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 recinoleic 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)	-

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 6.1.5
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	-	
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 confectionery 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% max, singly or in combination	-	-	-	-	-	-	-
2	Phosphates of calcium and Magnesium	-	-		-	-	-	-	-	-	-
3	Silicates of Calcium, Magnesium, or Sodium or Silicon dixoide	-	-		-	-	-	-	-	-	-
4	Myristates, palmitates or stearates of aluminium, ammonium, calcium, potassium or sodium	-	-		-	-	-	-	-	-	-
E	Arificial sweeteners (singly)										
1	Aspertame	-	200 ppm max	-	-	600 ppm	10000 ppm max	10000 ppm max	2000 ppm max	3000 ppm max	-
2	Acesulphame K	-	500 ppm max	-	-	600 ppm	5000 ppm max	3500 ppm max	500 ppm max	1500 ppm max	-
3	Saccharin Sodium	-	500 ppm max	-	-	-	3000 ppm max	3000 ppm max	500 ppm max	450 ppm max	-
4	Sucralose	-	750 ppm max	-	-	600 ppm		-	-	-	1500 ppm max
F	Polyols (singly or in combination)										
1	Sorbitol	-	GMP	-	-	-	GMP	GMP	GMP	-	GMP
2	Manitol	-	GMP	-	-	-	GMP	GMP	GMP	-	GMP
3	Xylitol	-	GMP	-	-	-	GMP	GMP	GMP	-	GMP
4	Isomalt	-	-	-	-	-	GMP	GMP	GMP	-	GMP
5	Lactitol	-	-	-	-	-	GMP	GMP	GMP	-	GMP
6	Maltitol	-	-	-	-	-	GMP	GMP	GMP	-	GMP

G	Glazing agents										
1	Shellac	-	-	-	-	-	-	-	-	-	-
2	Beeswax (white and yellow)	-	-	-	-	-	-	-	-	-	-
3	Candelilla wax	-	-	-	-	-	-	-	GMP	-	-
4	Gum arabic	-	-	-	-	-	-	-	-	-	-
5	Pectin	-	-	-	-	-	-	-	-	-	-
H	Bulking agents										
1	Polydextrose A and N	-	-	-	-	-	-	-	GMP	-	-
I	Miscellaneous										
1	Sodium bicarbonate	-	-	GMP	-	-	-	-	-	-	-
2	Sodium acetate	-	-	GMP	-	-	-	-	-	-	-
3	Tartaric acid	-	-	GMP	-	-	-	-	-	-	-
4	Citric acid	-	-	GMP	-	-	-	-	-	-	-
5	Malic acid	-	-	GMP	-	-	-	-	-	-	-

Table 3
Food Additives in Foods not specified

S. No.	Name of the product	Colours	Preservatives	Emulsifiers/ Stabilisers	Flavour enhancers	Anticaking agents	Acid regulators	Improver/ Leavening agents	Antioxidants
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 concenterate 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 Guanatate (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/ 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 rosins (ester gum) - GMP	-	-	-	-	TBHQ (tertiary butyl hydro quinone and BHA (butylated hydroxyl anisole) – max 0.01%
7	Sausages and Sausage meat containing raw meat, cereals and condiments	-	Sulphur dixoide- 450 ppm max	-	-	-	-	-	-
8	Corn flour and such like starches	-	Sulphur dixoide- 100 ppm max	-	-	-	-	-	-

9	Corn syrup	-	Sulphur dixoide- 450 ppm max	-	-	-	-	-	-
10	Canned rasgolla (the cans shall be internally lacquered with sulphur dioxide resistant lacquer)	-	Nisin-5 ppm maximum	-	-	-	-	-	-
11	Gelatin	-	Sulphur dixoide- 1000 ppm max	-	-	-	-	-	-
12	Beer	-	Sulphur dixoide- 70 ppm max	-	-	-	-	-	-
13	Cider	-	Sulphur dixoide- 200 ppm max	-	-	-	-	-	-
14	Alcoholic wines	-	Sulphur dixoide- 450 ppm max	-	-	-	-	-	-
15	Non Alcoholic wines	-	Sulphur dixoide- 350 ppm max	-	-	-	-	-	-
16	Ready-to-serve beverages	-	Sulphur dixoide- 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 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	Baked food confections and baked foods	-	Ammonia Carbonate- 5000ppm maximum Ammonium Bi-carbonate- GMP, Baking powder-GMP	-	-	-	-	-	-
28	Flour for baked foods	-	Sodium Diacetate- 2500ppm maximum or Methyl propyl hydroxy	-	-	-	-	-	-

			Benzoate- 500 ppm maximum						
29	Fruit, fruit pulp or juice (not dried) for conversion into jam or crystallised glace or cured fruit or other products	-	-	-	-	-	-	-	-
	(a) Cherries	-	Sulphur dioxide- 2000 ppm maximum	-	-	-	-	-	-
	(b) Strawsberries 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 including Sodium, Potassium and Calcium Salt (Calculated as Sorbic Acid)- 1500 ppm maximum	Sucroglycerides (only In cakes), Hydroxypropyl Methyl Cellulose, Sucrose esters of fatty acids- GMP	-	-	Sodium fumarate, Potassium Malate, Sodium hydroxide- GMP	Bacterial Amylase Baking Powder, Ammonium bicarbonate- GMP, Ammonium Carbonate- 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 tartric, 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: Table maragrine/ Fat spread
2	Sodium/ Potassium/ Calcium sorbate expressed as Sorbic acid	-	-	-	

3	Benzoic acid	-	-	-	
4	Sodium/ Potassium/ benzoate expressed as Benzoic acid	-	-	-	
F.	Natural colours				
1	Beta carotene	-	-	-	25 mg/kg max: Table maragrine/ Fat spread
2	Annatto extracts (as bixin/ norbixin)	-	-	-	20 mg/kg max: Table maragrine/ Fat spread
3	Curcumin or turmeric (As curcumin)	-	-	-	5 mg/kg max: Table maragrine/ Fat spread
4	Beta - apo - 8' - carotenal	-	-	-	25 mg/kg max: Table maragrine/ Fat spread
5	methyl and ethyl esters of beta - apo - 8' - carotenoic acid	-	-	-	25 mg/kg max: Table maragrine/ Fat spread
G.	Acidity regulators				

1	Citric acid	-	-	-	GMP: Table maragrine/ Fat spread
2	Lactic acid	-	-	-	GMP: Table maragrine/ Fat spread
3	Sodium and potassium salt of citric and lactic acid	-	-	-	GMP: Table maragrine/ Fat spread
4	Calcium disodium ethylene diamine tetra acetate	-	-	-	50 mg/kg max: Table maragrine/ Fat spread
H.	Flavours				
1	Natural flavours and natural flavouring substances/ Nature identical flavouring substances/ Artificial flavouring substances	-	-	-	GMP: Table maragrine/ Fat spread
2	Diacetyl	-	-	-	4 mg/kg max: Table maragrine/ 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 P_2O_5											
1	Sodium polyphosphate expressed as P2O5	100gms/kg maximum	100gms/kg maximum	-	-	-	-	-	10 gms/kg maximum expressed as P_2O_5 (including natural phosphate)	10 gms/kg maximum expressed as P_2O_5 (including natural phosphate)	10 gms/kg maximum expressed as P_2O_5 (including natural phosphate)	
2	Potassium Polyphosphate expressed as P_2O_5			-	-	-	-	-				
3	Calcium polyphosphate expressed as P_2O_5			-	-	-	-	-				
4	Orthophosphoric acid	-	-	-	-	-	850 mg/kg maximum	-	-	-	-	

	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	
D	Preservatives											
1	Potassium bisulphate expressed as Sulphur dioxide	100mg/kg maximum raw edible 30mg/kg maximum cooked product. Singly or in combination expressed as SO_2	100mg/kg maximum raw edible 30mg/kg maximum cooked product. Singly or in combination in cooked product	-	-	-	-	-	-	-	-	
2.	Potassium Sulphite expressed as sulphur dioxide			-	-	-	-	-	-	-	-	
3.	Sodium metabisulphate expressed as sulphur dioxide			-	-	-	-	-	-	-	-	
4.	Sodium sulphite expressed as sulphur di oxide			-	-	-	-	-	-	-	-	
5.	Sodium sorbate expressed as sorbic acid	-	-	200 mg/kg maximum singly or in combination expressed as sorbic acid	-	-	-	-	-	-	-	
6.	Calcium sorbate expressed as sorbic acid	-	-		-	-	-	-	-	-	-	
7.	Potassium sorbate expressed as sorbic acid	-	-		-	-	-	-	-	-	-	
8.	Sorbic Acid	-	-		-	-	-	-	-	-	-	
E	Colours											
1	Ponceau 4 R	30 mg/kg maximum cooked mass	-	-	-	-	-	-	-	-	-	
2.	Sunset Yellow	-	-	-	-	-	30 mg/kg maximum singly or in combination	-	-	-	--	-
3.	Tartarazine	-	-	-	-	-		-	-	-	-	-

	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	
F.	Thickening Agents											
1	Pectin	-	-	-	-	2.5 gm/kg maximum	-	-	2.5 gm/kg maximum	-	-	
2	Tragacanth Gum	-	-	-	-	-	-	20 gm/kg maximum singly or in combination in packing medium only	20 gm/kg maximum singly or in combination in packing medium only		--	
3.	Xanthan Gum	-	-	-	-	-	-				--	
4.	Sodium/ Potassium/ Calcium Alginate	-	-	-	-	-	-			-	5 mg/kg maximum as Sodium Alginate	
5.	Carboxy Methyl Cellulose	-	-	-	-	2.5 gm/kg maximum	-	-	-	-	-	
G	Modified Starches											
1	Acid Treated Starch	-	-	-	-	60 gm/kg maximum singly or in combination in packing medium only	-	60 gm/kg maximum singly or in combination in packing medium only	60 gm/kg maximum singly or in combination in packing medium only	-	-	
2	Alkali Treated Starch	-	-	-	-		-			-	-	
3	Balanced starched	-	-	-	-		-			-	-	
4	Distarch adipate acetylated	-	-	-	-		-			-	-	
5	Distarch glycerol	-	-	-	-		-			-	-	
6	Distarch glycerol acetylated	-	-	-	-		-			-	-	
7	Distarch glycerol, hydroxypropyl	-	-	-	-		-			-	-	
8	Distarch phosphate	-	-	-	-		-			-	-	
9	Distarch phosphate, acetylated	-	-	-	-		-			-	-	
10	Distarch phosphate hydroxypropyl	-	-	-	-		-			-	-	
11	Monostarch phosphate	-	-	-	-		-			-	-	
12	Oxidized starch	-	-	-	-		-			-	-	
13	Starch acetate	-	-	-	-		-			-	-	
14	Starch, hydroxypropyl	-	-	-	-		-			-	-	

	1	2	3	4	5	6	7	8	9	10	11	
	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	
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	Peaches	Grape Fruits	Pineapple	Plums	Raspberries	Peas	Strawberries	Oranges	Fruit Cocktail/ Tropical Fruit Cocktail	Apricot	Palmito	Mangoes	Guava	Chicu	Papaya	Lichi	Kenu	Pomegranate	Custard Apple	Fruits not specified
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
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
3	Fumaric Acid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Lactic Acid	-	-	-	-	-	GMP	GMP	-	-	GMP		-	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP
B	Anti-clouding Agent																				
1	Methyl Cellulose	-	10 ppm maxi-mum	-	-	-		-	10 ppm maximum	-	-	-	-	-	-	-	-	-	-	-	-
C	Antifoaming Agents																				
1	Dimethyl Polysiloxane	-	-	10 ppm maxi-mum	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
D	Antioxidant																				
1	Ascorbic Acid	550 ppm maxi-mum	550 ppm maxi-mum	-	-	-	550 ppm maxi-mum	-	550 ppm maxi-mum	550 ppm maxi-mum	-	550 ppm maxi-mum	550 ppm maxi-mum	550 ppm maxi-mum	550 ppm maxi-mum	550 ppm maxi-mum	550 ppm maxi-mum	550 ppm maxi-mum	550 ppm maxi-mum	550 ppm maxi-mum	550 ppm maxi-mum
E	Colours (can be used singly or in																				

S.No.	Name of Additives	Peaches	Grape Fruits	Pineapple	Plums	Raspberries	Peas	Strawberries	Oranges	Fruit Cocktail/ Tropical Fruit Cocktail	Apricot	Palmito	Mangoes	Guava	Chicu	Papaya	Lichi	Kenu	Pomegranate	Custard Apple	Fruits not specified
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	combination within the specified limits																				
(a)	Natural:																				
1	Chlorophyll	-	-	-			-		-		-										
2	Caramel	-	-	-			-		-		-										
3	Curcumin or turmeric	-	-	-			-		-		-										
4	Beta-carotene	-	-	-			-		-	200 ppm Maximum	-										
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	-	-	-	200 ppm maxi-mum	200 ppm maxi-mum	-	200 ppm maxi-mum	-		-			200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum
10	Annatto	-	-	-			-		-		-										
11	Saffron	-	-	-			-		-		-	-	-								
(b)	Synthetic									200 ppm Max											
1	Poncea 4R	-	-	-	200 ppm maxi-mum	200 ppm maxi-mum	-	200 ppm maxi-mum						200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum
2	Carmoisine	-	-	-			-														
3	Erythrosine	-	-	-			-														
4	Tartarzine	-	-	-			-		-		-										

S.No.	Name of Additives	Peaches	Grape Fruits	Pineapple	Plums	Raspberries	Peas	Strawberries	Oranges	Fruit Cocktail/ Tropical Fruit Cocktail	Apricot	Palmito	Mangoes	Guava	Chicu	Papaya	Lichi	Kenu	Pomegranate	Custard Apple	Fruits not specified
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
5	Sunset Yellow FCF	-	-	-			-		-	200 ppm max	-	-	-								
6	Indigo Carmine	-	-	-	200 ppm maxi-mum	200 ppm maxi-mum	-		-		-			200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum
7	Brilliant Blue FCF	-	-	-			-		-		-										
8	Fast Green FCF	-	-	-			-	200 ppm maxi-mum	-	200 ppm max											
F	Firming Agents (Singly or in combination)																				
1	Calcium Chloride	350 ppm maxi-mum	350 ppm maxi-mum	-	350 ppm maxi-mum	350 ppm maxi-mum	-	350 ppm maxi-mum	350 ppm maxi-mum	350 ppm maxi-mum	350 ppm maxi-mum	-	350 ppm maxi-mum	350 ppm maxi-mum	350 ppm maxi-mum	350 ppm maxi-mum	350 ppm maxi-mum	350 ppm maxi-mum	350 ppm maxi-mum	350 ppm maxi-mum	350 ppm maxi-mum
2	Calcium Lectate	-	350 ppm maxi-mum	-	-	350 ppm maxi-mum	-	350 ppm maxi-mum	-	350 ppm maxi-mum	-	-									
3	Calcium Gluconate	-	-	-	-	-	-	350 ppm maxi-mum	-	-	-	-									
4	Calcium Carbonate	-	-	-	-	-	-	-	-	-	-	-									
5	Calcium Bisulphite	-	-	-	-	-	-	-	-	-	-	-									
G	Thickening Agents																				
1	Modified Starches	-	-	-	-	-	-	-	-	-	-	1% m/m maxi-mum	-	-	-	-	-	-	-	-	-

Table 7

LIST OF FOOD ADDITIVES IN THERMALLY PROCESSED VEGETABLES

S.No.	Name of Additives	Canned Tomato	Green Beans/ Wax Bean	Sweet Corn/ Baby Corn	Mushrooms	Green Peas	Carrots	Chestnuts & Chestnut Puree	Niger, Groundnut, Seasame and mustard pastes and other oil seeds paste	Asparagus	Processed Peas	Ladies Finger	Cauliflour	Brinjal	Sweet Potato	Garkin	Spinach	Table Onions	Garlic	Bell Paper	Rajma	All pulses and dals whole and splits	Other vegetables and curried vegetables/ ready-to-eat vegerables
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
A.	Acidifying Agents singly or in combination																						
1	Acetic Acid	GMP	-	GMP	GMP	-	-	-	-	GMP	-	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP
2	Citric Acid	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP
3	Lactic Acid	GMP	-	-	-	-	-	-	-	GMP	-	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP
4	L-Tartaric Acid	GMP	GMP	GMP	GMP	GMP	GMP	10 g/kg maximum	10 g/kg maximum	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP
5	Malic Acid	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP
B	Antioxidants (Singly)																						
1	Ascorbic Acid	-	-	GMP	GMP	-	-	300 ppm maximum	300 ppm maximum	GMP	-	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP	GMP
2	BHA	-	-	-	-	-	-	200 ppm maxi-mum	200 ppm maxi-mum	-	-	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum	200 ppm maxi-mum
3	TBHQ	-	-	-	-	-	-			-	-												
4	Acorbyl Palmitate	-	-	-	-	-	-			-	-												
C	COLORS (Can be used singly or in combination within the specified Limits																						
(a)	Natural: Singly or in combination																						
1.	Chlorophyll	-					-	-	-	-	200 maximum ppm	-	-	-	-	-	-	-	-	-	-	-	-
-	- caramel	-		-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
3	- curcumi	-					-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-

S.No.	Name of Additives	Canned Tomato	Green Beans/ Wax Bean	Sweet Corn/ Baby Corn	Mushrooms	Green Peas	Carrots	Chestnuts & Chestnut Puree	Niger, Groundnut, Seasame and mustard pastes and other oil seeds paste	Asparagus	Processed Peas	Ladies Finger	Cauliflour	Brinjal	Sweet Potato	Garkin	Spinach	Table Onions	Garlic	Bell Paper	Rajma	All pulses and dals whole and splits	Other vegetables and curried vegetables/ ready-to-eat vegerables
	n or turmeric																						
4	-beta -carotene	-		-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
5	-beta apo-8 carotenal	-	200 ppm maxi-mum	-	-	200 ppm maxi-mum	-	-	-	-	200 ppm maxi-mum	-	-	-	-	-	-	-	-	-	-	-	-
6	-Methyl ester of beta-apo- 8 carotenic acid	-		-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
7	-ethyl ester of beta – apo-8 carotenic acid	-		-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
8	- canthaxanthin	-		-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
9	- ribiflavin, lactoflavin	-		-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
10	-annatto	-		-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
11	-saffron	-		-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
(b)	Synthetic																						

S.No.	Name of Additives	Canned Tomato	Green Beans/ Wax Bean	Sweet Corn/ Baby Corn	Mushrooms	Green Peas	Carrots	Chestnuts & Chestnut Puree	Niger, Groundnut, Seasame and mustard pastes and other oil seeds paste	Asparagus	Processed Peas	Ladies Finger	Cauliflour	Brinjal	Sweet Potato	Garkin	Spinach	Table Onions	Garlic	Bell Paper	Rajma	All pulses and dals whole and splits	Other vegetables and curried vegetables/ ready-to-eat vegerables
1	Poncea 4R	-	200 ppm maxi-mum	-	-	200 ppm maxi-mum	-	-	-	-	200 ppm maxi - mum	-	-	-	-	-	-	-	-	-	-	-	-
2	Carmoisine	-		-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
3	Erythrosine	-		-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
4	Tartarzine	-		-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
5	Sunset Yellow FCF	-		-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
6	Indigo Carmine	-		-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
7	Brilliant Blue FCF	-		-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
8	Fast Green FCF	-		-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
D	Firming Agents singly or in combination.																						
1	Calcium Chloride	0.80 % max total calcium ion (content (dices, slices, wedges) 0.45 % max (whol	-	0.80 % max total calcium ion (content (dices, slices, wedges) 0.45 % max (whol	0.80% max total calcium ion (content (dices, slices,	350 ppm Max	-	-	-	-	350 ppm maxi	350 ppm maxi-mum	350 ppm maxi	350 ppm maxi-mum	350 ppm maxi	350 ppm maxi-mum	350 ppm maxi	350 ppm maxi - mum	350 ppm maxi - mum	350 ppm maxi - mum	350 ppm maxi - mum	350 ppm maxi - mum	350 ppm maxi-mum
2.	Calcium Lactate		-			350 ppm max	-	-	-	-	350 ppm maxi - mum	350 ppm maxi-mum	350 ppm maxi-mum	350 ppm maxi-mum	350 ppm maxi - mum	350 ppm maxi-mum	350 ppm maxi	350 ppm maxi - mum	350 ppm maxi - mum	350 ppm maxi - mum	350 ppm maxi - mum	350 ppm maxi - mum	350 ppm maxi-mum
3.	Calcium Gluconate		-			350 ppm max	-	-	-	-	350 ppm maxi	350 ppm maxi-mum	350 ppm maxi	350 ppm maxi-mum	350 ppm maxi	350 ppm maxi-mum	350 ppm maxi	350 ppm maxi - mum	350 ppm maxi - mum	350 ppm maxi - mum	350 ppm maxi - mum	350 ppm maxi - mum	350 ppm maxi-mum

S.No.	Name of Additives	Canned Tomato	Green Beans/ Wax Bean	Sweet Corn/ Baby Corn	Mushrooms	Green Peas	Carrots	Chestnuts & Chestnut Puree	Niger, Groundnut, Seasame and mustard pastes and other oil seeds paste	Asparagus	Processed Peas	Ladies Finger	Cauliflour	Brinjal	Sweet Potato	Garkin	Spinach	Table Onions	Garlic	Bell Paper	Rajma	All pulses and dals whole and splits	Other vegetables and curried vegetables/ ready-to-eat vegerables
4.	Calcium Carbonate	e pieces)	-	e pieces)	wedges) 0.45% max (whole pieces)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Calcium Bi-Sulphite		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Mono Calcium Phosphate		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Aluminium Potassium Sulphate		-	-	-	-	-	GMP	GMP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E	Processing Aids																						
1.	Stannous Chloride	-	-	-	-	-	-	-	-	25ppm maxi-mum	-	-	-	-	-	-	-	-	-	-	-	-	-
F	Thickening Agents																						
1	Vegetable gums	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

S.No.	Name of Additives	Canned Tomato	Green Beans/ Wax Bean	Sweet Corn/ Baby Corn	Mushrooms	Green Peas	Carrots	Chestnuts & Chestnut Puree	Niger, Groundnut, Seasame and mustard pastes and other oil seeds paste	Asparagus	Processed Peas	Ladies Finger	Cauliflour	Brinjal	Sweet Potato	Garkin	Spinach	Table Onions	Garlic	Bell Paper	Rajma	All pulses and dals whole and splits	Other vegetables and curried vegetables/ ready-to-eat vegerables
	(singly or in combination)																						
i)	Arabic Gum	-	10 g/kg maximum	10 g/kg maximum	10 g/kg maximum	-	-	-	GMP	1% m/m maximum	-	10 g/kg maximum	10 g/kg maximum	10 g/kg maximum	10 g/kg maximum	10 g/kg maximum	10 g/kg maximum	10 g/kg maximum	10 g/kg maximum	10 g/kg maximum	10 g/kg maximum	10 g/kg maximum	10 g/kg maximum
ii)	Carrageenan	-				-	-	-			-												
Iii	Guar Gum	-				-	-	-			-												
iv	Caroba-bbean Gum	-				-	-	-			-												
v	Xantha n Gum	-				-	-	-			-												
2	Alginates (singly or in combination)					-	-	-	-		-												
i	Ammonium Alginates					-	-	-	-		-												
ii	Calcium aligates					-	-	-	-		-												
iii	Potassium Alginates					-	-	-	-		-												
iv	Sodium Alginates					-	-	-	-		-												
v	Propyl					-	-	-	-		-												

S.No.	Name of Additives	Canned Tomato	Green Beans/ Wax Bean	Sweet Corn/ Baby Corn	Mushrooms	Green Peas	Carrots	Chestnuts & Chestnut Puree	Niger, Groundnut, Seasame and mustard pastes and other oil seeds paste	Asparagus	Processed Peas	Ladies Finger	Cauliflour	Brinjal	Sweet Potato	Garkin	Spinach	Table Onions	Garlic	Bell Paper	Rajma	All pulses and dals whole and splits	Other vegetables and curried vegetables/ ready-to-eat vegerables
	glycol Alginat-e																						
vi	Pectines	-	-	-		-	-	GMP	GMP		-	-	-	-	-	-	-	-	-	-	-	-	-
G	Calcium Disodium ethylen diamine	-	-	-	200 ppm maximum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H	Softening Agents (Singly or in combination)																						
1.	Sodium bi-carbonate	-	-	-	-	-	-	-	-	-	-150 ppm max as sodium	-	-	-	-	-	-	-	-	-	-	-	-
2.	Sodium Citrate	-	-	-	-	-	-	-	-	-	-150 ppm max as sodium	-	-	-	-	-	-	-	-	-	-	-	-

Table 8

List of Food Additives for use in food products

Sl. No.	Name of the Additives	Tamarind Pulp /Puree & Conc.	Synthetic Syrups for Dispensers	Tomato Puree & Paste	Vineger	Carbonated Fruit Beverages or fruit drink	Dehydrated Fruits	Carbonated Water, Softdrink conc. (liquid/powder)	Dehydrated Vegetable	Frozen Fruit/Fruit Products	Frozen Vegetables	Fruit Based Beverage Mix/Powdered Fruit Based Beverages
1	2	3	4	5	6	7	8	9	10	11	12	13
A	ACIDIFYING AGENTS (Singly or in combination)											
1	Citric Acid	-	GMP	GMP	-	GMP	-	GMP	-	-	-	GMP
2	Fumaric Acid	-		-	-	-	-		-	-	-	
3	Lactic Acid	-		GMP	-	-	-		-	-	-	
4	L-Tartaric Acid	-		-	-	GMP	-		-	-	-	
5	Malic Acid	-		-	-	GMP	-		-	-	-	
6	Phosphoric Acids	-	GMP in Cola beverages only	-	-	-	-	GMP in Cola beverages only	-	-	-	-
B	ANTICAKING AGENTS (Singly or in Combinations)											
1	Carbonates of calcium and magnesium	-	-	-	-	-	2% maximum in	-	2% maximum in powders	-	-	2% maximum in powders only

2	Phosphates of calcium and magnesium	-	-	-	-	-	powders only	-	only	-	-	
3	Silicates of calcium, magnesium, aluminium or sodium or silicon dioxide	-	-	-	-	-		-		-	-	
C	ANTIOXIDANTS											
1	Ascorbic Acid	-	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 maximum	-	GMP Caramel only	100 ppm maximum	-	100 ppm maximum	-	-	-	200 ppm maximum
2	Caramel	-		-			-		-	-	-	
3	Curcumin or turmeric	-		-			-		-	-	-	
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	Tartarzine	-		-	-		-		-	-	-	
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 puree	-	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 max						
G	*THICKENING AGENTS/STABILISING/EMULSIFYING AGENTS*											
1	Vegetable Gums (Singly or in combination)											
	Gum Arabic	-	GMP	-	-	GMP	-	GMP	-	-	-	GMP
2	Alginates (singly or in combination											
(i)	Calcium Alginates	-	GMP	-	-	-	-	GMP	-	-	-	-
(ii)	Potassium Alginates	-		-	-	GMP	-		-	-	-	-
(iii)	Sodium Alginates	-		-	-	-	-		-	-	-	-

3	Pectines	-	GMP	-	-	-GMP	-	GMP	-	-	-	GMP
4	Estergum	-	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	Candid Crystallised & Glazed Fruit	Murabba/Preserve	Squashes, Crushes, Fruit Syrups, Sharbats, Cordial 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 (Tharmally Processed)	Chutney Fruits and / or Vegetable/ Mango Chutney	Mango Pulp/Puree	Fruit Pulp/Puree	Pickles	Green Chilli Paste, Ginger Paste, Garlic Paste, Onion 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 maximum	-	200 ppm maximum (on dilution except cordial and barley water) (clubbed from a1 to a11)	200 ppm maximum(clubbed from a1 to a11)	-	-	200 ppm maximum(clubbed from a1 to a11)	GMP(clubbed from a1 to a11)	-	-	-	GMP
2	Caramel		-			-	-						
3	Curcumin or turmeric		-			-	-						
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	Poncea 4R	200 ppm maximum	-	200 ppm maximum	200ppm maximum	-	-	200 ppm maximum	-	-	-	-	-
2	Carmoisine		-			-	-		-	-	-	-	-
3	Erythrosine		-			-	-		-	-	-	-	-
4	Tartarzine		-			-	-		-	-	-	-	-
5	Sunset Yellow FCF		-			-	-		-	-	-	-	-
6	Indigo Carmine		-			-	-		-	-	-	-	-
7	Brilliant Blue FCF		-			-	-		-	-	-	-	-
8	Fast green FCF		-			-	-		-	-	-	-	-
E	FIRMING AGENTS (Singly or in Combination)												
1	Calcium Chloride	GMP	GMP	-	-	-	-	350 ppm maximum	350 ppm maximum only on fruit/vegetable pieces	-	-	350 ppm maximum	350 ppm maximum only on fruit/ vegetable pieces
2	Calcium Lectate	GMP	GMP	-	-	-	-			-	-		
3	Calcium Gluconate	GMP	GMP	-	-	-	-			-	-		
4	Calcium Carbonate	GMP	GMP	-	-	-	-			-	-		
5	Calcium Bisulphite	GMP	GMP	-	-	-	-			-	-		
F	FLAVOURS												

1	Natural Flavouring and Natural Flavouring Substances	GMP	GMP	GMP	GMP	GMP	GMP	-	-	-	-	-	-
2	Nature Identical Flavouring Substances	GMP	GMP	GMP	GMP	GMP	GMP	-	-	-	-	-	-
G	PRESERVATIVES (singly or in combination)												
1	Benzoic Acid & its Sodium & Potassium Salt or both (Calculated as Benzoic Acid)	-	200 ppm maximum	600 ppm maximum	600 ppm maximum	600 ppm maximum	600 ppm maximum	-	250 ppm maximum	-	-	250 ppm maximum	250 ppm maximum
2	Sulphur di-oxide	150 ppm maximum	40 ppm maximum	350 ppm maximum	350 ppm maximum	1000 ppm maximum except Cherry, Strawberry,Raspberry, where it shall be 2000ppm maximum.	1500 ppm maximum	-	100 ppm maximum	-	-	100 ppm maximum	100 ppm maximum
3	Sorbic Acid Calcium Sorbate and Potassium Sorbate expressed as Sorbic Acid	500 ppm maximum	500 ppm maximum	1000 ppm maximum	200 ppm maximum	-	100 ppm maximum	-	500 ppm maximum	-	-	-	500 ppm maximum
H	PROCESSING AIDS												
1	Sodium Metabi-Sulphite as Sulphur	-	-	-	-	-	-	2000 ppm maximum	-	-	-	-	-

	Dioxide												
I	THICKENING AGENTS												
1	Xanthan Gum	-	-	0.5% maximum	-	-	-	-	0.5% maximum	-	-	-	0.5% maximum
2	Alginates (Singly or in combination)												
(i)	Ammonium Alginates	-	-	GMP	-	-	-	-	GMP	-	-	-	GMP
(ii)	Calcium Alginates	-	-		-	-	-	-		-	-	-	
(iii)	Potassium Alginates	-	-		-	-	-	-		-	-	-	
(iv)	Sodium Alginates	-	-		-	-	-	-		-	-	-	
(v)	Propyl glycol Alginate	-	-		-	-	-	-		-	-	-	
3	Pectines	-	-		-	-	-	-		-	-	-	
4	Gellan gum			GMP									
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	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/Vegetable Chutney Mixed (dry), Culinary Powder, Seasoning Mixed Powder	Nectars	Fruit Juices aspecticaly packed	Vegetable Juices	Concentrated Fruit/Veg. Juice /Pulp/Puree
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
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	-	-	-	-	-	-	-	-	-	-	-	-	GMP	-
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, aluminium or sodium or silicon dioxide	-	-	-	-	-	-	-	-	-		-	-	-	-
C	ANTIFOAMING AGENTS														
1	Dimethyl Polysiloxane	10ppm maximum	10ppm maximum	-	-	-	-	10ppm maximum	-	-	-	-	-	-	10ppm maximum
2	Mono-and diglycerides of fatty Acids of edible oils	GMP	GMP	-	-	-	-	10ppm maximum	-	-	-	-	-	-	10ppm maximum
D	ANTIOXIDANTS														
1	Ascorbic Acid	GMP	GMP	GMP	-	GMP	GMP	GMP	-	GMP	GMP	GMP	GMP	GMP	GMP
2	BHA	-	-	-	-	-	-		-			-	-	-	-
3	TBHQ	-	-	-	-	-	-		-	200 ppm maximum		-	-	-	-
4	Ascrobyl palmitate	-	-	-	-	-	-	200 ppm maximum	-		200 ppm maximum	-	-	-	-
E.	COLOURS (Can be used singly or in combination within the specified limits)														
(a)	Natural:														

1	Chlorophyll				-		-					100 ppm max-	-	-	-
2	Caramel				-		-						-	-	-
3	Curcumin or turmeric				-		-						-	-	-
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				-		-	GMP for Caramel only					-	-	-
11	Saffron	GMP	GMP	GMP	-	GMP	-		GMP	GMP	GMP		-	-	-
(b)	Synthetic														
1	Poncea 4R				-		-	-	-			-	-	-	-
2	Carmolsine				-		-	-	-			-	-	-	-
3	Erythrosine				-		-	-	-			-	-	-	-
4	Tartarzine				-		-	-	-			-	-	-	-
5	Sunset Yellow FCF	200 ppm maximum	200 ppm maximum	100 ppm maximum	-	100 ppm maximum	-	-	-	100 ppm maximum	100 ppm maximum	-	-	-	-

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 Lectate		-	-	-	-	-	-	-		-	-	-	-	-
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	Natural Flavouring and Natural Flavouring Substances only - GMP	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	-	-	-
J	PROCESSING AIDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	Nitrogen and Carbondioxide	-	-	-	-	-	-	-	-	-	-	-	GMP	GMP	GMP
K	THICKENING AGENTS (Singly or in combination)														
1	Modified Starches	-	-	-	-	-	0.5% maximum with declaration on label	0.5% maximum with declaration on label	-	0.5% maximum	0.5% maximum of final food for consumption after dilution	-	-	-	-
2	Vegetable Gums (Singly or in combination)	-	-	-	-	-	-	-	-			-	-	-	-
(i)	Arabic Gum	-	-	-	-	- GMP (for RTS fruit beverages only)	-	GMP	-			-	-	-	-
(ii)	Carobbean	-	-	-	-	-	-	GMP	-			-	-	-	-
(iii)	Guar Gum	-	-	-	-	-	-	GMP	-			-	-	-	-
(iv)	Carobbean Gum	-	-	-	-	-	-	GMP	-			-	-	-	-
(v)	Xanthan Gum	-	-	-	-	-	0.5% maximum	0.5% maximum	-			-	-	-	-

3	Alginates (Singly or in combination)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(i)	Calcium Alginates					-									
(ii)	Potassium Alginates					GMP (for RTS fruit beverages only) -						-	-	-	-
(iii)	Sodium Alginates					-						-	-	-	-
(iv)	Propyl glycol Alginate					-						-	-	-	-
(v)	Alginic acid					GMP						GMP	GMP	GMP	GMP
4	Pectines	GMP	GMP	GMP	GMP	GMP (for RTS fruit beverages only)-	GMP	GMP	GMP	GMP	GMP	-GMP	-GMP	-	-
5	Ester Gum	-	-	-	-	100 ppm max	-	-	-	-	-	-	-	-	-
6	Gellan Gum	-	-	-	-	GMP	-	-	-	-	-	-	-	-	-
L	Artificial sweeteners and Polyols														
1	Aspertame	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/ metasulphite expessed as SO_2		1.5 gm/kg maximum only SO_2	-	50 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 mg/kg maximum	-	-	-	-
H	Thickening Agents for Pastes for Stuffing Olives					
1.	Sodium Alginates	5.0 mg/kg maximum	-	-	-	-
2.	Xanthan gum	3.0 mg/kg maximum	-	-	-	-
3.	Caragreenan	GMP	-	-	-	-
4	Carobeean gum	GMP	-	-	-	-
5.	Guar gum	GMP				
I	Firming Agents for Stuffed Olives					
1	Calcium Chloride	1.5 gm/kg maximum as Calcium ions 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	Glucose syrup	Dried glucose syrup	Edible common salt/ Iodized salt/ Iron fortified common salt	Misri, Gur or Jaggery, Plantation white sugar Cube sugar Golden syrup	Khandsari sugar (Sulphur sugar), Bura sugar	Khandsari sugar (Desi)
1	2	3	4	5	6	7	8	9	10	11
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 2.4.5	-	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
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 3.1.4	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 sam 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 carotenoic acid	-				

7	Ethyl ester of Beta apo-8 carotenoid acid	-				
8	Canthaxanthin	-				
9	Riboflavin, Lactoflavin	-				
10	Annato	-				
11	Saffron	-				
(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	GMP			
3	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	Polyxylethylene sorbitan monostearate	-				
9	Carrageenan	-	-			
10	Modified starches	-	-			
11	Glycerol	-	GMP			
F	Alkalizing agents (Singly or on combination)					
1	Sodium, Potassium, Calcium, Magnesium and Ammonium carbonates	0.5% max on fat free cocoa (Singly or in combination)	GMP	Calcium carbonate: GMP	-	Calcium carbonate /magnesium carbonate: GMP
2	Sodium, Potassium, Calcium, Magnesium bicarbonates as K_2CO_3			Calcium bicarbonate/sodium bicarbonate: GMP	Sodium bicarbonate: GMP	-
3	Sodium, Potassium, Calcium Magnesium and Ammonium Hydroxide			-	-	-
G	Neutralising agents/ Acidulants					
1	Phosphoric acid	2.5 gm/kg max as P_2O_5 on cocoa fraction	2.5 gm/kg max as P_2O_5	1300 ppm max as P_2O_5	-	22000 ppm max as P2O5
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, Magenesium, 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	Cheese/ Sliced/ Cut/Shredded cheese	Processed cheese	Processed cheese spread	All types of yoghurts	Evaporated milk	Sweetened condensed milk	Butter	Milk fat/Butter oil and Amhydrous milk fat/ Anhydrous butter oil	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
A	Stabilisers and emulsifiers singly or in combination expressed as anhydrous substance													
1	Sodium, Potassium and calcium chloride	-	-	-	-	2 g/kg singly or 3 g/kg in combination max	2 g/kg singly or 3 g/kg in combination max	-	-	Cream powder: 3 g/kg max singly or in combination Milk powder: Calcium chloride, sodium citrate, Sodium salts of orthophosphoric acid and polyphosphoric acid (as linear phosphate)-3 g/kg max singly or in combination	-	-	-	-
	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	-	-
	Potssium salt of polyphosphoric acid	-	-	-	-			-	-		-	GMP	-	-
	Sodium salt of orthophosphoric acid	-	-	-	-			-	-		-	GMP	-	-
	Sodium salt of	-	-	-	-			-	-		-	GMP	-	-

	polyphosphoric acid													
2	Carrageenan	-	-	-	5 g/kg max	150 mg/kg max	-	-	-	-	10 g/kg max	-	-	-
3	Sodium, Potassium, Calcium and Ammonium Alginates	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-
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 fattty 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,	*40gm/kg maximum except that added phosphorus compound shall not exceed 9gm/kg calculated as Phosphorus*												
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 regulation 3.1.6 suitable for these products			40gm/kg maximum	40 gm/kg maximum						40 g/ kg maximum			
B	Thickener and modifying agent singly or in combination													
1	Microcrystalline cellulose	-	-	-	-	-	-	-	-	-	10 g/kg max	-	-	-
C	Modified starched singly or in combination													
1	Acid treated starch	-	-	-	-	-	-	-	-	-	30 g/kg max subject to declaration	-	-	-
2	Alkali treated starch	-	-	-	-	-	-	-	-	-		-	-	-
3	Bleached starch	-	-	-	-	-	-	-	-	-		-	-	-
4	Distarch adipate acetylated	-	-	-	-	-	-	-	-	-		-	-	-
5	Distarch glycerol	-	-	-	-	-	-	-	-	-		-	-	-
6	Distarch glycerol, acetylated	-	-	-	-	-	-	-	-	-		-	-	-
7	Distarch glycerol, hydroxypropyl	-	-	-	-	-	-	-	-	-		-	-	-
8	Distarch phosphate	-	-	-	-	-	-	-	-	-		-	-	-
9	Distarch phosphate, acetylated	-	-	-	-	-	-	-	-	-		-	-	-
10	Distarch phosphate, hydroxypropyl	-	-	-	-	-	-	-	-	-		-	-	-
11	Monostarch phosphate	-	-	-	-	-	-	-	-	-		-	-	-
12	Oxidised starch	-	-	-	-	-	-	-	-	-		-	-	-
13	Starch acetate	-	-	-	-	-	-	-	-	-		-	-	-
14	Starch hydroxypropyl	-	-	-	-	-	-	-	-	-		-	-	-
D	Flavours													

1	Vanilla extracts	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Vanillin	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Ethyl vanillin	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Natural flavours and natural flavouring substances/ Nature identical flavouring substances/ Artificial flavouring substances	-	-	GMP subject to declaration	GMP subject to declaration	-	-	-	-	-	GMP subject to declaration	-	-	-
E	Colours (Natural: singly or in combination)													
1	Curcumin	100 ppm max	100 ppm max	100 ppm max	100 ppm		-	100 ppm max	-	-	100 ppm max	-	-	-
2	Riboflavin	100 ppm max	100 ppm max	100 ppm max	- 50 ppm		-		-	-	50 ppm max	-	-	-
3	Chlorophyll	100 ppm max	100 ppm max	100 ppm max	-		-		-	-	.	-	-	-
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 normal to orange coloured	10-50 ppm max normal to orange coloured	10-50 ppm max normal to orange coloured	-100 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 carotenoic acid	35 ppm max	-	-	-100 ppm		-	35 ppm max	-	-	100 ppm max	-	-	-
9	Ethyl ester of Beta apo-8 carotenoicn acid	-	-	-	-100 ppm		-	-	-	-	-	-	-	-
10	Canthaxanthin	-	-	-	-100 ppm		-	-	-	-	100 ppm max	-	-	-
11	Caramel colours (Plain)	-	-	-	-GMP		-	-	-	-	GMP	-	-	-
12	Caramel colours (Ammonium Sulphite process)	-	-	-	-3ppm maximum		-	-	-	-	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 (only in flavoured and fruit yoghurt)	-	-	-	-	-	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	-	-
G	Preservatives													

1	Sorbic acid; Sodium, Potassium and Calcium sorbates expressed as sorbic acid	3000 ppm max; for cut, sliced, shredded cheese: 1000 ppm max	3000 ppm max;	3000 ppm max;	-	-	-	-	-	-	-	-	-	2000 ppm max
2	Nisin	12.5 ppm max	12.5 ppm max	12.5 ppm max	-	-	-	-	-	-	-	-	-	12.5 ppm max
3	Propionic acid; Sodium and calcium propionate expressed as propionic acid singly or in combination	3000 ppm max	-	-	-	-	-	-	-	-	-	-	-	2000 ppm max
H	For surface/ Rind treatment only													
1	Sorbic acid; Potassium and Calcium sorbates expressed as sorbic acid singly or in combination	1 g/kg max	-	-	-	-	-	-	-	-	-	-	-	-

2	Pimaricin (natamycin)	2 mg/dm square surface, not present in depth of 5 mm	-	-	-	-	-	-	-	-	-	-	-	-
I	Anticaking agent													
1	a) Cellulose b) Carbonates of calcium and magnesium c) Phosphates of calcium and magnesium d) Silicates of calcium, magnesium, aluminium or sodium; or silicon dioxide e) Myristates, Palmitates or Stearates of Al, K, Na, Ca, Ammonium.	10 g/kg max	-	-	-	-	-	-	-	-	-	-	-	-
J	Acidifying agents singly or in combination													

1	Citric acid	-	40 g/kg max with emulsifiers	40 g/kg max with emulsifiers	-	-	-	-	-	-	GMP including sodium potassium salts	-	-	-
2	Phosphoric acid	-	40 g/kg max with emulsifiers	40 g/kg max with emulsifiers	-	-	-	-	-	-	-	-	-	-
3	Acetic acid	-	40 g/kg max with emulsifiers	40 g/kg max with emulsifiers	-	-	-	-	-	-	GMP	-	-	-
4	Lactic acid	-	40 g/kg max with emulsifiers	40 g/kg max with emulsifiers	-	-	-	-	-	-	GMP including sodium potassium salts	-	-	-
5	Sodium bicarbonate/ Calcium carbonate expressed as anhydrous substance	-	40 g/kg max with emulsifiers	40 g/kg max with emulsifiers	-	-	-	-	-	-	-	-	-	-
6	Malic acid (DL-)	-	-	-	-	-	-	-	-	-	GMP	-	-	-
7	L-(+Tartaric acid & Sodium/ Potassium salts)	-	-	-	-	-	-	-	-	-	1 g/kg max	-	-	-
8	Sodium hydrogen carbonate	-	-	-	-	-	-	-	-	-	GMP	-	-	-

9	a) Sodium/ Potassium/ Calcium orthophosphate expressed as P2O5 b) Sodium/ Potassium polyphosphate expressed as P_2O_5	-	-	-	-	-	-	-	-	-	2 g/kg max singly or in combination with as P_2O_5	-	-	-
10	Glucono delta lactone	GMP												GMP
K	Emulsifier in singly or in combination													
1	a) Potassium salt of mono/di and polyphosphoric acid b) Calcium salt of mono/di and polyphosphoric acid c) Sodium salt of mono/di and polyphosphoric acid	-	40 g/kg max except that added phosphorus compound should not exceed 9 g/kg calculated as Phosphorus (Clubbed together frm 1 to 3)	40 g/kg max except that added phosphorus compound should not exceed 9 g/kg calculated as Phosphorus (Clubbed together frm 1 to 3)	-	-	-	-	-	-	-	-	-	-
2	a) Sodium citrate b) Potassium citrate 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 palimtate Ascorbyl stearate	-	-	-	-	-	-	-	500 mg/k gmax	0.5 g/kg max as ascorbic acid only in cream powder	-	-	-	-
3	Alpha tocopherols, Mixed tocopherols	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Propyl gallate	-	-	-	-	-	-	-	100 mg/k gmax	-	-	-	-	-
5	Octyl gallate	-	-	-	-	-	-	-	100 mg/k g max	-	-	-	-	-
6	Ethyl gallate	-	-	-	-	-	-	-	100 mg/k gmax	-	-	-	-	-
7	Dodecyl gallate	-	-	-	-	-	-	-	100 mg/k gmax	-	-	-	-	-
8	Butylated hydroxy anisole	-	-	-	-	-	-	-	175 mg/k gmax	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.	Name of additives	Cheddar	Danbo	Edam	Gouda	Havarti	Samsoe	Emmentaler	Tilsiter	Saint-Paulin	Provolone	Cottage/ Creamed Cottage	Coulommiers	Cream Cheese	Camembert	Brie	Extra Hard Grating Chees
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
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
B	**Colour**																
1. 2.	Annatto Beta Carotene	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	-
3.	Riboflavin	--	--	--	--	--	--	--	GMP	--	--	--	--	--	--	--	--
4	Chlorophyll	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15mg/ kg maximum

C	Enzymes																
1 2 3 4. 5 6	Alpha-amylase (Aspergillus oryzae var.) Alpha-amylese (Bacillus Megaterium expressed in Bacillus Subtilis) Alpha-amylese (Bacillus stearothemophilius expressed in B. subtilis). Alpha-amylase (Bacillus stearothermophilius). Alpha-amylase (Bacillus subtilies) Alpha-amylase (Carbohydrase) (Bascillus licheniformis) **Enzymes from GMO should be labelled**	1 gm/kg of milk solids maximum	--	--	--	--	--	--	--	--	GMP	--	--	--	--	--	1 gm/kg of milk solids maximum
D	**Preservatives**																

1	Sorbic Acid, Sodium sorbate, Potassium sorbate calculated as Sorbic Acid	1 gm/kg maximum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 gm/kg maximum
E	**Thickening Agents singly or in combination:**																
1	Carrageenan	-	-	-	-	-	-	-	-	-	-	-	-	5 gm/kg maximum			
2.	Guar Gum	-	-	-	-	-	-	-	-	-	-	-	-	5 gm/kg maximum	-	-	-
3.	Karaya Gum	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
4.	Tragacanth Gum	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
5.	Xanthan Gum	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
6.	Alginate of Sodium/ Potassium/ Calcium	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
7.	Ammonium Alginate	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
8.	Gelatine	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
9.	Pectins	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
10.	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	Vibrio Cholerae	Vibrio Parahaemolyticus	Clostridium perfringens
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 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	—
3.	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	—
4.	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	—
5	Frozen fish fillets or minced fish flesh or mixtures	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	—

Sl No	thereof Name of the product	Total plate count	E. Coli	Staphylococcus aureus	Salmonella & Shigella	Vibro cholerae	Vibro parahaemolyticus	Clostridium perfringens
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 fivelakhs / gm	Not more than 20 / gm	Not more than 100 / 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.	Requirements	Sampling Plan[10]	Pasteurised Milk/Cream / Flavoured Milk	Sterilised and UHT Milk, Cream Flavoured milk, Evaporated milk	Sweetened Condensed Milk	Pasteurised Butter[11]	Dried products: milk powder, cream, whey, edible casein, ice cream mix
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Total Plate Count[1]	m	30,000/g	-	500/g	10,000/g	40,000/g
		M	50,000/g	nil	1,500/g	50,000/g	50,000/g
2.	Coliform Count[2]	m	-	-	-	10/g	10/g
		M	Less than 10/g	-	Less than 10/g	50/g	50/g
3.	E.Coli[3]	M	Absent/g	-	Absent/g	Absent/g	Absent/g
4.	Salmonella[4]	M	Absent /25g	-	Absent /25g	Absent /25g	Absent /25g
5.	Staph aureus[5] *(coagulase positive)*	m	-	-	10/g	10/g	-
		M	Less than10/g	-	100/g	50/g	Less than10/g
6.	Yeast and mold count[6]	m	-	-	-	20/g	-
		M	-	-	10/g	50/g	-
7.	Spore Count: (a) Aerobic[7a] (*B.*cereus)	m	-	5/g	-	-	*100/g*
		M	-	10/g	-	-	*1000/g*
	(b) Anaerobic[7b] (*Clostridium Perfringens*)	m	-	-	10/g	-	10/g
		M	-	Absent/g	100/g	-	100/g
8.	Listeria Monocytogenes[8]	M	Absent /g	-	Absent/g	Absent/g	Absent/g
9.	Sampling Guidelines[9]	n [1-8]	5	5	5	5	5
		c	2^{1}	2^{7a}	$2^{1\&5}$	$2^{1,2,5,6}$	$2^{1,2,6,7a,b}$
			$0^{2-5,8}$	$0^{1\&7b}$	$0^{2-4,6,7b,8}$	$0^{3,4,8}$	$0^{3,4,5,8}$
		Storage & transport	0 to 4^{0} C	Ambient, max 30^{0} C	0 to 4^{0} C	-18^{0} C or lower	Ambient, max 30^{0} 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, Dahi, Chakka Shrikhand[13]	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] (*Clostridium Perfringens*)	m	--	*10/g*	*10/g*	--	--	--	
		M	--	*100/g*	*100/g*	--	--	--	
8.	Listeria Monocytogenes[8]	M	Absent /g	Absent /g	Absent/g Hard cheese Absent/ 25g other cheeses	Absent/g	Absent/g	Absent /g	
9.	Sampling Guidelines[9]	n [1-8]	5	5	5	5	5	5	
		c	$2^{1\&2}$	2^{1}	$2^{2,5,6}$	$2^{2,5,6}$	$2^{1,2,5,6}$	$2^{1,2,,5,6}$	
			$0^{3,4,5,6,8}$	$0^{2\text{-}6,7b,8}$	$0^{3,4,7b,8}$	$0^{3,4,8}$	$0^{3,4,8}$	$0^{3,4,8}$	
		Storage & transport	-18^0 C or lower	4 to 8^0 C	4 to 8^0 C	0 to 4^0 C	0 to 4^0 C	0 to 4^0 C	
		Sample size	100g	100g	100g	100g	100g	100g	

[1-8] Microbiological requirements for different dairy products

[9] Sampling 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.

[10] Sampling 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 $\leq$ 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 unstatisfctory product shall be stopped and will carry out the detailed investigations for nonconformity/ noncompliance during manufacturing. The manufacturing of such prouduct 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. Potentialy 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 General guidance 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 detection of bacteria responsible for food poisoning: Part 8	*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*

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, C.botulinum and enumeration of Cl. perfringens (second revision)	*IS:5887 PART IV:1999 Reaffirmed 2009*
Microbiology of food and animal feeding stuffs - Horizontal method for detection and enumeration of Listeria monocytogenes : 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	*IS 14988(Part 1):2001 Reaffirmed 2007 / ISO 11290-1 :1996 OR IS:14988(Part 2): 2002 Reaffirmed 2007/ ISO:11290-2 :1998*
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

No	Requirements	Caraway (Shiahjira)	Cardomom (Elaichi)	Chillies and Capsicum (Lal Mirchi)	Cinnamon (dalchini)	Cassia (Taj)	Cloves (Laung)	Coriander (Dhania)
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	-	-	-	-	-	-	-

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	-	-	-	-	-	-	-

Sl No	Requirements	Pepper Black (Kalimirch)	Poppy (Khas Khas)	Saffron (Kesar)	Turmeric (Haldi)	Curry Powder	Mixed Masala	Aniseed (Saunf)
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
5	Shigella	-	-	-	-	-	-	-
6	Staphylococcus aureus	-	-	-	-	-	-	-
7	Yeast and Mould Count	-	-	-	-	-	-	-
8	Anaerobic Spore Count	-	-	-	-	-	-	-
9	Listeria monocytogens	-	-	-	-	-	-	-

Sl No	Requirements	Ajowan (Bishops seed)	Dried Mango Slices	Dried Mango Powder (Amchur)	Pepper White	Garlic (Lahsun)	Celery	Dehydrated Onion (Sukha Pyaj)	Asafoetida	Edible Common Salt
1	Total Plate Count	-	-	-	-	-			-	-
2	Coliform Count	-	-	-	-	-			-	-
3	E. Coli	-	-	-	-	-			-	-
4	Salmonella	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 b. Tomato puree and paste c. Tomato ketchup and Tomato Sauce	(a) Mould count (b) Yeast and spores (a) Mould count (a) Mould count (b) Yeast and spores (c)Total plate Count	Positive in not more than 40.0 percent of the field examined Not more than 125 per 1 / 60 c.m.m Positive in not more than 60.00 percent of the field examined Positive in not more than 40.00 percent of the field examined Not more than 125 per 1 / 60 c.m.m 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 vegetableproducts covered under Regulation 2.3	Yeast and mould count	Positive in not more than 100 count / gm
7	Frozen fruits and vegetable 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 Crystalised 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 Regulation 2.3. b) Table olives c) Raisins d) Pistachio nuts e) Dates f) Dry fruits and nuts g) Vinegars	a. Flat Sour Organisms	(i) Not more than 10,000 cfu / gm for thoseproducts which have pH less than 5.2 (ii) Nil for those products which have pH more than 5.2
		b. Staphylococcus aureus	Absent in 25 gm / ml
		c. Salmonella	Absent in 25 gm / ml
		d. Shigella	Absent in 25 gm / ml
		e. Clostridium botulinum	Absent in 25 gm / ml
		f. E. Coli	Absent in 1 gm / ml
		g. Vibrio Cholera	Absent in 25 gm/ ml

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