-	200 ppm maximum
2	Carmoisine	-	-	-	-	-	-	-	-	-	-	-
3	Erythrosine	-	-	-	-	-	-	-	-	-	-	-
4	Tartarazine	-	-	-	-	-	-	-	-	-	-	-
5	Sunset Yellow FCF	-	-	-	-	-	-	-	-	-	-	-
6	Indigo Carmine	-	-	-	-	-	-	-	-	-	-	-
7	Brilliant blue FCF	-	-	-	-	-	-	-	-	-	-	-
8	Fast green FCF	-	-	-	-	-	-	-	-	-	-	-
E	FLAVOURS											
1	Natural Flavouring and Natural Flavouring substances / Nature identical flavouring substances / artificial flavouring substances	-	GMP	-	-	GMP	-	GMP	-	-	-	GMP
F	PRESERVATIVES (Singly or in combination)											
1	Benzoic Acid and its Sodium, Potassium Salt or both (Calculated as Benzoic Acid)	750 ppm maximum	500 ppm maximum	250 ppm maximum in Paste	-	120 ppm maximum	-	120 ppm maximum	-	-	-	-
2	Sulphur di-oxide	-	350 ppm maximum	750 ppm maximum in Paste	-	70 ppm maximum	700 ppm maximum	70 ppm maximum	2000 ppm maximum	-	-	120 ppm maximum
3	Sorbic acid its Na, K and Ca salts (calculated as sorbic acid)					300 ppm maximum						

1	2	3	4	5	6	7	8	9	10	11	12	13
G THICKENING AGENTS/STABILISING/EMULSIFYING AGENTS												
1	Vegetable Gums (Singly or in combination)	-	GMP	-	-	GMP	-	GMP	-	-	-	GMP
2	Gum Arabic	-	GMP	-	-	GMP	-	GMP	-	-	-	GMP
2	Alginate (singly or in combination)	-	-	-	-	-	-	-	-	-	-	-
(i)	Calcium Alginates	-	GMP	-	-	-	-	GMP	-	-	-	-
(ii)	Potassium Alginates	-	-	-	-	GMP	-	-	-	-	-	-
(iii)	Sodium Alginates	-	-	-	-	-	-	-	-	-	-	-
3	Pectines	-	GMP	-	-	-GMP	-	GMP	-	-	-	GMP
4	Ester gum	-	450 ppm maximum	-	-	100 ppm max	-	100 ppm maximum	-	-	-	100 ppm maximum
5	Xanthan Gum	-	0.5% maximum	0.5% max	-	-	-	0.5% maximum	-	-	-	0.5% maximum
6	Alginic Acid	-	GMP	-	-	GMP	-	GMP	-	-	-	GMP
7	Quinine (As Sulphate)	-	450 ppm max. subject to 100 ppm in ready to serve beverage after dilution	-	-	-	-	100 ppm maximum	-	-	-	100 ppm maximum
8	Gellan Gum	-	-	-	-	GMP	-	GMP	-	-	-	-
H	Phosforus Penta Oxide	-	-	-	500 ppm maximum	-	-	-	-	-	-	-
I	Nitrozen	-	-	-	400 ppm maximum	-	-	-	-	-	-	-
J	Sequestrant	-	-	-	-	-	-	-	-	-	-	-
1	Sodium hexa meta phosphate	-	-	-	-	-1000 ppm max	-	1000 ppm max in carbonated water only.	-	-	-	-

Table 9
List of food additives for use in food products

Sl. No.	Name of Additives	3	4	5	6	7	8	9	10	11	12	13	14
		Candid Crystallised & Glazed Fruit	Murabba/Preserve	Squashes, Crushes, Fruit Syrups, Sharbat, Cardal and Barley Water	Ginger Cocktail (Ginger Beer and Gingerale)	Fruit /vegetable Juice, Pulp, Puree, with preservatives for industrial use only	Concentrated Fruit/ Veg Juice, Pulp Puree with preservatives for industrial use only	Cherry (Thermally Processed)	Chutney Fruits and / or Vegetable/ Mango Chutney	Mango Pulp/Puree	Fruit Pulp/Puree	Pickles	Green Chilli Paste, Onion Paste, Garlic Paste, Ginger Paste, Whole Chilli Paste
A	ACIDIFYING AGENTS (Singly or in combination)												
1	Acetic Acid	-	-	-	GMP	GMP	GMP	-	GMP	-	GMP	GMP	GMP
2	Citric Acid	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP
3	Lactic Acid	-	-	GMP	GMP	GMP	GMP	-	GMP	-	-	-	GMP
4	L-Tartaric Acid	GMP	GMP	GMP	GMP	-	-	-	GMP	-	-	-	GMP
5	Malic Acid	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP
6	Phosphoric Acids	-	-	-	-	-	-	-	GMP	GMP	GMP	-	GMP
B	ANTIFOAMING AGENTS												
1	Dimethyl Polysiloxane	-	-	-	-	-	-	-	10 ppm maximum	-	-	-	GMP
2	Mono and diglycerides of fatty acids and edible oils	-	-	-	-	-	-	-	10 ppm maximum	-	-	-	GMP
C	ANTIOXIDANTS												
1	Ascorbic Acid	-	GMP	GMP	GMP	GMP	GMP	-	GMP	-	GMP	-	GMP
D	COLOURS (Can be used singly or in combination within the specified limits)												
(a)	Natural:												
1	Chlorophyll	200 ppm	-	200 ppm maximum (on dilution except from a1)	200 ppm maximum (clubbed from a1)	-	-	200 ppm maximum (clubbed from a1)	GMP (clubbed from a1 to a11)	-	-	-	GMP
2	Caramel	-	-	-	-	-	-	-	-	-	-	-	-

1	2	3	4	5	6	7	8	9	10	11	12	13	14
	(iii)	Potassium Alginates	-	-	-	-	-	-	-	-	-	-	-
	(iv)	Sodium Alginates	-	-	-	-	-	-	-	-	-	-	-
	(v)	Propyl glycol Alginate	-	-	-	-	-	-	-	-	-	-	-
3		Pectines	-	-	-	-	-	-	-	-	-	-	-
4		Gellan gum	-	-	-	-	-	-	-	-	-	-	-
	J	SOFTENING AGENTS (Singly or in Combination)											
1		Sodium Bi-Carbonate	-	-	-	-	-	-	GMP	-	-	-	GMP
2		Sodium Citrate	-	-	-	-	-	-	GMP	-	-	-	GMP

Table 10
List of food additives for use in Food products

Sl. No	Name of Additives	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		Jam/Jellies/Fruit Cheese	Fruit Marmalades	Fruit Bar/Toffee	Fruit Cereal Flakes	Thermally processed fruit beverages/ Fruit drinks/ready to serve fruit beverages	Tomato Ketchup	Culinary Paste/Other Sauces	Soyabean Sauce	Soups	Soup powder, Fruit powder, Vegetable powder, Instant Fruit, Culinary Powder, Seasoning Mixed Powder	Nectars	Fruit Juices aspecially packed	Vegetable Juices	Concentrated Fruit/Veg. Juice / Pulp/Puree
A	ACIDIFYING AGENTS (Singly or in combination)														
1	Acetic Acid	-	-	-	-	-	GMP	GMP	GMP	-	-	-	-	-	-
2	Citric Acid	GMP	GMP	GMP	-	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP
3	Fumaric Acid	GMP	GMP	GMP	-	GMP	0.3% maximum	0.3% maximum	-	-	-	-	-	-	-
4	Lactic Acid	-	-	-	-	-	GMP	GMP	GMP	GMP	GMP	-	-	GMP	GMP
5	L-Tartaric Acid	GMP	GMP	GMP	-	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	-
6	Malic Acid	GMP	GMP	GMP	-	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP
7	Phosphoric Acids	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	ANTICAKING AGENTS (Singly or in combination)														
1	Carbonates of Calcium and Magnesium	-	-	-	-	-	-	-	-	-	2% maximum	-	-	-	-
2	Phosphates of calcium and Magnesium	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Silicates of calcium, magnesium, aluminum or sodium or silicon dioxide	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	ANTI-FOAMING AGENTS														
1	Dimethyl Polysiloxane	10ppm maximum	10ppm maximum	-	-	-	-	10ppm maximum	-	-	-	-	-	-	10ppm maximum

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
6	Indigo Carmine	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Brilliant Blue FCF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Fast green FCF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F	FIRMING AGENTS (Singly or in Combination)														
1	Calcium Chloride	200 ppm maximum for use only on the fruit pieces	-	-	-	-	-	-	-	350 ppm maximum	-	-	-	-	-
2	Calcium Lactate	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Calcium Gluconate	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Calcium Carbonate	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Calcium Bisulphite	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G	FLAVOURS														
1	Natural Flavouring and Natural Flavouring substances / Nature identical flavouring substances / artificial flavouring substances	GMP	GMP	GMP	GMP	GMP	-	GMP	-	-	GMP	Natural Flavouring and Natural Flavouring Substances only	GMP natural flavours only	GMP natural flavours only	-
H	FLAVOUR ENHANCER														
1	MSG (Enhancer)	-	-	-	-	-	-	GMP	-	GMP	GMP	-	-	-	-
I	PRESERVATIVES (Singly or in combination) & its Salt														
1	Benzoic Acid & its Sodium & Potassium Salt or both (Calculated as Benzoic Acid)	200 ppm maximum	200 ppm maximum	200 ppm maximum	-	120 ppm maximum	750 ppm maximum	750 ppm maximum	750 ppm maximum	-	-	-120 ppm max	-	-	-
2	Sulphur di-oxide (Carry over from fruit products)	40 ppm maximum	40 ppm maximum	100 ppm maximum	-	70 ppm maximum	-	-	-	-	1500 ppm maximum	-70 ppm max	-	-	-
3	Sorbic Acid and its Cal., Sod., Pot. Salt (calculated as Sorbic Acid)	500 ppm maximum	500 ppm maximum	500 ppm maximum	-	300 ppm maximum	1000 ppm maximum	1000 ppm maximum	1000 ppm maximum	-	-	300 ppm max	-	-	-

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5	Ester Gum	-	-	-	-	100 ppm max	-	-	-	-	-	-	-	-	-
6	Gellan Gum	-	-	-	-	GMP	-	-	-	-	-	-	-	-	-
L	Artificial sweeteners and Polyols														
1	Aspartame	1000ppm maximum	1000ppm maximum	-	-	-	-	-	-	-	-	-	-	-	-
2	Sorbitol	30% maximum	30% maximum	-	-	-	-	-	-	-	-	-	-	-	-
M	SOFTENING AGENTS (Singly or in combination)														
1	Sodium Bi-Carbonate	-	-	-	-	-	-	-	-	GMP	GMP	-	-	-	-
2	Sodium Citrate	-	-	-	-	-	-	-	-	GMP	GMP	-	-	-	-
N	SEQUESTERANT														
1	Sodium hexameta phosphate	-	-	-	-	1000 ppm max	-	-	-	-	-	1000 ppm max	-	-	-

Table 11

List of Food Additives for use in food products

Sl. No.	Name of Food Additive	Table Olives	Raisins	Dates	Grated Desiccated Coconut	Dry Fruits & Nuts
A. Acidifying Agents (Singly or in combination)						
1.	Citric Acid	15 gm/kg maximum	-	-	-	-
2.	L-Tartaric Acid	15 gm/kg maximum	-	-	-	-
3.	Acetic Acid	GMP	-	-	-	-
4.	Lactic Acid	15 gm/kg maximum	-	-	-	-
5.	Hydrochloric Acid	GMP	-	-	-	-
B. Acidity Regulators						
1.	Sodium Hydroxide	GMP	-	-	-	-
2.	Potassium Hydroxide	GMP	-	-	-	-
C. Antioxidants						
1.	L-Ascorbic Acid	0.2 gm/kg maximum	-	-	-	-
D. Preservatives						
1.	Sulphur Dioxide, Sodium/ Potassium/ Calcium Sulphite/ bisulphate/ metaspulphite expressed as SO ₂	1.5 gm/kg maximum only SO ₂	-	50 gm/kg maximum only SO ₂	2.0 gm/kg maximum only SO ₂	2.0 gm/kg maximum
2.	Benzoic Acid/ Sodium/ Potassium Benzoate expressed as Benzoic Acid	1 gm/kg maximum	-	-	-	-
3.	Sorbic Acid/ Sodium/ Potassium ascorbate expressed as sorbic acid	0.5 gm/kg maximum	-	-	-	0.5 gm/kg maximum in dried apricot
E. Colour Retention/ Stabilising Agents						
1.	Ferrous Gluconate	0.15 gm/kg maximum as total iron-	-	-	-	-
2.	Ferrous Lactate	0.15 gm/kg maximum as total iron-	-	-	-	-
F. Flavours						
1.	Natural flavours and natural flavouring substances	GMP	-	-	-	-
2.	Nature identical flavouring substances	-	-	-	-	-
3.	Artificial Flavouring Substances	-	-	-	-	-
G. Flavour Enhancers						
1.	Mono-sodium glutamate	5.0 gm/kg maximum	-	-	-	-
H. Thickening Agents for Pastes for Stuffing Olives						
1.	Sodium Alginates	5.0 gm/kg maximum	-	-	-	-
2.	Xanthan gum	3.0 gm/kg maximum	-	-	-	-
3.	Carageenan	GMP	-	-	-	-

4	Carobean gum	-	-	-	-	GMP	-
5.	Guar gum	-	-	-	-	GMP	-
I	Firming Agents for Stuffed Olives						
1	Calcium Chloride	-	-	-	-	1.5 gm/kg maximum as Calciums in stuffed end product	-
2.	Calcium Lactate	-	-	-	-		-
3.	Calcium Citrate	-	-	-	-		-
J	Miscellaneous						
1.	Mineral Oil (food grades)	5 gm/kg maximum	-	-	-		-
2.	Sorbitol	5 gm/kg maximum	GMP	-	-		-
3.	Glycerol	-	GMP	-	-		-
4.	Dimethyl Polysiloxane	-	-	-	-		-
5.	Carbon Dioxide	-	-	-	-	GMP	-
6	Nitrogen	-	-	-	-	GMP	-
7.	Cultures of Lactic Acid	-	-	-	-	GMP	-

Table 12
List of food additives for use in Sugars and Salt

Name of food additive	Refined sugar	Sugar Icing/ Powdered sugar	Dextrose syrup	Glucose syrup	Dried glucose	Edible common salt/ Iodized salt/ Iron fortified common salt	Misri, Gur, Jaggery, Plantation white sugar Cube sugar Golden syrup	Khandsari sugar (Sulphur sugar), Bura sugar	Khandsari sugar
A Preservative									
1 Sulphur dioxide	20 ppm max	20 ppm max	70 ppm max	40 ppm max	40 ppm max " Sulphur dioxide may be present in an amount not exceeding 150 ppm if the product is intended for the manufacture of confectionery to be sold under a label as specified under Article 22 of regulation 4.4.5	-	70 ppm max	150 ppm max	-
B Anticaking agents singly or in combination									
1 Carbonates of calcium and magnesium	-	15g/kg max, singly or in combination (Clubbed from B1 to B4)	-	-	-	-	-	20g/kg max, singly or in combination (Clubbed from B1 to B4)	-
2 Phosphates of Calcium and Magnesium	-	-	-	-	-	-	-	-	-
3 Silicates of Calcium, Magnesium, aluminium or Sodium or silicon dioxide	-	-	-	-	-	-	-	-	-
4 Myristates, Palmitates or Stearates of Aluminium, Ammonium, Calcium, Potassium or Sodium	-	-	-	-	-	-	-	-	-
C Crystal modifiers									
1 Calcium or Sodium or Potassium Ferrocyanide singly or in combination expressed as Ferrocyanide	-	-	-	-	-	10 ppm max	-	-	-

Table 13

List of food additives for use in Cocoa powder, Chocolate, Sugar boiled confectionery, Chewing gum/ Bubble gum

Sl. No.	Name of additive	Cocoa powder	Chocolate- White, Milk, Plain, Composite, Filled	Sugar based/ Sugar free confectionery	Lozenges	Chewing gum/ Bubble gum
1	2	3	4	5	6	7
A	Preservatives (Singly or in combination)					
1	Benzoic acid, Sodium and Potassium benzoate		1500 ppm max			
	1500ppm max					
	1500ppm max	-	1500ppm max			
2	Sulphur dioxide	2000 ppm max	150ppm max	2000ppm max	350ppm max	2000ppm max
3	Sorbic acid and its Calcium, Sodium, Potassium Salts (Calculated as sorbic acid)	1500ppm max	1000ppm max	2000ppm max	-	1500ppm max
4	Class I preservative as listed under REGULATION 6.1.4	GMP	GMP	GMP	GMP	GMP
B	Anticaking agents (Singly or in combination)					
1	Calcium phosphate	10 g/kg (Clubbed from 1 to 3)	-	-	-	-
2	Silicon dioxide		-	-	-	-
3	Sodium aluminium silicate		-	-	10 g/kg max	-
C	Colours (Can be used singly or in combination within the specified limits but within the same class, i.e. either natural or synthetic)					
(a)	Natural (singly or in combination)					
1	Chlorophyll	-	Max 100 ppm in filled chocolates only	GMP	GMP	GMP
2	Caramel	-				
3	Curcumin or turmeric	-				
4	Beta carotene	-				
5	Beta apo-8 carotenal	-				
6	Methyl ester of Beta apo-8 carotenin acid	-				
7	Ethyl ester of Beta apo-8 carotenin acid	-				
8	Canthaxanthin	-				
9	Riboflavin, Lactoflavin	-				
10	Annato	-				
11	Saffron	-				

1	2	3	4	5	6	7
(b) Synthetic colour and inorganic colouring matter (Singly or in combination)						
1	Erythrosine	-	Max 100 ppm in filled chocolates only	Max 100 ppm	Max 100 ppm	Max 100 ppm
2	Carmoisine	-				
3	Ponceau 4R	-				
4	Fast green FCF	-				
5	Indigo carmine	-				
6	Brilliant blue FCF	-				
7	Sunset Yellow FCF	-				
8	Tartrazine	-				
9	Titanium dioxide	-	-	10000ppm max	-	10000ppm max
D Flavours (Singly or in combination)						
1	Natural flavour and Natural flavouring substances/ Nature identical flavouring substances/ Artificial flavouring substances	GMP	GMP	GMP	GMP	GMP
2	Vanillin	-	1 g/kg max singly or in combination	GMP	GMP	GMP
3	Ethyl vanillin	-		GMP	GMP	GMP
E Emulsifier (Singly or in combination)						
1	Mono and di glycerides of edible fatty acids	GMP	GMP	As provided in the regulation	As provided in the regulation	As provided in the regulation
2	Lecithin	10 gm/ kg max	GMP3	Ammonium salts of phosphatidic acids	10 gm/ kg max	10 gm/ kg max
4	Sucrose esters of fatty acids	10 gm/ kg max				
5	Polyglycerol polyricinoleate	-	5 gm/ kg max			
6	Sorbitan monostearate	-	10 gm/ kg max			
7	Sorbitan Tristearate	-				
8	Polyxyethylene sorbitan monostearate	-				
9	Carrageenan	-	-			
10	Modified starches	-	-			
11	Glycerol	-	GMP			
F Alkazing agents (Singly or on combination)						
1	Sodium, Potassium, Calcium, Magnesium and Ammonium carbonates	0.5% max on free cocoa (Singly or in combination)	GMP	Calcium carbonate: GMP	-	Calcium carbonate /magnesium carbonate: GMP

1	2	3	4	5	6	7
2	Sodium, Potassium, Calcium, Magnesium bicarbonates as K ₂ CO ₃		GMP	Calcium bicarbonate/ sodium bicarbonate: GMP	Sodium bicarbonate: GMP	-
3	Sodium, Potassium, Calcium Magnesium and Ammonium Hydroxide		GMP	-	-	-
G	Neutralising agents/ Acidulants					
1	Phosphoric acid	2.5 gm/kg as P ₂ O ₅ on cocoa fraction	2.5 gm/kg max as P ₂ O ₅	1300 ppm max as P ₂ O ₅	-	22000 ppm max as P ₂ O ₅
2	Citric acid	GMP	GMP	GMP	GMP	GMP
3	L-Tartaric acid	5 gm/kg max	5 gm/kg max	2000 ppm max	GMP	3000 ppm max
4	Sodium hexametaphosphate	-	-	GMP as buffering agent	-	-
5	Malic acid	-	GMP	GMP	GMP	GMP
H	Antioxidants					
1	BHA	-	200 ppm max	100 ppm max	-	250 ppm max
2	TBHQ	-	200 ppm max	100 ppm max	-	250 ppm max
3	Tocopherol	-	750 ppm max	500 ppm max	GMP	1500 ppm max
4	Ascorbyl palmitate	-	200 ppm max	-	-	-
5	Propyl gallate	-	200 ppm max	-	-	-
6	L-Ascorbic acid	GMP	GMP	GMP	GMP	GMP
7	Lecithin	GMP	GMP	GMP	GMP	GMP
I	Jellyfying agents					
1	Gelatine (Food grade)	-	-	GMP	-	-
2	Agar Agar	-	-	-	-	-
3	Sodium carboxy methyl cellulose	-	-	-	-	-
J	Lubricants					
1	Talc	-	-	0.2% max	0.2% max	2% max
2	Icing sugar	-	-	GMP	GMP	GMP
3	Mineral oil	-	-	0.2% max	0.2% max	0.2% max
4	Glycerine	-	-	GMP	GMP	GMP
5	Paraffin wax or liquid Paraffin (Food grade)	-	-	GMP	GMP	GMP
6	Calcium, Magnesium, sodium salts of Stearic acid (Food grade)	-	-	GMP	GMP	GMP
K	Miscellaneous					
1	Phosphated starch	-	-	-	-	GMP

Table 14
List of food additives for use in Milk products

Sl. No.	Name of additives	3	4	5	6	7	8	9	10	11	12	13	14	15
A	Stabilisers and emulsifiers singly or in combination expressed as anhydrous substance													
1	Sodium, Potassium and calcium chloride	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sodium, Potassium and calcium carbonate	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sodium, Potassium and calcium Citrate	-	-	-	-	-	-	-	-	-	-	GMP	-	-
	Calcium salt of orthophosphoric acid	-	-	-	-	-	-	-	-	-	-	-	-	-
	Calcium salt of polyphosphoric acid	-	-	-	-	-	-	-	-	-	-	-	-	-
	Potassium salt of orthophosphoric acid	-	-	-	-	-	-	-	-	-	-	GMP	-	-
	Potassium salt of polyphosphoric acid	-	-	-	-	-	-	-	-	-	-	GMP	-	-
	Sodium salt of orthophosphoric acid	-	-	-	-	-	-	-	-	-	-	GMP	-	-
	Sodium salt of polyphosphoric acid	-	-	-	-	-	-	-	-	-	-	GMP	-	-
2	Carrageenan	-	-	-	5 g/kg max	150 mg/kg max	2 g/kg singly or 3 g/kg in combination max	-	-	-	10 g/kg max	-	-	-
3	Sodium, Potassium, Calcium and Ammonium Alginate	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Gelatine	-	-	-	10 g/kg max	-	-	-	-	-	-	-	-	-
5	Lecithins	-	-	-	-	-	-	-	-	2.5 g/kg max	-	-	-	-
6	Pectins	-	-	-	10 g/kg max	-	-	-	-	-	10 g/kg max	-	-	-
7	Sodium carboxymethyl cellulose	-	-	-	5 g/kg max	-	-	-	-	-	10 g/kg max	-	-	-
	Chese/ Sliced/ Cut/Shredded													
	Processed chese													
	Processed chese spread													
	All types of yoghurts													
	Evaporated milk													
	Sweetened condensed milk													
	Butter													
	Milk fat/Butter oil and Anhydrous milk fat/Anhydrous butter oil													
	Milk powder and Cream powder													
	Milk powder and Cream powder													
	Ice cream, Kulfi, Dried icecream mix, Frozen desserts, Milk ice, Milk lollies , Ice candy													
	Casein products													
	Whey powder													
	Chhana/ Paneer													

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
8	Agar	-	-	-	5 g/kg max	-	-	-	-	-	10 g/kg max	-	-	-
9	Guar gum	-	-	-	5 g/kg max	-	-	-	-	-	10 g/kg max	-	-	-
10	Xanthan gum	-	-	-	5 g/kg max	-	-	-	-	-	10 g/kg max	-	-	-
11	Tragacanth gum	-	-	-	5 g/kg max	-	-	-	-	-	-	-	-	-
12	Karaya gum	-	-	-	5 g/kg max	-	-	-	-	-	-	-	-	-
13	Furcellaran	-	-	-	5 g/kg max	-	-	-	-	-	10 g/kg max	-	-	-
14	Propylene glycol alginate	-	-	-	-	-	-	-	-	-	10 g/kg max	-	-	-
15	a) Polyglycerol esters of fatty acids b) Polyoxyethylene sorbitan monolaureate c) Polyoxyethylene sorbitan tristearate d) Polyoxyethylene sorbitan monostearate	-	-	-	-	-	-	-	-	-	10 g/kg max	-	-	-
16	Mono and di glycerides of fatty acids	-	-	-	-	-	-	-	-	2.5 g/kg max	10 g/kg max	-	-	-
17	Methyl cellulose	-	-	-	-	-	-	-	-	-	10 g/kg max	-	-	-
18	(a) Potassium salts of mono/di and poly phosphoric acid, (b) Calcium salts of mono/di and poly phosphoric acid, (c) Sodium salts of mono/di and poly phosphoric acid,	-	-	-	-	-	-	-	-	-	-	-	-	-
19	(a) Sodium Citrate, (b) Potassium Citrate and (c) Calcium Citrate	-	-	-	-	-	-	-	-	-	-	-	-	-
20	(a) Citric acid with sodium hydrogen carbonate and or Calcium carbonate, (b) Phosphoric acid with sodium hydrogen carbonate and or Calcium carbonate	-	-	-	-	-	-	-	-	-	-	-	-	-
21	Any other emulsifying and stabilising agents listed in rule 60 suitable for these product	-	-	-	40gm/kg maximum	40gm/kg maximum	-	-	-	-	40gm/kg maximum	-	-	-

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
4	Beta carotene		100 ppm max	-	-	100 ppm	-	-	100 ppm max	-	-	100 ppm max	-	-	-
5	Carotene (Natural extract)		100 ppm max	100 ppm max	100 ppm max	-	-	-	100 ppm max	-	-	-	-	-	-
6	Annatto extract on Bixin/ Nor bixin basis (50:50 ratio)		10-50 ppm max	10-50 ppm max	10-50 ppm max	10-50 ppm	10-50 ppm	-	20 ppm max	-	-	100 ppm max	-	-	-
7	Beta apo-8 carotenal		35 ppm max	-	-	100 ppm	-	-	35 ppm max	-	-	100 ppm max	-	-	-
8	Methyl ester of Beta apo-8 Carotenoid acid		35 ppm max	-	-	100 ppm	-	-	35 ppm max	-	-	100 ppm max	-	-	-
9	Ethyl ester of Beta apo-8 Carotenoid acid		-	-	-	-	-	-	-	-	-	-	-	-	-
10	Canthaxanthin		-	-	-	100 ppm	-	-	-	-	-	100 ppm max	-	-	-
11	Caramel colours (Plain)		-	-	-	GMP	-	-	-	-	-	GMP	-	-	-
12	Caramel colours (Ammonium Sulphite process)		-	-	-	3 ppm	-	-	-	-	-	3.0 g/kg max	-	-	-
E	Colours (Synthetic: singly or in combination)														
13	a) Ponceau 4R														
	b) Carmoisine														
	c) Erythrosine														
	d) Tartrazine														
	e) Sunset yellow FCF														
	f) Indigo carmine														
	g) Brilliant blue FCF														
	h) Fast green FCF singly or in combination											100 ppm max	-	-	-
F	Acidity regulators														
1	Calcium and magnesium carbonates		GMP	-	-	-	-	-	-	-	-	-	GMP	-	-
2	Sodium bicarbonate and Sodium carbonate		-	-	-	-	-	-	-	-	-	-	-	-	-
3	Sodium and Calcium hydroxide		-	-	-	-	-	-	2000 ppm max	-	-	-	2000 ppm max	-	-
4	Sodium phosphate		-	-	-	-	-	-	GMP	-	-	-	GMP	-	-

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	c) Calcium citrate	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	a) Citric acid with sodium hydrogen carbonate and or calcium carbonate	-	-	-	-	-	-	-	-	-	-	-	-	-
	b) Phosphoric acid with sodium hydrogen carbonate and or calcium carbonate	-	-	-	-	-	-	-	-	-	-	-	-	-
L	Antioxidant singly or in combination													
	1 L- Ascorbic acid	-	-	-	-	-	-	-	-	0.5 g/kg max	-	-	-	-
	2 Ascorbyl palmitate	-	-	-	-	-	-	-	500mg/kg max	ascorbic acid only in cream powder	-	-	-	-
3	Alpha tocopherols, Mixed tocopherols	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Propyl gallate	-	-	-	-	-	-	-	100mg/kg max	-	-	-	-	-
5	Octyl gallate	-	-	-	-	-	-	-	100mg/kg max	-	-	-	-	-
6	Ethyl gallate	-	-	-	-	-	-	-	100mg/kg max	-	-	-	-	-
7	Dodecyl gallate	-	-	-	-	-	-	-	100mg/kg max	-	-	-	-	-
8	Butylated hydroxy anisole	-	-	-	-	-	-	-	175mg/kg max	100 ppm max	-	-	-	-
M	Antioxidant synergists													
1	Citric acid	-	-	-	-	-	-	-	GMP	GMP	-	-	-	-
N	Miscellaneous													
1	Glycerol	-	-	-	-	-	-	-	-	-	50 g/kg max	-	-	-

Table 15
(Use of Food Additives in individual variety cheeses)

Sl.No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
	Name of additives	Cheddar	Danbo	Edam	Gouda	Havarti	Samsoe	Emmentaler	Tilsiter	Saint-Paulin	Provologne	Cottage/ Creamed Cottage	Coulommiers	Cream Cheese	Camembert	Brie	Extra Hard Grating Chees	
A.	Stabilizers																	
1	Calcium Chloride	200mg/kg of Milk maximum	200mg/kg of Milk maximum	200mg/kg of Milk maximum	200mg/kg of Milk maximum	200mg/kg of Milk maximum	200mg/kg of Milk maximum	200mg/kg of Milk maximum	200mg/kg of Milk maximum	200mg/kg of Milk maximum	200mg/kg of Milk maximum	200mg/kg of Milk maximum	200mg/kg of Milk maximum	200mg/kg of Milk maximum	200mg/kg of Milk maximum	200mg/kg of Milk maximum	200mg/kg of Milk maximum	200mg/kg of Milk maximum
B	Colour																	
1.	Annatto	600 mg/Kg maximum	600 mg/Kg maximum	600 mg/Kg maximum	600 mg/Kg maximum	600 mg/Kg maximum	600 mg/Kg maximum	-	600 mg/Kg maximum	600 mg/Kg maximum	-	600 mg/Kg maximum	600 mg/Kg maximum	600 mg/Kg maximum	600 mg/Kg maximum	600 mg/Kg maximum	600 mg/Kg maximum	600 mg/Kg maximum
2.	Beta Carotene																	
3.	--																	
4	--																	1.5mg/kg maximum
C.	Enzymes																	
1.	Alpha-amylase (Aspergillus oryzae var).																	
2.	Alpha-amylase (Bacillus Megaterium expressed in Bacillus Subtilis).	1 gm/kg of milk solids maximum																
3.	Alpha-amylase (Bacillus Stearotherophilus expressed in subtilis).																	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
4.	Alpha-amylase (Bacillus stearother- mophilus).	1 gm/kg of milk solids maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5.	Alpha-amylase (Bacillus subtiliens)										GMP						
6.	Alpha-amylase (Carbohydrase) (Bacillus licheniformis)																
	Enzymes from GMO should be labelled																
	D. Preservatives																
1.	Sorbic Acid, Sodium sorbate, Potassium sorbate calculated as Sorbic Acid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	E. Thickening Agents singly or in combination:																
1.	Carrageenam	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1.	Guar Gum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2.	Karaya Gum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3.	Tragacanth Gum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4.	Xanthan Gum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5.	Alginate of Sodium/ Potassium/ Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6.	Ammonium Alginate	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7.	Gelatine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8.	Pectins	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9.	Propylene Glycol Alginate	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

APPENDIX B: Microbiological Requirements:

TABLE 1

MICROBIOLOGICAL REQUIREMENTS FOR SEA FOODS

Sl. No.	Name of the product	Total Plate count	E. Coli	Staphylococcus aureus	Salmonella & Shigella	Vibro Cholerae	Vibro Parahaemolyticus	Clostridium perfringens
1	2	3	4	5	6	7	8	9
1	Frozen shrimps or prawns							
	Raw	Not more than five lakhs /gm	Not more than 20/gm	Not more than 100 / gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	—
	Cooked	Not more than one lakh /gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	—
2	Frozen Lobsters							
	Raw	Not more than five lakhs /gm	Not more than	Not more than	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	—
	Cooked	Not more than one lakh /gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	—
	Frozen Squid	Not more than five lakhs /gm	Not more than 20/gm	Not more than 100 / gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	—
3	Frozen finfish	Not more than five lakhs /gm	Not more than 20/gm	Not more than 100 / gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	—
4	Frozen fish	Not more than five lakhs /gm	Not more than 20/gm	Not more than 100/gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	—
5	Frozen fish fillets or minced fish flesh or mixtures thereof	Not more than five lakhs /gm	Not more than 20/gm	Not more than 100/gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	—
6	Dried Shark fins	Not more than five lakhs / gm	Not more than 20 / gm	Not more than 100 / gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	—
7	Salted fish / dried salted fish	Not more than	Not more than five lakhs /gm	Not more than 20/gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	—
8	Canned finfish	Nil	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm
9	Canned shrimp	Nil	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	—
10	Canned sardines or sardine type products	Nil	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	—
11	Canned salmon	Nil	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	—
12	Canned crab meat	Nil	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	—
13	Canned tuna and Bonito	Nil	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	—

TABLE 2
MICROBIOLOGICAL PARAMETER FOR MILK PRODUCTS

Sl. No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Requirements		Sampling Plan ¹⁰	Pasteurised Milk/Cream / Flavoured Milk	Sterilised and UHT Milk, Cream Flavoured milk, Evaporated milk	Sweetened Condensed Milk	Pasteurised Butter I	Dried products: milk powder, cream, whey, edible casein, ice cream mix
1.	Total Plate Count ¹		m	30,000/g	-	500/g	10,000/g	40,000/g
2.	Coliform Count ²		M	50,000/g	nil	1,500/g	50,000/g	50,000/g
3.	E.Coli ³		m	-	-	-	10/g	10/g
4.	Salmonella ⁴		M	Less than 10/g	-	Less than 10/g	50/g	50/g
5.	Staph aureus ⁵ (coagulase positive)		M	Absent/g	-	Absent/g	Absent/g	Absent/g
6.	Yeast and mold count ⁶		M	Absent /25g	-	Absent /25g	Absent /25g	Absent /25g
7.	Spore Count:		m	-	-	10/g	10/g	-
	(a) Aerobic ^{7a} (B.cereus)		M	Less than 10/g	-	100/g	50/g	Less than 10/g
	(b) Anaerobic ^{7b} (Clostridium Perfringens)		m	-	-	-	20/g	-
8.	Listeria Monocytogenes ⁸		M	-	-	-	50/g	-
9.	Sampling Guidelines ⁹		n ¹⁻⁸	Absent /g	-	Absent/g	Absent/g	Absent/g
			c	5	5	5	5	5
				21	27a	21&5	21,2,5,6	21,2,6,7a,b
				02-5,8	01&7b	02-4,6,7b,8	03,4,8	03,4,5,8
	Storage & transport			0 to 4 °C	Ambient, max 30°C	0 to 4°C	-18°C or lower	Ambient, max 30°C
	Sample size			100ml or g	100 ml or g	100g	100g	100g

Sl.No.	Requirements	Sampling Plan ¹⁰	Ice cream, frozen dessert, milk lolly, ice candy	Processed cheese/ cheese spread	All other cheeses ¹²	Yoghurt, ¹³ Chakka	Paneer/ Chhana	Khoya
		(9)	(10)	(11)	(12)	(13)	(14)	
1.	Total Plate Count ¹	m	2,00,000/g	50,000/g	--	--	3,00,000/g	50,000/g
		M	2,50,000/g	75,000/g	--	--	5,00,000/g	1,00,000/g
2.	Coliform Count ²	m	50/g	-	100/g	10/g	50/g	50/g
		M	100/g	Less than 10/g	500/g	50/g	90/g	90/g
3.	E.Coli ³	M	Absent/g	Absent/g	Less than 10/g	Absent/g	Less than 10/g	Less than 10/g
4.	Salmonella ⁴	M	Absent /25g	Absent /25g	Absent /g	Absent /25g	Absent /g	Absent /25g
5.	Staph aureus ⁵ (coagulase positive)	m	--	--	100/g	50/g	50/g	50/g
		M	Less than10/g	Less than10/g	1000/g	100/g	100/g	100/g
6.	Yeast and mold count ⁶	m	-	-	10/g	50/g	150/g	50/g
		M	Less than10/g	Less than10/g	100/g	100/g	250/g	100/g
7.	Spore Count:							
	(a) Aerobic ^{7a} (B.cereus)	m	--	--	--	--	--	--
		M	--	--	--	--	--	--
	(b) Anaerobic ^{7b}	m	m	--	10/g	10/g	--	--
	(Clostridium Perfringem)	M	--	100/g	100/g	--	--	--
8.	Listeria Monocytogenes ⁸	M	Absent /g	Absent /g	Absent/g	Absent/g	Absent/g	Absent /g
9.	Sampling Guidelines ⁹	n	5	5	5	5	5	5
		c	2 ^{1&2}	2 ¹	2,2,5,6	2,2,5,6	2 ^{1,2,5,6}	2 ^{1,2,5,6}
			0 ^{3,4,5,6,8}	0	0	0	0	0
	Storage & transport		-180 C or lower	4 to 80 C	4 to 80 C	0 to 40 C	0 to 40 C	0 to 40 C
	Sample size		100g	100g	100g	100g	100g	100g

1-8 Microbiological requirements for different dairy products

⁹Sampling Guidelines:

The sampling for different microbiological testing parameters proposed in the standards is to be ensured aseptically by a trained person at manufacturing units following guidelines given in IS 11546:1999 /ISO 707:1985 (Reaffirmed 2010). The samples shall be stored and transported under appropriate temperature conditions and insulations within 24 hours of sampling to accredited laboratory for analysis as per the approved test methods. A large sample size may be drawn (if desired) according to the tests required and the type of product. Preservatives shall not be added to samples intended for microbiological examination. Three sample sets shall be taken from full production batches. Each sample set shall comprise of a minimum of five samples of 100 grams each taken randomly from throughout the batch. The samples will be submitted to the laboratory in the original unopened packaging, sealed at the time of sampling maintained in their original physical state. A set of five samples shall be tested from three different accredited laboratories and the final decision shall be drawn based on three test results. There will be no provision for retesting or re-sampling for microbiological testing.

¹⁰Sampling plan and interpretation:

The following terms, as used by the International Commission on Microbiological Specifications of Foods (ICMSF) are defined and used in this standards:

n= The number of sample units which must be examined from the batch/lot of food to satisfy the requirements of a particular sampling plan.

c= the maximum allowable number of defective sample units. This is the number of sample units, which may exceed the microbiological limit specified by m. These are considered marginally acceptable results provided they did not exceed the limit specified by M. When more than this number is found; the lot is rejected by the sampling plan.

m= Represents an acceptable level and values above it are marginally acceptable in terms of the sampling plan.

M= A microbiological criterion which separates marginally acceptable quality from unsatisfactory/potentially hazardous quality. Values above M are unacceptable in terms of the sampling plan and detection of one or more samples exceeding this level would be cause for rejection of the lot.

When 5 or more units of the same variety from a lot or consignment are analyzed (n=5), no more than 2 units (c=2) should exceed the maximum tolerance (m) for microbiological levels stated in the reference criteria and no 1 unit should exceed the stated level for the maximum tolerance (M).

Microbiological criteria and their interpretation: Three categories of microbiological quality have been assigned in standard based on Total plate count, levels of indicator organisms (Coliform count and yeast & mold count) and the number or presence of pathogenic bacteria. These are satisfactory, unsatisfactory and potentially hazardous.

1. Satisfactory: if a maximum of c/n value are between m and M, and the rest of the values observed are < m ---- means the results are within limits of acceptable microbiological quality and no action is required.

2. Unsatisfactory: If one or more of the values observed are >M or more than c/n values are between m and M --- means the results are outside acceptable microbiological limits linked with hygiene indicators (Total plate count, Coliform count and Yeast and mold count) and are indicative of poor hygiene or poor handling practices. Under these conditions the premises producing such unsatisfactory product shall be stopped and will carry out the detailed investigations for nonconformity/ noncompliance during manufacturing. The manufacturing of such product will be re-started only after HACCP/GMP audit clearance of the premises by the food safety authority and compliance of fresh product with the regulatory limits.

3. Potentially hazardous: If one or more of the values observed are >M or more than c/n values are between m and M --- means the results are outside acceptable microbiological limits linked with pathogenic bacteria (E. coli, Salmonella, coagulase positive Staph aureus, B.cereus, Cl. Perfringens, L. monocytogenes) and are indicative of serious food safety concern and immediate remedial action should be initiated. Such results will attract enforcement/prosecution by the concerned food safety authorities. Withdrawal of any of the food still available for sale or distribution and if applicable, recall action may be initiated. An investigation of food production or handling practices shall be investigated to determine the source /cause of the potential of the problem so that remedial action can commence. A detail risk assessment shall also be done. Failure by an owner to either cease manufacture of product or withdraw/recall product from sale when requested to do so shall result in seizure of that product where the officer has reason to believe that it is contaminated with pathogenic bacteria.

¹⁴ Reference test methods:

Test Methods	Reference
Microbiology - General guidance for the enumeration of micro-organisms - Colony count technique at 30°C (first revision)	IS 5402:2002/ ISO:4833:1991 Reaffirmed 2007
Microbiology - General guidance for the enumeration of Coliforms: Part 1 Colony count Technique (first revision) OR for estimation of Coliforms: Part 2 Most Probable Number technique (first revision)	IS 5401(Part 1): 2002/ISO 4832:1991 Reaffirmed 2007 OR IS 5401(Part 2): 2002/ISO 4831:1991 Reaffirmed 2007
Methods for detection of bacteria responsible for food poisoning: Part 1 Isolation, Identification and Enumeration of Escherichia coli (first revision)	IS 5887(Part 1):1976 Reaffirmed 2009
Methods for detection of bacteria responsible for food poisoning: Part 3 General guidance on methods for detection of Salmonella (second revision)	IS 5887(Part 3):1999/ ISO 6579:1993 Reaffirmed 2009
Methods for detection of bacteria responsible for food poisoning: Part 8 Horizontal method for enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) Section 1 Technique using Baird-Parker Agar Medium OR Methods for	IS 5887(Part 8/Sec 1):2002 / ISO 6888-1 :1999 Reaffirmed 2007 OR IS 5887(Part 8/Sec 2):2002 / ISO 6888-2 :1999 Reaffirmed 2007

detection of bacteria responsible for food poisoning:

Part 8 Horizontal method for enumeration of coagulase-positive staphylococci (Staphylococcus Aureus and other species)

Section 2 Technique using rabbit plasma fibrinogen Agar Medium

Method for yeast and mould count of food stuffs and animal feeds (first revision) IS 5403:1999 Reaffirmed 2005/ ISO 7954:1987 Reaffirmed 2009

Indian Standard Specification for sterilized milk IS: 4238-1967 Reaffirmed 2010

Methods for detection of bacteria responsible for food poisoning:

Part 6 Identification, Enumeration and Confirmation of B.cereus IS 5887(Part 6):1999 / ISO 7932:1993 Reaffirmed 2007

Methods for detection of bacteria responsible for food poisoning:

Part 4 Isolation, identification of Clostridium perfringens, IS:5887 PART IV:1999 Reaffirmed 2009

C.botulinum and enumeration of Cl. perfringens (second revision)

Microbiology of food and animal feeding stuffs - Horizontal

IS 14988(Part 1):2001 Reaffirmed 2007 / ISO 11290-1 :1996 OR

method for detection and enumeration of Listeria monocytogenes : IS:14988(Part 2): 2002 Reaffirmed 2007/ ISO:11290-2 :1998

Part 1 Detection method OR Microbiology of Food and Animal

Feeding Stuffs -Horizontal Method for the Detection and

Enumeration of Listeria monocytogenes-

part-2 Enumeration Method

Methods of sampling for milk and milk products IS 11546:1999 / ISO 707:1997 Reaffirmed 2010

¹¹ The microbial specifications for ripened butter are the same as for pasteurised butter excluding the requirements of total plate count

¹² The requirement on yeast and mold counts is not applicable for mold ripened cheese.

¹³ The standard requirements of lactic counts of one million c.f.u./g min as specified by BIS in such products/ or such products containing Probiotic organisms shall be applicable.

TABLE 3
MICROBIOLOGICAL PARAMETERS FOR SPICES

Sl. No.	Requirements	Caraway (Shiahjira)	Cardomom (Elaichi)	Chillies and Capsicum (Lal Mirchi)	Cinnamon (dalchini)	Cassia (Taj)	Cloves (Laung)	Coriander (Dhania)
1	2	3	4	5	6	7	8	9
1	Total Plate Count	-	-	-	-	-	-	-
2	Coliform Count	-	-	-	-	-	-	-
3	E. Coli	-	-	-	-	-	-	-
4	Salmonella	Absent in 25 gm	-	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm
5	Shigella	-	-	-	-	-	-	-
6	Staphylococcus aureus	-	-	-	-	-	-	-
7	Yeast and Mould Count	-	-	-	-	-	-	-
8	Anaerobic Spore Count	-	-	-	-	-	-	-
9	Listeria monocytogens	-	-	-	-	-	-	-
Sl. No.	Requirements	Cumin (Zeera, Kalaunji)	Fennel (Saunf)	Fenugreek (Methi)	Ginger (Sonth, Adrak)	Mace (Jaipatri)	Mustard (Rai, Sarson)	Nutmeg (Jaiphal)
1	Total Plate Count	-	-	-	-	-	-	-
2	Coliform Count	-	-	-	-	-	-	-
3	E. Coli	-	-	-	-	-	-	-
4	Salmonella	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm	Absent in 25 gm
5	Shigella	-	-	-	-	-	-	-
6	Staphylococcus aureus	-	-	-	-	-	-	-
7	Yeast and Mould Count	-	-	-	-	-	-	-
8	Anaerobic Spore Count	-	-	-	-	-	-	-
9	Listeria monocytogens	-	-	-	-	-	-	-

TABLE 4: Microbiological requirements of food products given below: -

Sl No	Products	Parameters	Limits
1	Thermally processed fruits and vegetable products	a) Total plate count b) Incubation at 37°C for 10 days and 55°C for 7 days	a) Not more than 50 / ml b) No changes in pH
2	a) Dehydrated fruits and vegetable products b) Soup powders c) Desiccated coconut powder d) Table olives e) Raisins f) Pistachio nuts g) Dates h) Dry fruits and nuts	Total plate count	Not more than 40,000 / gm
3	Carbonated beverages, ready - to - serve beverages including fruit beverages	a) Total plate count b) Yeast and mould count c) Coli form count	Not more than 50 cfu / ml Not more than 2.0 cfu / ml Absent in 100 ml
4	Tomato products		
	a. Tomato juices and soups	(a) Mould count	Positive in not more than 40.0 percent of the field examined
	b. Tomato puree and paste	(b) Yeast and spores	Not more than 125 per 1 / 60 c.m.m
	c. Tomato ketchup and Tomato Sauce	(a) Mould count	Positive in not more than 60.00 percent of the field examined
		(a) Mould count	Positive in not more than 40.00 percent of the field examined
		(b) Yeast and spores	Not more than 125 per 1 / 60 c.m.m
		(c) Total plate Count	Not more than 10000 / ml
5	Jam / Marmalade / Fruit jelly / Fruit Chutney and Sauces	Mould Count Yeast and spores	Positive in not more than 40.00 percent of the field examined Not more than 125 per 1 / 60 c.m.m
6	Other fruits and vegetables products covered under item A. 16 of Appendix B	Yeast and mould count	Positive in not more than 100 count/gm
7	Frozen fruits and vegetables products	Total plate count	Not more than 40,000 / gm
8	Preserves	Mould count	Absent in 25 gm / ml
9	Pickles	Mould count	Absent in 25 gm / ml
10	Fruits Cereal Flakes	Mould count	Absent in 25 gm / ml
11	Candied and Crystallised or Glazed Fruit and Peel	Mould count	Absent in 25 gm / ml
12	a) All Fruits and Vegetable products and ready - to - serve Beverages including Fruit Beverages and Synthetic products covered under A. 16 of Appendix B b) Table olives c) Raisins d) Pistachio nuts e) Dates f) Dry fruits and nuts g) Vinegars	a. Flat Sour Organisms b. Staphylococcus aureus c. Salmonella d. Shigella e. Clostridium botulinum f. E. Coli g. Vibrio Cholera	(i) Not more than 10,000 cfu / gm for those products which have pH less than 5.2 (ii) Nil for those products which have pH more than 5.2 Absent in 25 gm / ml Absent in 25 gm / ml Absent in 25 gm / ml Absent in 25 gm / ml Absent in 25 gm / ml Absent in 1 gm / ml Absent in 25 gm/ ml

International Numbering System (INS) for Food Additives-

The following list is only for identifying the food additive and their synonyms as published by the Codex on 23.11.2005 Codex. For the latest updates, JECFA/Codex website may be referred to (www.codexalimentarius.net, www.codexalimentarius.net/web/jecfa.jsp)

A. List sorted by INS number

Sl. No.	INS	Food Additive Name	Technical functions
1	2	3	4
1.	100	Curcumins	Colour
2.	100(i)	Curcumin	Colour
3.	100(ii)	Turmeric	Colour
4.	101	Riboflavins	Colour
5.	101(i)	Riboflavin	Colour
6.	101(ii)	Riboflavin 5'-phosphate, sodium	Colour
7.	102	Tartrazine	Colour
8.	103	Alkanet	Colour
9.	104	Quinoline yellow	Colour
10.	107	Yellow 2G	Colour
11.	110	Sunset yellow FCF	Colour
12.	120	Carmines	Colour
13.	121	Citrus red 2	Colour
14.	122	Azorubine / Carmoisine	Colour
15.	123	Amaranth	Colour
16.	124	Ponceau 4R	Colour
17.	125	Ponceau SX	Colour
18.	127	Erythrosine	Colour
19.	128	Red 2G	Colour
20.	129	Allurared AC/Fast Red E	Colour
21.	130	Manascorubin	Colour
22.	131	Patent blue V	Colour
23.	132	Indigotine	Colour
24.	133	Brilliant blue FCF	Colour
25.	140	Chlorophyll	Colour
26.	141	Copper chlorophylls	Colour
27.	141(i)	Chlorophyll copper complex,	Colour
28.	141(ii)	Chlorophyll copper complex, sodium and potassium Salts	Colour
29.	142	Green S	Colour
30.	143	Fast green FCF	Colour
31.	150a	Caramel I-plain	Colour
32.	150b	Caramel II - caustic sulphite process	Colour
33.	150c	Caramel III - ammonia process	Colour
34.	150d	Caramel IV-ammonia sulphite Process	Colour
35.	151	Brilliant black PN	Colour
36.	152	Carbon black (hydrocarbon)	Colour
37.	153	Vegetable carbon	Colour
38.	154	Brown FK	Colour
39.	155	Brown HT	Colour
40.	160a	Carotenes	Colour
41.	160a(i)	Beta-carotene (synthetic)	Colour
42.	160a(ii)	Natural extracts	Colour

1	2	3	4
43.	160b	Annatto extracts	Colour
44.	160c	Paprika Oleoresins	Colour
45.	160d	Lycopene	Colour
46.	160e	Beta-apo-carotental	Colour
47.	160f	Beta-apo-8'-carotenic acid, methyl or ethyl ester	Colour
48.	161a	Flavoxanthin	Colour
49.	161b	Lutein	Colour
50.	161c	Krytoxanthin	Colour
51.	161d	Rubixanthin	Colour
52.	161e	Violoxanthin	Colour
53.	161f	Rhodoxanthin	Colour
54.	161g	Canthaxanthin	Colour
55.	162	Beet red	Colour
56.	163	Anthocyanins	Colour
57.	163(i)	Anthocyanins	Colour
58.	163(ii)	Grape skin extract	Colour
59.	163(iii)	Blackcurrant extract	Colour
60.	164	Gardenia yellow	Colour
61.	166	Sandalwood	Colour
62.	170	Calcium carbonates	Surface colourant, anticaking agent, stabilizer
63.	170(i)	Calcium carbonate	anticaking agent
64.	170(ii)	Calcium hydrogen carbonate	anticaking agent
65.	171	Titanium dioxide	Colour
66.	172	Iron oxides	Colour
67.	172(i)	Iron oxide, black	Colour
68.	172(ii)	Iron oxide, red	Colour
69.	172(iii)	Iron oxide, yellow	Colour
70.	173	Aluminium	Colour
71.	174	Silver	Colour
72.	175	Gold	Colour
73.	180	Lithol rubine BK	Colour
74.	181	Tannins, food grade	Colour, emulsifier, stabilizer, thickener
75.	182	Orchil	Colour
76.	200	Sorbic acid	Preservative
77.	201	Sodium sorbate	Preservative
78.	202	Potassium sorbate	Preservative
79.	203	Calcium sorbate	Preservative
80.	209	Heptyl p-hydroxybenzoate	Preservative
81.	210	Benzoic acid	Preservative
82.	211	Sodium benzoate	Preservative
83.	212	Potassium benzoate	Preservative
84.	213	Calcium benzoate	Preservative
85.	214	Ethyl p-hydroxybenzoate	Preservative
86.	215	Sodium ethyl p-hydroxybenzoate	Preservative
87.	216	Propyl p-hydroxybenzoate	Preservative
88.	217	Sodium propyl p-hydroxybenzoate	Preservative
89.	218	Methyl p-hydroxybenzoate	Preservative

1	2	3	4
90.	219	Sodium methyl p-hydroxybenzoate	Preservative
91.	220	Sulphur dioxide	Preservative, antioxidant
92.	221	Sodium sulphite	Preservative, antioxidant
93.	222	Sodium hydrogen sulphite	Preservative, antioxidant
94.	223	Sodium metabisulphite	Preservative, bleaching agent, antioxidant
95.	224	Potassium metabisulphite	Preservative, antioxidant
96.	225	Potassium sulphite	Preservative, antioxidant
97.	226	Calcium sulphite	Preservative, antioxidant
98.	227	Calcium hydrogen sulphite	Preservative, antioxidant
99.	228	Potassium bisulphate	Preservative, antioxidant
100.	230	Diphenyl	Preservative
101.	231	Ortho-phenylphenol	Preservative
102.	232	Sodium o-phenylphenol	Preservative
103.	233	Thiabendazole	Preservative
104.	234	Nisin	Preservative
105.	235	Pimaricin (natamycin)	Preservative
106.	236	Formic acid	Preservative
107.	237	Sodium formate	Preservative
108.	238	Calcium formate	Preservative
109.	239	Hexamethylene tetramine	Preservative
110.	240	Formaldehyde	Preservative
111.	241	Gum guaicum	Preservative
112.	242	Dimethyl dicarbonate	Preservative
113.	249	Potassium nitrite	Preservative, colour fixative
114.	250	Sodium nitrite	Preservative, colour fixative
115.	251	Sodium nitrate	Preservative, colour fixative
116.	252	Potassium nitrate	Preservative, colour fixative
117.	260	Acetic acid, glacial	Preservative, acidity regulator
118.	261	Potassium acetates	Preservative, acidity regulator
119.	261(i)	Potassium acetate	Preservative, acidity regulator
120.	261(ii)	Potassium diacetate	Preservative, acidity regulator
121.	262	Sodium acetates	Preservative, acidity regulator, Sequestrant
122.	262(i)	Sodium acetate	Preservative, acidity regulator, Sequestrant
123.	262(ii)	Sodium diacetate	Preservative, acidity regulator, Sequestrant
124.	263	Calcium acetate	Preservative, stabilizer, acidity Regulator
125.	264	Ammonium acetate	Acidity regulator
126.	265	Dehydroacetic acid	Preservative
127.	266	Sodium dehydroacetate	Preservative
128.	270	Lactic acid (L-, D-and DL-)	Acidity regulator
129.	280	Propionic acid	Preservative
130.	281	Sodium propionate	Preservative
131.	282	Calcium propionate	Preservative
132.	283	Potassium propionate	Preservative
133.	290	Carbon dioxide	Carbonating agent, Packing agent
134.	296	Malic acid (DL-L-)	Acidity regulator, flavouring agent.
135.	297	Fumaric acid	acidity regulator
136.	300	Ascorbic acid (L)	Antioxidant

1	2	3	4
137.	301	Sodium ascorbate	Antioxidant
138.	302	Calcium ascorbate	Antioxidant
139.	303	Potassium ascorbate	Antioxidant
140.	304	Ascorbyl palmitate	Antioxidant
141.	305	Ascorbyl stearate	Antioxidant
142.	306	Mixed tocopherols	Antioxidant
143.	307	Alpha-tocopherol	Antioxidant
144.	308	Synthetic gamma-tocopherol	Antioxidant
145.	309	Synthetic delta-tocopherol	Antioxidant
146.	310	Propyl gallate	Antioxidant
147.	311	Octyl gallate	Antioxidant
148.	312	Dodecyl gallate	Antioxidant
149.	313	Ethyl gallate	Antioxidant
150.	314	Guaiac resin	Antioxidant
151.	315	Isoascorbic acid	Antioxidant
152.	316	Sodium isoascorbate	Antioxidant
153.	317	Potassium isoascorbate	Antioxidant
154.	318	Calcium isoascorbate	Antioxidant
155.	319	Tertiary butylhydroquinone	Antioxidant
156.	320	Butylated hydroxyanisole	Antioxidant
157.	321	Butylated hydroxytoluene	Antioxidant
158.	322	Lecithins	Antioxidant, emulsifier
159.	323	Anoxomer	Antioxidant
160.	324	Ethoxyquin	Antioxidant
161.	325	Sodium lactate	antioxidant, synergist, humectant, bulking agent
162.	326	Potassium lactate	antioxidant, synergist, acidity Regulator
163.	327	Calcium lactate	acidity regulator, flour treatment agent
164.	328	Ammonium lactate	acidity regulator, flour treatment agent
165.	329	Magnesium lactate (D-,L-)	acidity regulator, flour treatment agent
166.	330	Citric acid	acidity regulator, synergist for Sequestrant
167.	331	Sodium citrates	acidity regulator, sequestrant emulsifier stabilizer
168.	331(i)	Sodium dihydrogen citrate	acidity regulator, sequestrant emulsifer, stabilizer
169.	331(ii)	Disodium monohydrogen citrate	acidity regulator, stabilizer, sequestrant, emulsifier
170.	331(iii)	Trisodium citrate	acidity regulator, sequestrant, emulsifier, Stabilizer
171.	332	Potassium citrates	acidity regulator, sequestrant, Stabilizer
172.	332(i)	Potassium dihydrogen citrate	acidity regulator, sequestrant, Stabilizer
173.	332(ii)	Tripotassium citrate	acidity regulator, sequestrant, Stabilizer
174.	333	calcium citrates	acidity regulator, firming agent, Sequestrant
175.	334	Tartaric acid [L(+)-]	acidity regulator, sequestrant, antioxidant synergist
176.	335	Sodium tartrates	Stabilizer, sequestrant,
177.	335(i)	Monosodium tartrate	Stabilizer, sequestrant
178.	335(ii)	Disodium tartrate	Stabilizer, sequestrant
179.	336	Potassium tartrate	Stabilizer, sequestrant
180.	336(i)	Monopotassium tartrate	Stabilizer, sequestrant
181.	336(ii)	Dipotassium tartrate	Stabilizer, sequestrant
182.	337	Potassium sodium tartrate	Stabilizer, sequestrant

1	2	3	4
183.	338	Orthophosphoric acid	acidity regulator, antioxidant Synergist
184.	339	Sodium phosphates	acidity regulator, texturizer, sequestrant, stabilizer Emulsifier, water retention agent
185.	339(i)	Monosodium orthophosphate	Acidity regulator, texturizer, Sequestrant, stabilizer, Emulsifier, water retention agent
186.	339(ii)	Disodium orthophosphate	acidity regulator, texturizer, sequestrant, stabilizer Emulsifier, water retention agent
187.	339(iii)	Trisodium orthophosphate	sequestrant, stabilizer, Emulsifier, water retention agent, acidity regulator, Texturizer
188.	340	Potassium Phosphates	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent
189.	340(i)	Monopotassium orthophosphate	acidity regulator, texturizer, sequestrant, stabilizer Emulsifier, water retention Agent
190.	340(ii)	Dipotassium orthophosphate	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent
191.	340(iii)	Tripotassium orthophosphate	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent
192.	341	Calcium phosphates	acidity regulator, texturizer, water retention agent, flour treatment agent, raising agent, firming agent, anticaking agent
193.	341(i)	Monocalcium orthophosphate	acidity regulator, texturizer, water retention agent, flour treatment agent, firming agent, anticaking agent
194.	341(ii)	Dicalcium orthophosphate	acidity regulator, texturizer, flour treatment agent, raising agent, firming agent, anticaking Agent
195.	341(iii)	Tricalcium orthophosphate	acidity regulator, texturizer, water retention agent, flour treatment agent, firming agent, anticaking agent
196.	342	Ammonium phosphates	acidity regulator, flour treatment agent
197.	342(i)	Monoammonium orthophosphate	acidity regulator, flour treatment agent
198.	342(ii)	Diammonium orthophosphate	acidity regulator, flour treatment agent
199.	343	Magnesium phosphates	acidity regulator, anticaking Agent
200.	343(i)	Monomagnesium orthophosphate	acidity regulator, anticaking Agent
201.	343(ii)	Dimagnesium orthophosphate	acidity regulator, anticaking Agent
202.	343(iii)	Trimagnesium orthophosphate	acidity regulator, anticaking Agent
203.	344	Lecithin citrate	Preservative
204.	345	Magnesium citrate	acidity regulator
205.	349	Ammonium malate	acidity regulator
206.	350	Sodium malates	acidity regulator, humectant
207.	350(i)	Sodium hydrogen malate	acidity regulator, humectant
208.	350(ii)	Sodium malate	acidity regulator, humectant
209.	351	Potassium malates.	acidity regulator
210.	351(i)	Potassium hydrogen malate	acidity regulator
211.	351(ii)	Potassium malate	acidity regulator
212.	352	Calcium malates	acidity regulator
213.	352(i)	Calcium hydrogen malate	acidity regulator
214.	352(ii)	Calcium malate	acidity regulator
215.	353	Metatartaric acid	acidity regulator
216.	354	Calcium tartrate	acidity regulator
217.	355	Adipic acid	acidity regulator
218.	356	Sodium adipates	acidity regulator

1	2	3	4
219.	357	Potassium adipates	acidity regulator
220.	359	Ammonium adipates	acidity regulator
221.	363	Succinic acid	acidity regulator
222.	364(i)	Monosodium succinate	acidity regulator, flavour Enhancer
223.	364(ii)	Disodium succinate	acidity regulator, flavour Enhancer
224.	365	Sodium fumarates	acidity regulator
225.	366	Potassium fumarates	acidity regulator
226.	367	Calcium fumarates	acidity regulator
227.	368	Ammonium fumarates	acidity regulator
228.	370	1, 4-Heptonolactone	acidity regulator, sequestrant
229.	375	Nicotinic acid	Colour retention agent
230.	380	Ammonium citrates	acidity regulator
231.	381	Ferric ammonium citrate	anticaking agent
232.	383	Calcium glycerophosphate	Thickener, gelling agent, Stabilizer
233.	384	Isopropyl citrates	Antioxidant, Preservative, Sequestrant
234.	385	Calcium disodium ethylene- diamine-tetra-acetate	Antioxidant, Preservative, Sequestrant
235.	386	Disodium ethylene-diamine-tetra-acetate	Antioxidant, Preservative, Sequestrant
236.	387	Oxy stearin	Antioxidant, sequestrant
237.	388	Thiodipropionic acid	Antioxidant
238.	389	Dilauryl thiodipropionate	Antioxidant
239.	390	Distearyl thiodipropionate	Antioxidant
240.	391	Phytic acid	Antioxidant
241.	399	Calcium lactobionate	Stabilizer
242.	400	Alginic acid	Thickener, stabilizer
243.	401	Sodium alginate	Thickener, stabilizer, gelling Agent
244.	402	Potassium alginate	Thickener, stabilizer
245.	403	Ammonium alginate	Thickener, stabilizer
246.	404	Calcium alginate	Thickener, stabilizer, gelling Agent, antifoaming agent
247.	405	Propylene glycol alginate	Thickener, emulsifier
248.	406	Agar	Thickener, gelling agent, Stabilizer
249.	407	Carrageenan and its Na, K, NH ₄ salts (includes furcellaran)	Thickener, gelling agent, Stabilizer
250.	407a	Processed Euchema Seaweed (PES)	Thickener, stabilizer
251.	408	Bakers yeast glycan	Thickener, gelling agent, Stabilizer
252.	409	Arabinogalactan	Thickener, gelling agent, Stabilizer
253.	410	Carob bean gum	Thickener, Stabilizer
254.	411	Oat gum	Thickener, Stabilizer
255.	412	Guar gum	Thickener, Stabilizer, Emulsifier
256.	413	Tragacanth gum	Thickener, Stabilizer, Emulsifier
257.	414	Gum arabic (acacia gum)	Thickener, Stabilizer
258.	415	Xanthan gum	Thickener, Stabilizer, emulsifier, foaming agent
259.	416	Karaya gum	Thickener, Stabilizer
260.	417	Tara gum	Thickener, Stabilizer
261.	418	Gellan gum	Thickener, Stabilizer, gelling Agent
262.	419	Gum ghatti	Thickener, Stabilizer, Emulsifier
263.	420	Sorbitol and sorbitol syrup	Sweetener, Humectant, sequestrant, Texturizer, Emulsifier
264.	421	Mannitol	Sweetener, anticaking agent

1	2	3	4
265.	422	Glycerol	Humectant, bodying agent
266.	424	Curd lan	Thickener, Stabilizer
267.	425	Konjac flour	Thickener
268.	429	Peptones	Emulsifier
269.	430	Polyoxyethylene (8) stearate	Emulsifier
270.	431	Polyoxyethylene (40) stearate	Emulsifier
271.	432	Polyoxyethylene (20) sorbitan Monolaurate	Emulsifier, dispersing agent
272.	433	Polyoxyethylene (20) sorbitan Monoleate	Emulsifier, dispersing agent
273.	434	Polyoxyethylene (20) sorbitan Monopalmitate	Emulsifier, dispersing agent
274.	435	Polyoxyethylene (20) sorbitan Monostearate	Emulsifier, dispersing agent
275.	436	Polyoxyethylene (20) sorbitan Tristearate	Emulsifier, dispersing agent
276.	440	Pectins	Thickener, emulsifier, Stabilizer, gelling agent
277.	441	Superglycerinated hydrogenated rapeseed oil	Emulsifier
278.	442	Ammonium salts of phosphatidic Acid	Emulsifier
279.	443	Brominated vegetable oil	Emulsifier, stabilizer
280.	444	Sucrose acetate isobutyrate	Emulsifier, stabilizer
281.	445	Glycerol esters of wood resin	Emulsifier, stabilizer
282.	446	Succistearin	Emulsifier
283.	450	Diphosphates	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent
284.	450(i)	Disodium diphosphate	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent
285.	450(ii)	Trisodium diphosphate	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent
286.	450(iii)	Tetrasodium diphosphate	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent
287.	450(iv)	Dipotassium diphosphate	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent
288.	450(v)	Tetrapotassium diphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent Sequestrant, water retention Agent
289.	450(vi)	Dicalcium diphosphate	acidity regulator, texturizer, sequestrant stabilizer, Emulsifier, water retention Agent
290.	450(vii)	Calcium dihydrogen diphosphate	Emulsifier, raising agent, stabilizer, sequestrant, acidity, regulator, water retention agent
291.	450 (viii)	Dimagnesium diphosphate	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent
292.	451	Triphosphates	Sequestrant, acidity regulator Texturizer
293.	451(i)	Pentasodium	Sequestrant, acidity regulator, Texturizer
294.	451(ii)	Pentapotassium triphosphate	Sequestrant, acidity regulator, Texturizer
295.	452	Polyphosphates	acidity regulator, texturizer, sequestrant stabilizer, Emulsifier, water retention Agent
296.	452(i)	Sodium polyphosphate	acidity regulator, texturizer, sequestrant stabilizer, Emulsifier, water retention Agent
297.	452(ii)	Potassium Polyphosphate	acidity regulator, texturizer, sequestrant stabilizer, Emulsifier, water retention Agent
298.	452(iii)	Sodium calcium polyphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
299.	452(iv)	Calcium polyphosphates	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
300.	452(v)	Ammonium polyphosphates	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent

1	2	3	4
301.	458	Gamma Cyclodextrin	Stabilizer, binder
302.	459	Beta-cyclodextrin	Stabilizer, binder
303.	460	Cellulose	Emulsifier, dispersing agent, anticaking agent, texturizer
304.	460(i)	Microcrystalline cellulose	Emulsifier, dispersing agent, anticaking agent
305.	460(ii)	Powdered cellulose	Emulsifier dispersing agent, anticaking agent
306.	461	Methyl cellulose	Thickener, Emulsifier, Stabilizer
307.	462	Ethyl cellulose	Binder, filler
308.	463	Hydroxypropyl cellulose	Thickener, Emulsifier, Stabilizer
309.	464	Hydroxypropyl methyl cellulose	Thickener, Emulsifier, Stabilizer
310.	465	Methyl ethyl cellulose	Thickener antifoaming agent, Emulsifier, stabilizer
311.	466	Sodium carboxymethyl cellulose	Thickener, Emulsifier, Stabilizer
312.	467	Ethyl hydroxyethyl cellulose	Thickener, Emulsifier, Stabilizer
313.	468	Croscarmellose	Stabilizer, binder
314.	469	Sodium carboxymethyl cellulose, enzymatically hydrolysed	Thickener, stabilizer
315.	470	Salts of fatty acids (with base Al, Ca, Na, Mg, K, and NH ₄)	Emulsifier, Stabilizer, anticaking agent
316.	471	Mono-and di-glycerides of fatty acids	Emulsifier, Stabilizer
317.	472a	Acetic and fatty acid esters of glycerol	Emulsifier, Stabilizer Sequestrant
318.	472b	Lactic and fatty acid esters of glycerol	Emulsifier, Stabilizer, Sequestrant
319.	472c	Citric and fatty acid esters of glycerol	Emulsifier, Stabilizer, Sequestrant
320.	472d	Tartaric acid esters of mono and diglycerides of fatty acids	Emulsifier, Stabilizer, Sequestrant
321.	472e	Diacetyltartric and fatty acid ester of glycerol	Emulsifier, Stabilizer, Sequestrant
322.	472f	Mixed tartaric, acetic and fatty acid esters of glycerol	Emulsifier, Stabilizers, Sequestrant
323.	472g	Succinylated monoglycerides	Emulsifier, Stabilizer, Sequestrant
324.	473	Sucrose esters of fatty acids	Emulsifier, Stabilizer, Sequestrant
325.	474	Sucroglycerides	Emulsifier, Stabilizer, Sequestrant
326.	475	Polyglycerol esters of fatty acid	Emulsifier, Stabilizer, Sequestrant
327.	476	Polyglycerol esters of interesterified ricinoleic acid	Emulsifier, Stabilizer, Sequestrant
328.	477	Propylene glycol esters of fatty Acids	Emulsifier, Stabilizer, Sequestrant
329.	478	Lactylated fatty acid esters of glycerol and propylene glycol	Emulsifier, Stabilizer, Sequestrant
330.	479.	Thermally oxidized soya bean oil with mono-and di-glycerides of fatty acids	Emulsifier, Stabilizer, Sequestrant
331.	480	Dioctyl sodium sulphosuccinate	Emulsifier, wetting agent
332.	481	Sodium lactylate	Emulsifier, Stabilizer
333.	481(i)	Sodium stearyl lactylates	Emulsifier, Stabilizer
334.	481(ii)	Sodium oleyl lactylate	Emulsifier, Stabilizer
335.	482	Calcium lactylates	Emulsifier, Stabilizer
336.	482(i)	Calcium stearyl lactylate	Emulsifier, Stabilizer
337.	482(ii)	Calcium oleyl lactylates	Emulsifier, Stabilizer
338.	483	Stearyl tartrate	Flour treatment agent
339.	484	Stearyl citrate	Emulsifier, sequestrant
340.	485	Sodium stearyl fumarate	Emulsifier
341.	486	Calcium stearyl fumarate	Emulsifier
342.	487	Sodium laurylsulphate	Emulsifier
343.	488	Ethoxylated mono-and di-glycerides	Emulsifier
344.	489	Methyl glucoside-coconut oil ester	Emulsifier

1	2	3	4
345.	491	Sorbitan monostearate	Emulsifier
346.	492	Sorbitan tristearate	Emulsifier
347.	493	Sorbitan monolaurate	Emulsifier
348.	494	Sorbitan monooleate	Emulsifier
349.	495	Sorbitan monopalmitate	Emulsifier
350.	496	Sorbitan trioleate	Stabilizer, Emulsifier
351.	500	Sodium carbonates	acidity regulator, raising agent, anticaking agent
352.	500(i)	Sodium carbonate	acidity regulator, raising agent, anticaking agent
353.	500(ii)	Sodium hydrogen carbonate	acidity regulator, raising agent, anticaking agent
354.	500(iii)	Sodium sesquicarbonate	acidity regulator, raising agent, anticaking agent
355.	501	Potassium carbonates	acidity regulator, stabilizer
356.	501(i)	Potassium carbonate	acidity regulator, stabilizer
357.	501(ii)	Potassium hydrogen carbonate	acidity regulator, stabilizer
358.	503	Ammonium carbonates	acidity regulator, raising agent
359.	503(i)	Ammonium carbonate	acidity regulator, raising agent
360.	503(ii)	Ammonium hydrogen carbonate	acidity regulator, raising agent
361.	504	Magnesium carbonates	acidity regulator, anticaking agent, colour retention agent
362.	504(i)	Magnesium carbonate	acidity regulator, anticaking agent, colour retention agent
363.	504(ii)	Magnesium hydrogen carbonate	acidity regulator, anticaking agent, colour retention agent
364.	505	Ferrous carbonate	acidity regulator
365.	507	Hydrochloric acid	acidity regulator acid
366.	508	Potassium chloride	gelling agent
367.	509	Calcium chloride	firming agent
368.	510	Ammonium chloride	flour treatment agent
369.	511	Magnesium chloride	firming agent
370.	512	Stannous chloride	Antioxidant, colour retention Agent
371.	513	Sulphuric acid	acidity regulator
372.	514	Sodium sulphates	acidity regulator
373.	515	Potassium sulphates	Acidity regulator
374.	516	Calcium Sulphate	Dough conditioner, Sequestrant, firming agent
375.	517	Ammonium sulphate	Flour treatment agent, stabilizer
376.	518	Magnesium sulphate	firming agent
377.	519	Cupric sulphate	colour fixative, preservative
378.	520	Aluminium sulphate	firming agent
379.	521	Aluminium sodium Sulphate	firming agent
380.	522	Aluminium potassium Sulphate	Acidity regulator, stabilizer
381.	523	Aluminium ammonium Sulphate	Stabilizer, firming agent
382.	524	Sodium hydroxide	acidity regulator
383.	525	Potassium hydroxide	acidity regulator
384.	526	Calcium hydroxide	acidity regulator, firming agent
385.	527	Ammonium hydroxide	acidity regulator
386.	528	Magnesium hydroxide	acidity regulator, colour retention agent
387.	529	Calcium oxide	acidity regulator, colour retention agent
388.	530	Magnesium oxide	anticaking agent
389.	535	Sodium ferrocyanide	anticaking agent

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390.	536	Potassium ferrocyanide	anticaking agent
391.	537	Ferrous hexacyanomanganate	anticaking agent
392.	538	Calcium ferrocyanide	anticaking agent
393.	539	Sodium thiosulphate	antioxidant, sequestrant
394.	541	Sodium aluminium phosphate	acidity regulator, emulsifier
395.	541(i)	Sodium aluminium phosphate-acidic	acidity regulator, emulsifier
396.	541(ii)	Sodium aluminium phosphate-basic	acidity regulator, emulsifier
397.	542	Bone phosphate (essentially calcium phosphate, tribasic)	Emulsifier, anticaking agent, water retention agent
398.	550	Sodium silicates	anticaking agent
399.	550(i)	Sodium silicate	anticaking agent
400.	550(ii)	Sodium metasilicate	anticaking agent
401.	551	Silicon dioxide, amorphous	anticaking agent
402.	552	Calcium silicate	anticaking agent
403.	553	Magnesium silicates	anticaking agent, dusting Powder
404.	553(i)	Magnesium silicate	anticaking agent, dusting Powder
405.	553(ii)	Magnesium trisilicate	anticaking agent, dusting Powder
406.	553(iii)	Talc	anticaking agent, dusting Powder
407.	554	Sodium aluminosilicate	anticaking agent
408.	555	Potassium aluminium silicate	anticaking agent
409.	556	Calcium aluminium silicate	anticaking agent
410.	557	Zinc silicate	anticaking agent
411.	558	Bentonite	anticaking agent
412.	559	Aluminium silicate	anticaking agent
413.	560	Potassium silicate	anticaking agent
414.	570	Fatty acids	foam stabilizer, glazing agent, antifoaming agent
415.	574	Gluconic acid (D-)	acidity regulator, raising agent
416.	575	Glucono delta-lactone	acidity regulator, raising agent
417.	576	Sodium gluconate	Sequestrant
418.	577	Potassium gluconate	Sequestrant
419.	578	Calcium gluconate	acidity regulator, firming agent
420.	579	Ferrous gluconate	Colour retention agent
421.	580	Magnesium gluconate	acidity regulator, firming agent
422.	585	Ferrous lactate	colour retention agent
423.	586	4-Hexylresorcinol	colour retention agent, Antioxidant
424.	620	Glutamic acid (L (+)-)	flavour enhancer
425.	621	Monosodium glutamate	flavour enhancer
426.	622	Monopotassium glutamate	flavour enhancer
427.	623	Calcium glutamate	flavour enhancer
428.	624	Monoammonium glutamate	flavour enhancer
429.	625	Magnesium glutamate	flavour enhancer
430.	626	Guanylic acid	flavour enhancer
431.	627	Disodium 5'-guanylate	flavour enhancer
432.	628	Dipotassium 5'-guanylate	flavour enhancer
433.	629	Calcium 5'-guanylate	flavour enhancer
434.	630	Inosinic acid	flavour enhancer
435.	631	Disodium 5'-inosinate	flavour enhancer

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436.	632	Potassium Inosate	flavour enhancer
437.	633	Calcium 5'-inosinate	flavour enhancer
438.	634	Calcium 5'-ribonucleotides	flavour enhancer
439.	635	Disodium 5'-ribonucleotides	flavour enhancer
440.	636	Maltol	flavour enhancer
441.	637	Ethyl maltol	flavour enhancer
442.	638	Sodium L-Aspartate	flavour enhancer
443.	639	DL-Alanine	flavour enhancer
444.	640	Glycine	flavour enhancer
445.	641	L-Leucine	flavour enhancer
446.	642	Lysin hydrochloride	flavour enhancer
447.	900a	Polydimethylsiloxane	antifoaming agent, anticaking agent, emulsifier
448.	900b	Methylphenylpolysiloxane	antifoaming agent
449.	901	Beeswax, white and yellow	glazing agent, release agent
450.	902	Candeilla Wax	glazing agent
451.	903	Carnaubawax	glazing agent
452.	904	Shellac	glazing agent
453.	905a	Mineral oil, food grade	glazing agent, release agent sealing agent
454.	905b	Petrolatum Petroleumielly	glazing agent, release agent, sealing agent
455.	905c	Petroleum wax	glazing agent, release agent, sealing agent
456.	905c(i)	Microcrystallinewax	glazing agent
457.	905c(ii)	Paraffin wax	glazing agent
458.	906	Benzoin gum	glazing agent
459.	907	Hydrogenated poly-1 decene	glazing agent
460.	908	Rice bran wax	glazing agent
461.	909	Spermaceti wax	glazing agent
462.	910	Wax esters	glazing agent
463.	911	Methyl esters of fatty acids	glazing agent
464.	913	Lanolin	glazing agent
465.	915	Glycerol-, methyl-, or penta- erithrytol esters of colophane	glazing agent
466.	916	Calcium iodate	flour treatment agent
467.	917	Potassium iodate	flour treatment agent
468.	918	Nitrogen oxide	flour treatment agent
469.	919	Nitrosyl chloride	flour treatment agent
470.	920	L-Cysteine and its hydrochlorides-sodium and potassium salts	flour treatment agent
471.	921	L-Cysteine and its hydrochlorides-sodium and potassium salts	flour treatment agent
472.	922	Potassium persulphate	flour treatment agent
473.	923	Ammonium persulphate	flour treatment agent
474.	924a	Potassium bromate	flour treatment agent
475.	924b	Calcium bromate	flour treatment agent
476.	925	Chlorine	flour treatment agent
477.	926	Chlorine dioxide	flour treatment agent
478.	927a	Azodicarbonamide	flour treatment agent
479.	927b	Carbamide (urea)	flour treatment agent
480.	928	Benzoyl peroxide	flour treatment agent, Preservative
481.	929	Acetone peroxide	flour treatment agent
482.	930	Calcium peroxide	flour treatment agent

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483.	938	Argon	packing gas
484.	939	Helium	packing gas
485.	940	Dichlorodifluoromethane	Propellant, liquid freezant
486.	941	Nitrogen	Packing gas, freezant
487.	942	Nitrous oxide	Propellant
488.	943a	Butane	Propellant
489.	943b	Isobutane	Propellant
490.	944	Propane	Propellant
491.	945	Chloropentafluoroethane	Propellant
492.	946	Octafluorocyclobutane	Propellant
493.	948	Oxygen	packing gas
494.	950	Acesulfame potassium	Sweetener, flavour enhancer
495.	951	Aspartame	Sweetener, flavour enhancer
496.	952	Cyclamic acid (and Na, K, Ca Salts)	Sweetener
497.	953	Isomalt (isomaltitol)	Sweetener, anticaking agent, bulking agent, glazing agent
498.	954	Saccharin (and Na, K, Ca salts)	Sweetener
499.	955	Sucralose (trichlorogalactosucrose)	Sweetener
500.	956	Alitame	Sweetener
501.	957	Thaumatococin	Sweetener, flavour enhancer
502.	958	Glycyrrhizin	Sweetener, flavour enhancer
503.	959	Neohesperidine dihydrochalcone	Sweetener
504.	960	Stevioside	Sweetener
505.	964	Polyglycitol syrup	Sweetener
506.	965	Maltitol and matitol Syrup	Sweetener, stabilizer, emulsifier
507.	966	Lactitol	Sweetener, texturizer
508.	967	Xylitol	Sweetener, humectant, stabilizer, Emulsifier, thickener
509.	968	Erythritol	Sweetener, flavour enhancer, Humectant
510.	999	Qullillaia extracts	foaming agent
511.	1000	Cholic acid	Emulsifier
512.	1001	Choline salts and esters	Emulsifier
513.	1001(i)	Choline acentate	Emulsifier
514.	1001(ii)	Choline carbonate	Emulsifier
515.	1001(iii)	Choline chloride	Emulsifier
516.	1001(iv)	Choline citrate	Emulsifier
517.	1001(v)	Choline tartrate	Emulsifier
518.	1001(vi)	Choline lactate	Emulsifier
519.	1100	Amylases	flour treatment agent
520.	1101	Proteases	flour treatment agent, stabilizer, tenderizer, flavour enhancer
521.	1101(i)	Protease	flour treatment agent, stabilizer, tenderizer, flavour enhancer
522.	1101(ii)	Papain	flour treatment agent, stabilizer, tenderizer, flavour enhancer
523.	1101(iii)	Bromelain	flour treatment agent, stabilizer, tenderizer, flavour enhancer
524.	1101(iv)	Ficin	flour treatment agent, stabilizer, tenderizer, flavour enhancer

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525	1102	Glucose oxidase	Antioxidant
526	1103	Invertases	Stabilizer
527	1104	Lipases	flavour enhancer
528	1105	Lysozyme	Preservative
529	1200	Polydextroses A and N	bulking agent, stabilizer, thickener, Humectant texturizer
530	1201	Polyvinylpyrrolidone	bodying agent, stabilizer, clarifying agent, dispersing Agent
531	1202	Polyvinylpolypyrrolidone	colour stabilizer, colloidal, Stabilizer
532	1503	Castor oil	release agent
533	1505	Triethyl citrate	foam stabilizer
534	1518	Triacetin	Humectant
535	1520	Propylene glycol	Humectant, Wetting agent, dispersing agent
536	1521	Polyethylene glycol	antifoaming agent
<i>Supplementary List-Modified Starches</i>			
537	1400	Dextrins, roasted starch white and yellow	Stabilizer, thickener, binder
538	1401	Acid-treated starch	Stabilizer, thickener, binder
539	1402	Alkaline treated starch	Stabilizer, thickener, binder
540	1403	Bleached starch	Stabilizer, thickener, binder
541	1404	Oxidised starch	Stabilizer, thickener, binder
542	1405	Starches, enzyme-treated	Thickener
543	1410	Monostarch phosphate	Stabilizer, thickener, binder
544	1411	Distarch glycerol	Stabilizer, thickener, binder
545	1412	Distarch phosphate esterified with sodium trimetaphosphate;	Stabilizer, thickener, binder
546	1413	Phosphated distarch phosphate	Stabilizer, thickener, binder
547	1414	Acetylated distarch phosphate	Emulsifier, thickener, binder
548	1420	Starch acetate esterified with Acetic anhydride	Stabilizer, thickener
549	1421	Starch acetate esterified with vinyl acetate	Stabilizer, thickener
550	1422	Acetylated distarch adipate	Stabilizer, thickener, binder, Emulsifier
551	1423	Acetylated distarch glycord	Stabilizer, thickener
552	1440	Hydroxypropyl starch	Stabilizer, thickener, binder, Emulsifier
553	1442	Hydroxypropyl distarch phosphate	Stabilizer, thickener
554	1443	Hydroxypropyl distarch	Stabilizer, thickener
555	1450	Starch sodium octenyl succinate	Stabilizer, thickener, binder

B.List sorted in alphabetical Order-

Sl.No.	INS Number	Food Additive Name	Technical functions
1.	370	1,4-Heptonolactone	acidity regulator, sequestrant
2.	586	4-Hexylresorcinol	colour retention agent, Antioxidant
3.	950	Acesulfame potassium	Sweetener, flavour enhancer
4.	260	Acetic acid, glacial	Preservative, acidity regulator
5.	472a	Acetic and fatty acid esters of Glycerol	Emulsifier, Stabilizer, Sequestrant
6.	929	Acetone peroxide	flour treatment agent
7.	355	Adipic acid	Acidity regulator
8.	406	Agar	Thickener, gelling agent, Stabilizer
9.	400	Alginic acid	Thickener, stabilizer
10.	956	Alitame	Sweetener

1	2	3	4
11.	103	Alkanet	Colour
12.	129	Allurared AC	Colour
13.	307	Alpha-tocopherol	Antioxidant
14.	173	Aluminium	Colour
15.	523	Aluminium ammonium sulphate	Stabilizer, firming agent
16.	522	Aluminium potassium sulphate	acidity regulator, stabilizer
17.	559	Aluminium sodium silicate	anticaking agent
18.	521	Aluminium sodium sulphate	firming agent
19.	520	Aluminium sulphate	firming agent
20.	123	Amaranth	Colour
21.	264	Ammonium acetate	Acidity regulator
22.	359	Ammonium adipates	Acidity regulator
23.	403	Ammonium alginate	Thickener, stabilizer
24.	503(i)	Ammonium carbonate	acidity regulator, raising agent
25.	503	Ammonium carbonates	acidity regulator, raising agent
26.	510	Ammonium chloride	flour treatment agent
27.	380	Ammonium citrates	Acidity regulator
28.	368	Ammonium fumarate	Acidity regulator
29.	503(ii)	Ammonium hydrogen carbonate	acidity regulator, raising agent
30.	527	Ammonium hydroxide	Acidity regulator
31.	328	Ammonium lactate	acidity regulator, flour treatment agent
32.	349	Ammonium malate	Acidity regulator
33.	923	Ammonium persulphate	flour treatment agent
34.	342	Ammonium phosphates	acidity regulator, flour treatment agent
35.	452(v)	Ammonium polyphosphates	emulsifier raising agent, stabilizer sequestrant, Acidity regulator, water retention agent
36.	442	Ammonium salts of phosphatidic Acid	Emulsifier
37.	517	Ammonium sulphate	flour treatment agent, stabilizer
38.	1100	Amylases	flour treatment agent
39.	160b	Annatto extracts	Colour
40.	323	Anoxomer	Antioxidant
41.	163(i)	Anthocyanins	Colour
42.	163	Anothocyanins	Colour
43.	409	Arabinogalactan	Thickener, gelling agent, Stabilizer
44.	938	Argon	packing gas
45.	300	Ascorbic acid(L-)	Antioxidant
46.	304	Ascorbyl palmitate	Antioxidant
47.	305	Ascorbyl stearate	Antioxidant
48.	951	Aspartame	Sweetener, flavour enhancer
49.	927a	Azodicarbonamide	flour treatment agent
50.	122	Azorubine	Colour
51.	408	Bakers yeast glycan	Thickener, gelling agent, Stabilizer
52.	901	Beeswax, white and yellow	glazing agent, release agent
53.	162	Beet red	Colour
54.	558	Bentonite	anticaking agent
55.	210	Benzole acid	Preservative
56.	906	Benzoin gum	glazing agent

1	2	3	4
57.	928	Benzoyl peroxide	flour treatment agent, Preservative
58.	160 f	Beta-apo-8'carotenic acid, methyl or ethyl ester	Colour
59.	160e	Beta-apo-Carotenal	Colour
60.	160a(i)	Beta-Carotene (Synthetic)	Colour
61.	459	Beta-cyclodextrin	Stabilizer, binder
62.	163(iii)	Blackcurrant extract	Colour
63.	542	Bone phosphate (essentially calcium phosphate, tribasic)	Emulsifier, anticaking agent, water retention agent
64.	151	Brilliant black PN	Colour
65.	133	Brilliant blue FCF	Colour
66.	1101(iii)	Bromelain	flour treatment agent, stabilizer, tenderizer, flavour enhancer
67.	443	Brominated vegetable oil	Emulsifier, stabilizer
68.	154	Brown FK	Colour
69.	155	Brown HT	Colour
70.	943a	Butane	Propellant
71.	320	Butylated hydroxyanisole	Antioxidant
72.	321	Butylated hydroxytoluene	Antioxidant
73.	629	Calcium 5'-guanylate	flavour enhancer
74.	633	Calcium 5' -inosinate	flavour enhancer
75.	634	Calcium 5' -ribonucleotides	flavour enhancer
76.	263	Calcium acetate	Preservative, stabilizer, acidity Regulator
77.	404	Calcium alginate	Thickener, Stabilizer, gelling agent, antifoaming agent
78.	556	Calcium aluminium silicate	anticaking agent
79.	302	Calcium ascorbate	Antioxidant
80.	213	Calcium benzoate	Preservative
81.	924 b	Calcium bromate	flour treatment agent
82.	170(i)	Calcium carbonate	anticaking agent
83.	170	Calcium carbonate	Surface colourant, anticaking agent, stabilizer
84.	509	Calcium chloride	firming agent
85.	333	Calcium citrates	acidity regulator, firming agent, Sequestrant
86.	450 (vii)	Calcium dihydrogen diphosphate	emulsifier, raising agent, stabilizer sequestrant, acidity regulator water retention agent
87.	385	Calcium disodium ethylene- diamine-tetra-acetate	Antioxidant, Preservative, Sequestrant
88.	538	Calcium ferrocyanide	anticaking agent
89.	238	Calcium formate	Preservative
90.	367	Calcium fumarates	Acidity regulator
91.	578	Calcium gluconate	acidity regulator, firming agent
92.	623	Calcium glutamate	flavour enhancer
93.	383	Calcium	Thickener, gelling agent, Stabilizer
94.	170 (ii)	Calcium hydrogen carbonate	anticaking agent
95.	352 (i)	Calcium hydrogen malate	Acidity regulator
96.	227	Calcium hydrogen	Preservative, antioxidant
97.	526	Calcium hydroxide	acidity regulator, firming agent
98.	916	Calcium iodate	flour treatment agent
99.	318	Calcium isoascorbate	Antioxidant
100.	327	Calcium lactate	acidity regulator, flour treatment agent

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101.	399	Calcium lactobionate	Stabilizer
102.	482	Calcium lactylates	Emulsifier, stabilizer
103.	352 (ii)	Calcium malate	Acidity regulator
104.	352	Calcium malates	Acidity regulator
105.	482 (ii)	Calcium oleyl lactylate	Emulsifier, stabilizer
106.	529	Calcium oxide	acidity regulator, colour retention agent
107.	930	Calcium peroxide	flour treatment agent
108.	341	Calcium phosphates	acidity regulator, flour treatment agent, firming agent, Texturizer, raising agent, anticaking agent, water retention agent
109.	452 (iv)	Calcium polyphosphates	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
110.	282	Calcium propionate	Preservative
111.	552	Calcium silicate	anticaking agent
112.	203	Calcium sorbate	Preservative
113.	486	Calcium stearoyl fumarate	Emulsifier
114.	482 (i)	Calcium stearoyl lactylate	Emulsifier, stabilizer
115.	516	Calcium sulphate	flour treatment agent, Sequestrant, firming agent
116.	226	Calcium sulphite	preservative, antioxidant
117.	354	Calcium tartrate	Acidity regulator
118.	902	Candelilla wax	glazing agent
119.	161 g	Canthaxanthin	Colour
120.	150a	Caramel I-plain	Colour
121.	150 b	Caramel II-caustic sulphite process	Colour
122.	150 c	Caramel III-ammonia process	Colour
123.	150 d	Caramel IV-ammonia sulphite process	Colour
124.	927 b	Carbamide (urea)	flour treatment agent
125.	152	Carbon black (hydrocarbon)	Colour
126.	290	Carbon dioxide	carbonating agent, packing gas
127.	120	Carmines	Colour
128.	903	Carnaubawax	glazing agent
129.	410	Carob bean gum	Thickener, stabilizer
130.	160a	Carotenes	Colour
131.	407	Carrageenan and its Na, K, NH ₄ salts (includes furcellaran)	Thickener, gelling agent, Stabilizer
132.	1503	Castor oil	release agent
133.	460	Cellulose	Emulsifier, anticaking agent, texturizer, dispersing agent
134.	925	Chlorine	flour treatment agent
135.	926	Chlorine dioxide	flour treatment agent
136.	945	Chloropentafluoroethane	Propellant
137.	140	Chlorophyll Copper	Colour
138.	141(i)	Chlorophyll copper complex	Colour
139.	141(ii)	Chlorophyll copper complex sodium and potassium Salts	Colour
140.	1000	Cholic acid	Emulsifier
141.	1001(i)	Choline acetate	Emulsifier
142.	1001(ii)	Choline carbonate	Emulsifier
143.	1001(iii)	Choline chloride	Emulsifier

1	2	3	4
144.	1001(iv)	Choline citrate	Emulsifier
145.	1001(vi)	Choline lactate	Emulsifier
146.	1001	Choline salt and esters	Emulsifier
147.	1001(v)	Choline tartrate	Emulsifier
148.	330	Citric acid	acidity regulator, Antioxidant, Sequestrant
149.	472 c	Citric and fatty acid esters of glycerol	Emlsifier, Stabilizer, Sequestrant
150.	121	Citrus red 2	Colour
151.	141	Copper chlorophylls	Colour
152.	468	Croscarmellose	Stabilizer, binder
153.	519	Cupric sulphate	colour fixture, preservative
154.	100(i)	Curcumin	Colour
155.	100	Curcumins	Colour
156.	424	Curdlan	Thickener, stabilizer
157.	952	Cyclamic acid (and Na, K, Ca Salts)	Sweetener
158.	265	Dehydroacetic acid	Preservative
159.	472e	Diacetyltartaric and fatty acid esters of glycerol	Emulsifier, Stabilizer, Sequestrant
160.	342(ii)	Diammonium orthophosphate	acidity regulator, flour treatment agent
161.	450 (vi)	Dicalcium diphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
162.	341(ii)	Dicalcium orthophosphate	acidity regulator, flour treatment agent, firming agent, Texturizer
163.	940	Dichlorodifluoromethane	Propellant, liquid freezant
164.	389	Dilauryl thiodipropionate	Antioxidant
165.	450 (viii)	Dimagnesium diphosphate	emulsifier raising agent, stabilizer sequestrant, acidity regulator, water retention agent
166.	343(ii)	Dimagnesium	acidity regulator, anticaking Agent
167.	242	Dimethyl dicarbonate	Preservative
168.	480	Diocetyl sodium sulphosuccinate	Emulsifier, wetting agent
169.	230	Diphenyl	Preservative
170.	450	Diphosphates	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
171.	628	Dipotassium 5'-guanylate	flavour enhancer
172.	450(iv)	Dipotassium diphosphate	Emulsifier, Stabilizer, acidity, regulator, raising agent, Sequestrant, water retention Agent
173.	340(ii)	Dipotassium orthophosphate	acidity regulator texturizer, sequestrant, stabilizer, emulsifier water retention agent
174.	336(ii)	Dipotassium tartrate	Stabilizer, sequestrant
175.	627	Disodium 5'-guanylate	flavour enhancer
176.	631	Disodium 5'-inosinate	flavour enhancer
177.	635	Disodium 5'-ribonucleotides	flavour enhancer
178.	450(i)	Disodium diphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
179.	386	Disodium ethylene-diamine-tetra -acetate	Antioxidant, Preservative, Sequestrant
180.	331(ii)	Disodium monohydrogen citrate	acidity regulator, stabilizer, Sequestrant, emulsifier
181.	339(ii)	Disodium orthophosphate	acidity regulator, Sequestrant, emulsifier, Texturizer, Stabilizer, water retention agent
182.	335(ii)	Disodium tartrate	Stabilizer, sequestrant
183.	364(ii)	Disodium succinate	acidity regulator, flavour Enhancer
184.	390	Distearyl thiodipropionate	Antioxidant

1	2	3	4
185.	639	DL-Alanine	flavour enhancer
186.	312	Dodecyl gallate	Antioxidant
187.	968	Erythritol	Sweetener, flavour enhancer, Humectant
188.	127	Erythrosine	Colour
189.	488	Ethoxylated mono-and di-glycerides	Emulsifier
190.	324	Ethoxyquin	Antioxidant
191.	462	Ethyl cellulose	Binder, filler
192.	313	Ethyl gallate	Antioxidant
193.	467	Ethyl hydroxyethyl cellulose	Thickener, emulsifier, stabilizer
194.	637	Ethyl maltol	flavour enhancer
195.	214	Ethyl-p-hydroxybenzoate	Preservative
196.	143	Fast green FCF	Colour
197.	570	Fatty acids	foam stabilizer, glazing agent, antifoaming agent
198.	381	Ferric ammonium citrate	anticaking agent
199.	505	Ferrous carbonate	Acidity regulator
200.	579	Ferrous gluconate	Colour retention agent
201.	537	Ferrous hexacyanomanganate	anticaking agent
202.	585	Ferrous lactate	Colour retention agent
203.	1101(iv)	Ficin	flour treatment agent, stabilizer, tenderizer, flavour enhancer
204.	161a	Flavoxanthin	Colour
205.	240	Formaldehyde	Preservative
206.	236	Formic acid	Preservative
207.	297	Fumaric acid	Acidity regulator
208.	458	Gamma Cyclodextrin	Stabilizer, binder
209.	164	Gardenia yellow	Colour
210.	418	Gellan gum	Thickener, stabilizer, gelling Agent
211.	574	Gluconic acid (D-)	acidity regulator, raising agent
212.	575	Glucono delta-lactone	acidity regulator, raising agent
213.	1102	Glucose oxidase	Antioxidant
214.	620	Glutamic acid (L(+)-)	flavour enhancer
215.	422	Glycerol	Humectant, bodying agent
216.	445	Glycerol esters of wood resin	Emulsifier, stabilizer
217.	915	Glycerol-, methyl-, or penta- erythrytol esters of colophane	Glazing agent
218.	640	Glycine	Flavour modifier
219.	958	Glycyrrhizin	Sweetener, flavour enhancer
220.	175	Gold	Colour
221.	163 (ii)	Grape skin extract	Colour
222.	142	Green S	Colour
223.	314	Guaiac resin	Antioxidant
224.	626	Guanlic acid	flavour enhancer
225.	412	Guar gum	Thickener, stabilizer
226.	414	Gum arabic (acacia gum)	Thickener, stabilizer
227.	419	Gum ghatti	Thickener, stabilizer, emulsifier
228.	241	Gum guaicum	Preservative
229.	939	Helium	packing gas
230.	209	Heptyl-p-hydroxybenzoate	Preservative

1	2	3	4
231.	239	Hexamethylene tetramine	Preservative
232.	507	Hydrochloric acid	Acidity regulator
233.	907	Hydrogenated poly-1-decene	glazing agent
234.	463	Hydroxypropyl cellulose	Thickener, Emulsifier, Stabilizer
235.	464	Hydroxypropyl methyl cellulose	Thickener, Emulsifier, Stabilizer
236.	132	Indigotine	Colour
237.	630	Inosinic acid	flavour enhancer
238.	1103	Invertases	Stabilizer
239.	172 (i)	Iron oxide, black	Colour
240.	172(ii)	Iron oxide, red	Colour
241.	172(iii)	Iron oxide, yellow	Colour
242.	172	Iron oxides	Colour
243.	315	Isoascorbic acid	Antioxidant
244.	943b	Isobutane	Propellant
245.	953	Isomalt (isomaltitol)	Sweetener, anticaking agent, bulking agent, glazing agent
246.	384	Isopropyl citrates	Antioxidant, Preservative, Sequestrant
247.	416.	Karaya gum	Thickener, stabilizer
248.	425	Lonjac flour	Thickener
249.	161c	Kryptoxanthin	Colour
250.	920	L-Cysteine and its hydrochlorides-sodium and potassium salts	flour treatment agent
251.	921	L-Cysteine and its hydrochlorides-sodium and potassium salts	flour treatment agent
252.	641	L-Leucine	flavour modifier.
253.	270	Lactic acid (L-, D- and DL-)	Acidity regulator
254.	472b	Lactic and fatty acid esters of glycerol	Emulsifier, stabilizer,
255.	966	Lactitol	Sweetener, texturizer
256.	478	Lactylated fatty acid esters of glycerol and propylene glycol	Emulsifier
257.	913	Lanolin	glazing agent
258.	344	Lecithin citrate	Preservative
259.	322	Lecithins	Antioxidant, emulsifier
260.	1104	Upases	flavour enhancer
261.	180	Lithol rubine BK	Colour
262.	161b	Lutein	Colour
263.	160d	Lucopene	Colour
264.	642	Lysin hydrochloride	flavour enhancer
265.	1105	Lysozyme	Preservative
266.	504(i)	Magnesium carbonate	acidity regulator, anticaking agent, colour retention agent
267.	504	Magnesium carbonates	acidity regulator, anticaking agent, colour retention agent
268.	511	Magnesium chloride	firming agent
269.	345	Magnesium citrate	Acidity regulator
270.	580	Magnesium gluconate	acidity regulator, firming agent
271.	625	Magnesium glutamate	flavour enhancer
272.	504(ii)	Magnesium hydrogen carbonate	acidity regulator, anticaking agent, colour retention agent
273.	528	Magnesium hydroxide	acidity regulator, colour retention agent
274.	329	Magnesium lactate (D-, L-)	acidity regulator, flour treatment agent

1	2	3	4
275.	530	Magnesium oxide	anticaking agent
276.	343	Magnesium phosphates	acidity regulator, anticaking Agent
277.	553(i)	Magnesium silicate	anticaking agent, dusting Powder
278.	553	Magnesium Silicates	anticaking agent, dusting Powder
279.	518	Magnesium sulphate	firmiting agent
280.	553(ii)	Magnesium trisilicate	anticaking agent, dusting Powder
281.	296	Malic acid (D-,L-)	acidity regulator, flavouring Agent
282.	965	Maltitol and maltitol Syrup	Sweetener, Stabilizer, Emulsifier
283.	636	Maltol	flavour enhancer
284.	130	Manascorubin	Colour
285.	421	Mannitol	Sweetener, anticaking agent
286.	353	Metatartaric acid	Acidity regulator
287.	461	Methyl cellulose	Thickener, Emulsifier, Stabilizer
288.	911	Methyl esters of fatty acids	glazing agent
289.	465	Methyl ethyl cellulose	Thickener, Emulsifier, stabilizer, antifoaming agent
290.	489	Methyl glucoside-coconut oil ester	Emulsifier
291.	218	Methyl p-hydroxybenzoate	Preservative
292.	900 b	Methylphenylpolysiloxane	antifoaming agent
293.	460(i)	Microcrystalline cellulose	Emulsifier, anticaking agent, texturizer, dispersing agent
294.	905 c (i)	Microcrystalline wax	glazing agent
295.	905a	Mineral oil, food grade	glazing agent, release agent, sealing agent
296.	472 f	Mixed tartaric, acetic and fatty acid esters of glycerol	Emulsifier, Stabilizer, Sequestrant
297.	306	Mixed tocopherols concentrate	Antioxidant
298.	471	Mono-and di-glycerides of fatty acids	Emulsifier, stabilizer
299.	624	Monoammonium glutamate	flavour enhancer
300.	342 (i)	Monoammonium orthophosphate	acidity regulator, flour treatment agent
301.	341 (i)	Monocalcium orthophosphate	acidity regulator, texturizer, flour treatment agent, raising Agent
302.	343 (i)	Monomagnesium orthophosphate	acidity regulator, anticaking Agent
303.	622	Monopotassium glutamate	flavour enhancer
304.	340 (i)	Monopotassium orthophosphate	acidity regulator texturizer, sequestrant stabilizer, emulsifier, water retention Agent
305.	336 (i)	Monopotassium tartrate	Stabilizer, sequestrant
306.	621	Monosodium glutamate	flavour enhancer
307.	339 (i)	Monosodium orthophosphate	acidity regulator texturizer, sequestrant stabilizer, emulsifier, water retention Agent
308.	364 (i)	Monosodium succinate	acidity regulator, flavour Enhancer
309.	335 (i)	Monosodium tartrate	Stabilizer, sequestrant
310.	160a (ii)	Natural extracts	Colour
311.	959	Neohesperidine dihydrochalcone	Sweetener
312.	375	Nicotinic acid	Colour retention agent
313.	234	Nisin	Preservative
314.	941	Nitrogen	packing gas, freezant
315.	918	Nitrogen oxides	flour treatment agent
316.	919	Nitrosyl chloride	flour treatment agent
317.	942	Nitrous oxide	Propellant

1	2	3	4
318.	411	Oat gum	Thickener, stabilizer
319.	946	Octafluorocyclobutane	Propellant
320.	311	Octyl gallate	Antioxidant
321.	182	Orchil	Colour
322.	231	Ortho-phenylphenol	Preservative
323.	338	Orthophosphoric acid	acidity regulator, antioxidant, Synergist
324.	948	Oxygen	packing gas
325.	387	Oxy stearin	Antioxidant, sequestrant
326.	1101(ii)	Papain	flour treatment agent, Stabilizer, tenderizer, flavour
327.	160c	Paprika oleoresins	Colour
328.	905 c (ii)	Paraffin wax	glazing agent
329.	131	Patent blue V	Colour
330.	440	Pectins	Thickener, Stabilizer, gelling Agent
331.	451 (ii)	Pentapotassium triphosphate	Sequestrant, acidity regulator, Texturizer
332.	451 (i)	Pentasodium triphosphate	Sequestrant, acidity regulator, Texturizer
333.	429	Peptones	Emulsifier
334.	905 b	Petrolatum (petroleum jelly)	glazing agent, release agent, sealing agent
335.	905 c	Petroleum wax	glazing agent, release agent, sealing agent
336.	391	Phytic acid	Antioxidant
337.	235	Pimaricin (natamycin)	Preservative
338.	1200	Polydextroses A and N	bulking agent, Stabilizer, thickener, Humectant, texturizer
339.	990a	Polydimethylsiloxane	antifoaming agent, anticaking agent, emulsifier
340.	1521	Polyethylene glycol	antifoaming agent
341.	475	Polyglycerol esters of fatty acids	Emulsifier
342.	476	Polyglycerol esters of interesterified Ricinoleic acid	Emulsifier
343.	964	Polyglycitol syrup	Sweetener
344.	432	Polyoxyethylene (20) sorbitan monolaurate	Emulsifier, dispersing agent
345.	433	Polyoxyethylene (20) sorbitan Mono-oleate	Emulsifier, dispersing agent
346.	434	Polyoxyethylene (20) sorbitan monopalmitate	Emulsifier, dispersing agent
347.	435	Polyoxyethylene (20) sorbitan monostearate	Emulsifier, dispersing agent
348.	436	Polyoxyethylene (20) sorbitan tristearate	Emulsifier, dispersing agent
349.	431	Polyoxyethylene (40) stearate	Emulsifier
350.	430	Polyoxyethylene (8) stearate	Emulsifier
351.	452	Polyphosphates	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
352.	1202	Polyvinylpyrrolidone	colour stabilizer, Colloidal, Stabilizer
353.	1201	Polyvinylpyrrolidone	bodying agent, Stabilizer, clarifying agent, dispersing Agent
354.	124	Ponceau 4R	Colour
355.	125	Ponceau SX	Colour
356.	261 (i)	Potassium acetate	Preservative, acidity regulator
357.	261	Potassium acetates	Preservative, acidity regulator
358.	357	Potassium adipates	Acidity regulator
359.	402	Potassium alginate	Thickener, stabilizer
360.	555	Potassium aluminium silicate	anticaking agent
361.	303	Potassium ascorbate	Antioxidant

1	2	3	4
362.	212	Potassium benzoate	Preservative
363.	228	Potassium bisulphite	Preservative, antioxidant
364.	924 a	Potassium bromate	flour treatment agent
365.	501 (i)	Potassium carbonate	acidity regulator, stabilizer
366.	501	Potassium carbonates	acidity regulator, stabilizer
367.	508	Potassium chloride	Gelling agent
368.	332	Potassium citrates	acidity regulator, Sequestrant, Stabilizer
369.	261 (ii)	Potassium diacetate	Preservative, acidity regulator
370.	332 (i)	Potassium dihydrogen citrate	acidity regulator, Sequestrant, Stabilizer
371.	536	Potassium ferrocyanide	anticaking agent
372.	366	Potassium fumarates	Acidity regulator
373.	577	Potassium gluconate	Sequestrant
374.	501 (ii)	Potassium hydrogen carbonate	acidity regulator, stabilizer
375.	351 (i)	Potassium hydrogen malate	Acidity regulator
376.	525	Potassium hydroxide	Acidity regulator
377.	632	Potassium Inosate	flavour enhancer
378.	917	Potassium iodate	flour treatment agent
379.	317	Potassium isoascorbate	Antioxidant
380.	326	Potassium lactate	Antioxidant, synergist, acidity Regulator
381.	351 (ii)	Potassium malate	Acidity regulator
382.	351	Potassium malates	Acidity regulator
383.	224	Potassium metabisulphite	Preservative, antioxidant
384.	252	Potassium nitrate	Preservative, colour fixative
385.	249	Potassium nitrite	Preservative, colour fixative
386.	922	Potassium persulphate	flour treatment agent
387.	340	Potassium phosphates	acidity regulator, Sequestrant, emulsifier, Texturizer, Stabilizer, water retention agent
388.	452 (ii)	Potassium polyphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
389.	283	Potassium propionate	Preservative
390.	560	Potassium silicate	anticaking agent
391.	337	Potassium sodium tartrate	Stabilizer, sequestrant
392.	202	Potassium sorbate	Preservative
393.	515	Potassium sulphates	Acidity regulator
394.	225	Potassium sulphite	Preservative, antioxidant
395.	336	Potassium tartrates	Stabilizer, sequestrant
396.	460 (ii)	Powdered cellulose	Emulsifier, anticaking agent, texturizer, dispersing agent
397.	407 a	Processed Euchema seaweed	Thickener, stabilizer
398.	944	Propane	Propellant
399.	280	Propionic acid	Preservative
400.	310	Propyl gallate	Antioxidant
401.	216	Propyl p-hydroxybenzoate	Preservative
402.	1520	Propylene glycol	Humectant, wetting agent, dispersing agent
403.	405	Propylene glycol alginate	Thickener, emulsifier
404.	477	Propylene glycol esters of fatty acids	Emulsifier
405.	1101 (i)	Protease	flour treatment agent, Stabilizer, tenderizer, flavour Enhancer

1	2	3	4
406.	1101	Proteases	flour treatment agent, Stabilizer, tenderizer, flavour Enhancer
407.	999	Quillaia extracts	foaming agent
408.	104	Quinoline yellow	Colour
409.	128	Red 2G	Colour
410.	161 f	Rhodoxanthin	Colour
411.	101 (i)	Riboflavin	Colour
412.	101 (ii)	Riboflavin 5' -phosphate, sodium	Colour
413.	101	Riboflavins	Colour
414.	908	Rice bran wax	glazing agent
415.	161 d	Rubixanthin	Colour
416.	954	Saccharin (and Na, K, Ca salts)	Sweetener
417.	470	Salts of fatty acids (with base Al, Ca, Na, Mg, K and NH ₄)	Emulsifier, Stabilizer, anti caking agent
418.	166	Sandalwood	Colour
419.	904	Shellac	glazing agent
420.	551	Silicon dioxide, amorphous	anticaking agent
421.	174	Silver	Colour
422.	262 (i)	Sodium acetate	Preservative, acidity regulator, Sequestrant
423.	262	Sodium acetates	Preservative, acidity regulator, Sequestrant
424.	356	Sodium adipates	Acidity regulator
425.	401	Sodium alginate	Thickener, Stabilizer, gelling Agent
426.	541	Sodium aluminium phosphate	acidity regulator, emulsifier
427.	541 (i)	Sodium aluminium phosphate-acidic	acidity regulator, emulsifier
428.	541 (ii)	Sodium aluminium phosphate-basic	acidity regulator, emulsifier
429.	554	Sodium alumino-silicate	anticaking agent
430.	301	Sodium ascorbate	Antioxidant
431.	211	Sodium benzoate	Preservative
432.	452 (iii)	Sodium calcium polyphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
433.	500(i)	Sodium carbonate	acidity regulator, raising agent, anticaking agent
434.	500	Sodium carbonates	acidity regulator, raising agent, anticaking agent
435.	466	Sodium carboxymethyl cellulose	Thickener, Emulsifier, Stabilizer
436.	469	Sodium carboxymethyl, cellulose, enzymatically, hydrolysed	Thickener, stabilizer
437.	331	Sodium citrates	acidity regulator, Sequestrant, emulsifier, stabilizer
438.	266	Sodium dehydroacetate	Preservative
439.	262 (ii)	Sodium diacetate	Preservative, acidity regulator, Sequestrant
440.	331 (i)	Sodium dihydrogen citrate	acidity regulator, Sequestrant, emulsifier, stabilizer
441.	215	Sodium ethyl p-hydroxybenzoate	Preservative
442.	535	Sodium ferrocyanide	anticaking agent
443.	237	Sodium formate	Preservative
444.	365	Sodium fumarates	Acidity regulator
445.	576	Sodium gluconate	Sequestrant
446.	500 (ii)	Sodium hydrogen carbonate	acidity regulator, raising agent, anticaking agent
447.	350 (i)	Sodium hydrogen malate	acidity regulator, humectant
448.	222	Sodium hydrogen sulphite	Preservative, antioxidant
449.	524	Sodium hydroxide	Acidity regulator

1	2	3	4
450.	316	Sodium isoascorbate	Antioxidant
451.	638	Sodium L-Aspartate	flavour enhancer
452.	325	Sodium lactate	antioxidant synergist, Humectant, bulking agent
453.	481	Sodium lactylates	Emulsifier, stabilizer
454.	487	Sodium laurylsulphate	Emulsifier
455.	350 (ii)	Sodium malate	acidity regulator, humectant
456.	350	Sodium malates	acidity regulator, humectant
457.	223	Sodium metabisulphite	Preservative, bleaching agent, Antioxidant
458.	550 (ii)	Sodium metasilicate	anticaking agent
459.	219	Sodium methyl p-hydroxybenzoate	Preservative
460.	251	Sodium nitrate	Preservative, colour fixative
461.	250	Sodium nitrite	Preservative, colour fixative
462.	232	Sodium o-phenylphenol	Preservative
463.	481 (ii)	Sodium oleyl lactylate	Emulsifier, stabilizer
464.	339	Sodium phosphates	acidity regulator, Sequestrant, emulsifier, Texturizer, Stabilizer, water retention agent
465.	452 (i)	Sodium polyphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
466.	281	Sodium propionate	Preservative
467.	217	Sodium propyl p-hydroxybenzoate	Preservative
468.	500 (iii)	Sodium sesquicarbonate	acidity regulator, raising agent, anticaking agent
469.	550 (i)	Sodium silicate	anticaking agent
470.	550	Sodium silicates	anticaking agent
471.	201	Sodium sorbate	Preservative
472.	485	Sodium stearyl fumarate	Emulsifier
473.	481 (i)	Sodium stearyl lactylate	Emulsifier, stabilizer
474.	514	Sodium sulphates	Acidity regulator
475.	221	Sodium sulphite	Preservative, antioxidant
476.	335	Sodium tartrates	Stabilizer, sequestrant
477.	539	Sodium thiosulphate	Antioxidant, sequestrant
478.	200	Sorbic acid	Preservative
479.	493	Sorbitan monolaurate	Emulsifier
480.	494	Sorbitan mono-oleate	Emulsifier
481.	495	Sorbitan monopalmitate	Emulsifier
482.	491	Sorbitan monostearate	Emulsifier
483.	496	Sorbitan trioleate	Stabilizer, emulsifier
484.	492	Sorbitan tristearate	Emulsifier
485.	420	Sorbitol and sorbitol syrup	Sweetener, Humectant, sequestrant, Texturizer, Emulsifier
486.	909	Spermacetic wax	glazing agent
487.	512	Stannous chloride	Antioxidant, colour retention agent
488.	484	Stearyl citrate	Emulsifier, sequestrant
489.	483	Stearyl tartrate	flour treatment agent
490.	960	Stevioside	Sweetener
491.	363	Succinic acid	Acidity regulator
492.	472g	Succinylated monoglycerides	Emulsifier, Stabilizer, Sequestrant
493.	446	Succi stearin	Emulsifier
494.	955	Sucralose	Sweetener

1	2	3	4
495.	474	Sucroglycerides	Emulsifier
496.	444	Sucrose acetate isobutyrate	Emulsifier, stabilizer
497.	473	Sucrose esters of fatty acids	Emulsifier
498.	220	Sulphur dioxide	Preservative, antioxidant
499.	513	Sulphuric acid	acidity regulator
500.	110	Sunset yellow FCF	colour
501.	441	Superglycerinated hydrogenated rapeseed oil	Emulsifier
502.	309	Synthetic delta-tocopherol	Antioxidant
503.	308	Synthetic gamma-tocopherol	Antioxidant
504.	553 (iii)	Talc	anticaking agent, dusting powder
505.	181	Tannins, food grade	Colour, Emulsifier, Stabilizer, thickener
506.	417	Tara gum	Thickener, stabilizer
507.	334	Tartaric acid (L(+)-)	acidity regulator, Sequestrant, antioxidant synergist
508.	472 d	Tartaric acid esters of mono and di-glycerides of fatty acids	Emulsifier, Stabilizer, sequestrant
509.	102	Tartrazine	Colour
510.	319	Tertiary butylhydroquinone	antioxidant
511.	450(v)	Tetrapotassium diphosphate	emulsifier, raising agent, stabilizer sequestrant, acidity regulator, water retention agent
512.	450 (iii)	Tetrasodium diphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention agent
513.	957	Thaumatococcus	Sweetener, flavour enhancer emulsifier
514.	479	Thermally oxidized soya bean oil with mono-and di-glycerides of fatty acids	Emulsifier
515.	233	Thiabendazole	Preservative
516.	388	Thiodipropionic acid	antioxidant
517.	171	Titanium dioxide	Colour
518.	413	Tragacanth gum	Thickener, Stabilizer, emulsifier
519.	1518	Triacetin	Humectant
520.	341 (iii)	Tricalcium orthophosphate	acidity regulator, texturizer, flour treatment agent, raising agent, firming agent, anticaking agent, water retention agent
521.	1505	Triethyl citrate	foam stabilizer
522.	343 (iii)	Trimagnesium orthophosphate	acidity regulator, anticaking Agent
523.	451	Tri phosphates	Sequestrant, acidity regulator, Texturizer
524.	332 (ii)	Tripotassium citrate	acidity regulator, Sequestrant, Stabilizer
525.	340 (iii)	Tripotassium orthophosphate	acidity regulator, texturizer, sequestrant stabilizer, Emulsifier, water retention Agent
526.	331 (ii)	Trisodium citrate	acidity regulator, Sequestrant, emulsifier, Stabilizer
527.	450 (ii)	Trisodium diphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
528.	339 (iii)	Trisodium orthophosphate	acidity regulator, Sequestrant, emulsifier, Texturizer, Stabilizer, water retention agent
529.	100 (ii)	Turmeric	Colour
530.	153	Vegetable carbon	Colour
531.	161 e	Violoxanthin	Colour
532.	910	Wax esters	glazing agent
533.	415	Xanthan gum	Thickener, stabilizer

1	2	3	4
534.	967	Xylitol	Sweetener, Humectant, stabilizer, Emulsifier, thickener
535.	107	Yellow 2G	Colour
536.	557	Zinc silicate	anticaking agent Supplementary List-Modified Starches
537.	1422	Acetylated di-starch adipate	Stabilizer, thickener, binder
538.	1423	Acetylated distarch glycerol	Stabilizer, thickener
539.	1414	Acetylated distarch phosphate	Emulsifier, thickener
540.	1401	Acid-treated starch	Stabilizer, thickener, binder
541.	1402	Alkaline treated starch	Stabilizer, thickener, binder
542.	1403	Bleached starch	Stabilizer, thickener, binder
543.	1400	Dextrins roasted starch white and yellow	Stabilizer, thickener, binder
544.	1411	Di-starch glycerol	Stabilizer, thickener, binder
545.	1412	Di-starch phosphate esterified with sodium trimetaphosphate; esterified with phosphorus oxychloride	Stabilizer, thickener, binder
546.	1443	Hydroxypropyl di-starch glycerol	Stabilizer, thickener
547.	1442	Hydroxypropyl di-starch phosphate	Stabilizer, thickener
548.	1440	Hydroxypropyl starch	Emulsifier, thickener, binder
549.	1410	Monostarch phosphate	Stabilizer, thickener, binder
550.	1404	Oxidized starch	Emulsifier, thickener, binder
551.	1413	Phosphated di-starch phosphate	Stabilizer, thickener, binder
552.	1420	Starch acetate esterified with acetic anhydride	Stabilizer, thickener
553.	1421	Starch acetate esterified with vinyl acetate	Stabilizer, thickener
554.	1450	Starch sodium octenyl succinate	Stabilizer, thickener, binder,
555.	1405	Starches, enzyme-treated	thickener

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V.N. GAUR,
Chief Executive Officer