

FOOD SAFETY AND STANDARDS (CONTAMINANTS, TOXINS AND RESIDUES)  
REGULATIONS, 2011

CHAPTER 1  
GENERAL

1.1 : Short title and commencement-

1.1.1 : These regulations may be called the Food Safety and Standards (Contaminants, toxins and Residues) Regulations, 2011.

1.1.2 : These regulations shall come into force on or after 5<sup>th</sup> August, 2011.

1.2 : Definitions-

1.2.1 : In these regulations unless the context otherwise requires:

1. "Crop contaminant" means any substance not intentionally added to food, but which gets added to articles of food in the process of their production (including operations carried out in crop husbandry, animal husbandry and veterinary medicine), manufacture, processing, preparation, treatment, packing, packaging transport or holding of articles of such food as a result of environmental contamination

CHAPTER 2  
CONTAMINANTS, TOXINS AND RESIDUES

2.1 : METAL CONTAMINANTS

<sup>15</sup>[2.1.1

1. Chemicals described in monographs of the Indian Pharmacopoeia when used in foods, shall not contain metal contaminants beyond the limits specified in the appropriate monographs of the Indian Pharmacopoeia for the time being in force.

2. Notwithstanding anything contained in clause (1) above, no article of food specified in column (2) of the table below shall contain any metal specified in excess of the quantity specified in column (3) of the said table:

Table

Name of metal contaminant	Article of food	Parts per Million (mg/kg or mg/L)
(1)	(2)	(3)
1. Lead	Agar	5.0
	Alginic acid	5.0

All types of sugars, sugar syrup, invert sugar and direct consumption coloured sugars with sulphated ash content exceeding 1.0 percent	5.0
Alumina used in preparation of lake colour	10
Aluminium lake of Sunset Yellow FCF	10
Ammonium hydrogen carbonate	2.0
Anhydrous dextrose and dextrose monohydrate, refined white sugar (sulphated ash content not exceeding 0.03 per cent)	0.5
Annatto	10
Ascorbic acid	2.0
Ascorbyl palmitate	2.0
Aspartame (Aspartyl phenyl alanine methyl ester)	10
Assorted subtropical fruits, edible peel	0.1
Assorted subtropical fruits, inedible peel	0.1
Baking powder	10
Benzoic acid	2.0
Berries and other small fruits	0.2
Beta-apo-8'-carotenal	2.0
Beta-carotene	10
Bivalve molluscs	1.5
Brassica vegetables excluding Kale	0.3
Brewed vinegar and synthetic vinegar	0.01
Brilliant blue FCF	10
Bulb vegetables	0.1
Butylated hydroxyanisole	2.0
Calcium alginate	5.0
Calcium propionate	5.0
Canned carrots	1.0
Canned green beans and canned wax beans	1.0
Canned green peas	1.0
Canned mushrooms	1.0
Canned palmito	1.0
Canned sweetcorn	1.0
Canned tomatoes	1.0
Canned asparagus	1.0
Canned chestnuts and canned chestnut purée	1.0

Canned fish, canned meats, edible gelatin, meat extracts and hydrolysed protein, dried or dehydrated vegetables (other than onions)	5.0
Canned fruit cocktail	1.0
Canned grapefruit	1.0
Canned mandarin oranges	1.0
Canned mangoes	1.0
Canned mature processed peas	1.0
Canned pineapple	1.0
Canned raspberries	1.0
Canned strawberries	1.0
Canned tropical fruit salad	1.0
Caramel	5.0
Carbonated water , expressed in mg/L	10
Carmoisine	10
Carrageenan	5.0
Cattle, edible offal of	0.5
Cephalopods	1.0
Cereal grains, except buckwheat, canihua and quinoa	0.2
Chlorophyll	10
Citric acid	0.5
Citrus fruits	0.1
Cocoa powder	5.0 on dry fat free substance basis
Concentrated soft drinks (but not including concentrates used in the manufacture of soft drinks)	0.5
Concentrates used in the manufacture of soft drinks, lime juice and lemon juice	2.0
Corned beef, Luncheon meat, Cooked ham, Chopped meat, Canned chicken, Canned mutton and Goat meat and other related meat products	2.5
Crustaceans	0.5
Dehydrated onions, dried herbs and spices, curry powder and mix masalas, flavourings, alginic acid, alignates, agar, carrageen and similar products derived from seaweed	10 on dry matter basis
Dicalcium phosphate	4.0
Dodecyl gallate	2.0
Edible fats and oils (edible fats and oils not covered by individual standards)	0.1

Edible molasses, caramel liquid, solid glucose and starch conversion products with a sulphated ash content exceeding 1.0 per cent	5.0
Edible oils and fats	0.5
Erythrosine	10
Ethylester of Beta-apo-8'-carotenoic acid	2.0
Fast green FCF	10
Fish	0.3
Food colours other than caramel	10 on dry colouring matter basis
Foods not specified	2.5
Fruit and vegetable juice (including tomato juice, but not including lime juice and lemon juice)	1.0
Fruit Juices (including nectars; ready to drink)	0.05
Fruiting vegetables other than cucurbits(excluding mushrooms)	0.1
Fruiting vegetables, cucurbits	0.1
Fumaric acid	2.0
Gaur gum	2.0
Glycerol esters of Wood rosin	1.0
Gum Arabic or Acacia gum	3.0
Gum ghatti	5.0
Gum karaya	2.0
Hard boiled sugar confectionery	2.0
Ice-cream, iced lollies and similar frozen confections	1.0
Indigo carmine	10
Infant formula (ready to use)	0.02
Infant milk substitutes and Infant foods	0.2
Iron fortified common salt	2.0
Jam (fruit preserves) and jellies	1.0
L (+) -Tartaric acid	2.0
Lactic acid	2.0
Leafy vegetables (including brassica leafy vegetables but excluding spinach)	0.3
Legume vegetables	0.2
Liquid pectin, chemicals not otherwise specified, used as ingredients or in the preparation or processing of food	10
Malic acid	2.0
Mango chutney	1.0

Margarine	0.1
Meat of cattle, sheep and pig (also applies to fat from meat)	0.1
Milks (Concentration factor shall be applied to partially or wholly dehydrated milks)	0.02
Minarine ( <b>Low Fat Spread</b> )	0.1
Mineral Oil (High viscosity)	1.0
Mineral Oil (Low viscosity)	1.0
Monosodium L-glutamate	1.0
Named Animal fats (lard, rendered pork fat, premier jus ( <b>suet</b> ) and edible tallow)	0.1
Natural mineral water, expressed in mg/L	0.01
Octyl gallate	2.0
Olive oil, Virgin olive oil, Extra virgin olive oil, Ordinary virgin olive oil, Refined olive oil, Refined olive pomace oil and Olive pomace oil	0.1
Other vegetables	2.5
Packaged drinking water (other than mineral water), expressed in mg/L	0.01
Pectin	2.0
Phosphoric acid	4.0
Pickled cucumbers (Cucumber pickles)	1.0
Pig, edible offal of	0.5
Polyglycerol esters of fatty acids	2.0
Polyglycerol esters of interesterified ricinoleic acid	2.0
Pome fruits	0.1
Ponceau 4R	10
Potassium iodate	10
Potassium metabisulphite	2.0
Potassium nitrate	2.0
Potassium nitrite	2.0
Poultry fats	0.1
Poultry meat	0.1
Poultry, edible offal of	0.5
Processed tomato concentrates	1.5
Propyl gallate	2.0
Propylene glycol	2.0
Pulses	0.2
Raw sugars except those sold for direct consumption or used for manufacturing purpose other than the manufacture of refined sugar	5.0
Riboflavin	20
Root and tuber vegetables	0.1

	Saccharin sodium	10
	Salt, food grade	2.0
	Secondary milk products (as consumed)	0.02
	Sodium alginate	5.0
	Sodium ascorbate	2.0
	Sodium benzoate	2.0
	Sodium carboxymethyl cellulose	2.0
	Sodium carboxymethyl cellulose, enzyme hydrolysed	3.0
	Sodium hydroxide	2.0
	Sodium metabisulphite	2.0
	Sodium propionate	5.0
	Solid pectin	50
	Sorbic acid	2.0
	Sorbitol	1.0
	Steviol glycoside	1.0
	Stone fruits	0.1
	Sucralose	10
	Sulphur dioxide	5.0
	Sunset yellow	10
	Sunset yellow dye used in preparation of lake colour	10
	Synthetic food colour-preparation and mixtures	10
	Table olives	1.0
	Tartrazine	10
	Tea	5.0 on dry matter basis
	Titanium dioxide	2.0
	Tragacanth gum	2.0
	Trisodium citrate	2.0
	Turmeric whole and powder	10
	Vegetable Oils, crude (oils of arachis <b>(Groundnut)</b> , babasu, coconut, cotton seed, grape seed, maize, mustard seed, palm kernel, palm, rape seed, safflower seed, sesame seed, soya bean, and sunflower seed, and palm olein, stearin and superolein and other oils but excluding cocoa butter)	0.1
	Vegetable Oils, edible (oils of arachis <b>(Groundnut)</b> , babasu, coconut, cotton seed, grape seed, maize, mustard seed, palm kernel, palm, rape seed, safflower seed, sesame seed, soya bean, and sunflower seed, and palm olein, stearin and superolein and other oils but	0.1

	excluding cocoa butter)	
	Wine	0.2
	Yeast and yeast products	5.0 on dry matter basis
2. Copper	Ammonium hydrogen carbonate	5.0
	Annatto	30
	Brewed vinegar and synthetic vinegar	0.01
	Caramel	20
	Carbonated water , expressed in mg/L	1.5
	Chicory-dried or roasted, coffee beans, flavourings/pectin liquid	30
	Chlorophyll	30
	Cocoa powder	70 on fat free substance basis
	Colouring matter	30 on dry colouring matter basis
	Concentrates for soft drinks	20
	Edible gelatin	30
	Foods not specified	30
	Hard boiled sugar confectionery	5.0
	Infant milk substitute and Infant foods	15 (But not less than 2.8)
	Iron fortified common salt	2.0
	Juice of orange, grape, apple, tomato, pineapple and lemon	5.0
	Mineral water , expressed in mg/L	1.0
	Olive oil, Virgin olive oil ,Extra virgin olive oil, Ordinary virgin olive oil, Refined olive oil, Refined olive pomace oil and Olive pomace oil	0.1
	Packaged drinking water (other than mineral water), expressed in mg/L	0.05
	<b>Solid Pectin</b>	300
	Polyglycerol esters of fatty acids	25
	Polyglycerol esters of Interesterified ricinoleic acid	25
	Pulp and pulp products of any fruit	5.0
	Soft drinks excluding concentrates and Carbonated Water , expressed in mg/L	7.0
	Tea	150
	Toddy	5.0

	Tomato ketchup	50 on dried total solids basis
	Tomato puree, paste, powder, and cocktails	100 on dried tomato solids
	Turmeric whole and powder	5.0
	Vegetables	30
	Yeast and yeast products	60 on dry matter basis
3. Arsenic	Agar	3.0
	Alginic acid	3.0
	Alumina used in preparation of lake colour	1.0
	Aluminium lake of Sunset Yellow FCF	1.0
	Ammonium hydrogen carbonate	0.6
	Annatto	3.0
	Ascorbyl palmitate	3.0
	Aspartame (Aspartyl phenyl alanine methyl ester)	3.0
	Benzoic acid	3.0
	Beta -apo-8'-carotenal	3.0
	Beta-carotene	3.0
	Brewed vinegar and synthetic vinegar	0.1
	Brilliant blue FCF	3.0
	Butylated hydroxyanisole	3.0
	Calcium alginate	3.0
	Caramel	3.0
	Carbonated water, expressed in mg/L	0.25
	Carmoisine	3.0
	Carrageenan	3.0
	Chicory-dried or roasted	4.0
	Chlorophyll	3.0
	Citric acid	3.0
	Dehydrated onions, edible gelatin, liquid pectin	2.0
	Dicalcium phosphate	3.0
	Dodecyl gallate	3.0
	Dried herbs, finings and clearing agents, solid pectin all grades, spices	5.0
	Edible fats and oils (edible fats and oils not covered by individual standards)	0.1
	Erythrosine	3.0
	Ethylester of Beta-apo-8'-carotenoic acid	3.0
	Fast Green FCF	3.0
	Fish and Crustaceans	76



	Food colouring other than synthetic colouring	5.0 on dry colouring matter basis
	Foods not specified	1.1
	Fumaric acid	3.0
	Gaur gum	3.0
	Glycerol esters of wood rosin	3.0
	Gum Arabic or Acacia gum	2.0
	Gum Ghatti	3.0
	Gum Karaya	3.0
	Hard boiled sugar confectionery	1.0
	Ice-cream, iced lollies and similar frozen confections	0.5
	Indigo carmine	3.0
	Infant milk substitute and Infant foods	0.05
	Iron fortified common salt	1.0
	Juice of orange, grape, apple, tomato, pineapple and lemon	0.2
	L (+)- Tartaric acid	3.0
	Malic acid	3.0
	Margarine	0.1
	Milk	0.1
	Minarine ( <b>Low Fat Spread</b> )	0.1
	Mineral Oil (High viscosity)	1.0
	Mineral Oil (Low viscosity)	1.0
	Molluscs	86
	Monosodium L-glutamate	2.0
	Named Animal fats (lard, rendered pork fat, premier jus( <b>suet</b> ) and edible tallow)	0.1
	Natural mineral water, expressed in mg/L	0.01
	Octyl gallate	3.0
	Olive oil, Virgin olive oil ,Extra virgin olive oil, Ordinary virgin olive oil, Refined olive oil, Refined olive pomace oil and Olive pomace oil	0.1
	Packaged drinking water (other than mineral water) , expressed in mg/L	0.01
	Pectin	5.0
	Phosphoric acid	2.0
	Polyglycerol esters of fatty acids	3.0
	Polyglycerol esters of interesterified ricinoleic acid	3.0
	Ponceau 4R	3.0
	Potassium iodate	3.0
	Potassium nitrate	3.0
	Potassium nitrite	3.0

	Preservatives, anti-oxidants, emulsifying and stabilising agents and synthetic food colours	3.0 on dry matter basis
	Propyl gallate	3.0
	Propylene glycol	3.0
	Pulp and pulp products of any fruit	0.2
	Riboflavin	5.0
	Saccharin sodium	2.0
	Sodium alginate	3.0
	Sodium ascorbate	3.0
	Sodium benzoate	3.0
	Sodium carboxymethyl cellulose	3.0
	Sodium propionate	3.0
	Soft drink intended for consumption after dilution except carbonated water	0.5
	Sorbic acid	3.0
	Sorbitol	3.0
	Steviol glycoside	1.0
	Sucralose	3.0
	Sulphur dioxide	3.0
	Sunset yellow	3.0
	Sunset yellow dye used in preparation of lake colour	3.0
	Synthetic food colour-preparation and mixtures	3.0
	Tartrazine	3.0
	Titanium dioxide	1.0
	Tragacanth gum	3.0
	Trisodium citrate	3.0
	Turmeric whole and powder	0.1
	Vegetables	1.1
	Vegetable oils, crude (oils of arachis <b>(Groundnut)</b> , babasu, coconut, cotton seed, grape seed, maize, mustard seed, palm kernel, palm, rapeseed, safflower seed, sesame seed, soya bean, and sunflower seed, and palm olein, stearin and superolein).	0.1
	Vegetable oils, edible (oils of arachis <b>(Groundnut)</b> , babasu, coconut, cotton seed, grape seed, maize, mustard seed, palm kernel, palm, rapeseed, safflower seed, sesame seed, soya bean, and sunflower seed, and palm olein, stearin and superolein).	0.1
4.Tin	Canned (citrus fruits, stone fruits, vegetables, fruit cocktail, mangoes, pineapple, raspberries, strawberries, tropical fruit salad).	250
	Canned beverages	150

	Canned chestnuts and chestnut puree	250
	Canned fish products	200
	Canned foods other than beverages	250
	Canned mushrooms	250
	Canned tomatoes	250
	Cooked cured chopped meat (for products in other containers)	50
	Cooked cured chopped meat (for products in tins)	250
	Cooked cured ham (for products in other containers)	50
	Cooked cured ham (for products in tins)	200
	Cooked cured pork shoulder (for products in other containers)	50
	Cooked cured pork shoulder (for products in tins)	200
	Corned beef (for products in other containers)	50
	Corned beef (for products in tins)	200
	Corned beef, Luncheon meat, Cooked ham, Chopped meat, Canned chicken, Canned mutton and Goat meat	250
	Foods not specified	250
	Hard boiled sugar confectionery	5.0
	Infant milk substitute and Infant foods	5.0
	Jam, Jellies and Marmalade	250
	Juice of orange, apple, tomato, pineapple and lemon	250
	Luncheon meat (for products in other containers)	50
	Luncheon meat (for products in tins)	200
	Mango Chutney	250
	Pickled cucumber	250
	Processed and canned food products	250
	Processed tomato concentrates	250
	Pulp and pulp products of any fruit	250
	Table Olives	250
	Turmeric whole and powder	0.01
5. Cadmium	Bivalve Molluscs	2.0
	Brassica vegetables	0.05
	Bulb vegetables	0.05
	Carrageenan	1.5
	Cephalopods	2.0
	Cereal grains, except buckwheat, canihua and	0.1

	Quinoa (excluding wheat and rice; and bran and germ)	
	Crustaceans	0.5
	Fish	0.3
	Foods not specified	1.5
	Fruiting vegetables other than cucurbits (excluding tomatoes and edible fungi)	0.05
	Fruiting vegetables, cucurbits	0.05
	Infant milk substitute and Infant foods	0.1
	Leafy vegetables	0.2
	Legume vegetables	0.1
	Natural mineral water, expressed in mg/L	0.003
	Other vegetables	1.5
	Packaged drinking water (other than mineral water), expressed in mg/L	0.003
	Potato, peeled	0.1
	Pulses, excluding soybean dry	0.1
	Rice, polished	0.4
	Root and tuber vegetables, excluding potato and celeriac	0.1
	Salt, food grade	0.5
	Stalk and stem vegetables	0.1
	Turmeric whole and powder	0.1
	Wheat	0.2
6. Mercury	Alumina used in preparation of lake colour	1.0
	Aluminium lake of Sunset yellow FCF	1.0
	Caramel	0.1
	Carrageenan	1.0
	Fast green FCF	0.01
	Fish	0.5
	Foods not specified	1.0
	Natural mineral water, expressed in mg/L	0.001
	Non-predatory fish, crustaceans, cephalopods, molluscs	0.5
	Packaged drinking water (other than mineral water), expressed in mg/L	0.001
	Predatory fish (Tuna, Marlin, Sword Fish, Elasmobranch)	1.0
	Salt, food grade	0.1
	Sodium hydroxide	1.5
	Titanium oxide	1.0
	Vegetables	1.0
7. Methyl Mercury (Calculated as the element)	All foods	0.25

8. Chromium	All fishery products	12
	Brilliant blue FCF	50
	Fast green FCF	50
	Gelatin	10
	Mineral water, expressed in mg/L	0.05
	Packaged drinking water (other than mineral water), expressed in mg/L	0.05
	Refined sugar	0.02
	Vegetables	1.0
9. Nickel	All hydrogenated, partially hydrogenated, interesterified vegetable oils and fats such as vanaspati, table margarine, bakery and industrial margarine, bakery shortening, fat spread and partially hydrogenated margarine, bakery shortening, fat spread and partially hydrogenated soyabean oil	1.5
	Mineral water, expressed in mg/L	0.02
	Packaged drinking water (other than mineral water), expressed in mg/L	0.02
	Sorbitol	2.0
	Vegetables	1.0
10.Selenium	Mineral water , expressed in mg/L	0.05
	Packaged drinking water (other than mineral water), expressed in mg/L	0.01
	Potassium metabisulphite	5.0
	Sodium metabisulphite	5.0
	Sulphur dioxide	20
11.Antimony	Mineral water , expressed in mg/L	0.005
	Packaged drinking water (other than mineral water), expressed in mg/L	0.005
	Titanium dioxide	2.0
	Vegetables	1.0"]

## 2.2 Crop contaminants and naturally occurring toxic substances

### 2.2.1

<sup>15</sup>[1. No article of food specified in column (3) of the Table below shall contain any crop contaminant specified in the corresponding entry in column (2) thereof in excess of quantities specified in the corresponding entry in column (4) of the said Table:

**Table**

S.No.	Name of the Contaminants	Article of the food	Limit µg/kg
(1)	(2)	(3)	(4)
1	Total Aflatoxins	Cereal and cereal products	15
		Dried figs	10
		Arecanut or Betelnut	15
		Nuts: Nuts for further processing	15
		Ready to eat	15
		Oilseeds or oil: Oilseeds for further processing	15
		Ready to eat	15
		Pulses	15
		Spices/Spice Mix	30
2	Aflatoxin B1	Food product containing any of the above mentioned food articles	20
		Arecanut or Betelnut	10
		Cereal and cereal products	10
		Dried figs	10
		Nuts: Nuts for further processing	10
		Ready to eat	10
		Oilseeds or oil: Oilseeds for further processing	10
		Ready to eat	10
		Pulses	10
3	Aflatoxin M1	Spices/Spice Mix	15
		Food product containing any of the above mentioned food articles	10
		Milk (Liquid)	0.5
		Skimmed milk powder	6
		Whole milk powder	4

4	Ochratoxin A	<sup>16</sup> [Wheat, wheat bran, rye, barley, coffee	5]
5	Patulin	Apple juice	50
		Apple juice used as an ingredient in other beverages	50
6	Deoxynivalenol	<sup>16</sup> [Wheat, wheat bran, barley	1000]]

<sup>2</sup> [2. Naturally occurring Toxic Substances:

**Table**

Sl.No	Name of naturally occurring toxic substances (NOTS)	Article of food	Maximum limits (ppm)
(1)	(2)	(3)	(4)
1	Agaric acid	Food containing mushrooms	100
		Alcoholic beverages	100
2	Hydrocyanic acid	Nougat, marzipan or its substitutes or similar products	5
		Canned stone fruits	5
		Alcoholic beverages	5
		Confectionery	5
		Stone fruit juices	5
		<sup>10</sup> [Sago, Cassava flour, Tapioca flour, Manihot flour and their products	10]
3	Hypericine	Alcoholic beverages	1
4	Saffrole	Meat preparations and meat products, including poultry and game	10
		Fish preparations and fish products	10
		Soups and sauces	10
		Non-alcoholic beverages	10
		Food containing mace and nutmeg	10
		Alcoholic beverages	10]

<sup>5</sup> [3. Polychlorinated biphenyls (PCBs) and Polycyclic Aromatic Hydrocarbon (PAH) compounds in Fish and Fishery Products:

Sl.No.	Name of the contaminants	Article of food	Limit
(1)	(2)	(3)	(4)
1.	Polychlorinated biphenyls (Sum of PCB28, PCB52, PCB101, PCB138, PCB153 and PCB180)	Inland and Migratory Fish	2.0 ppm

2.	Polychlorinated biphenyls (Sum of PCB28, PCB52, PCB101, PCB138, PCB153 and PCB180)	Marine Fish, Crustaceans and molluscs	0.5 ppm
3.	Benzo(a)pyrene	Smoked Fishery Products	5.0 ppb]

## 2.3: Residues

### <sup>14</sup> [2.3.1. Restriction on the use of insecticides:

(1) The expression “insecticide” shall have the meaning assigned to it in the Insecticide Act, 1968 (46 of 1968).

(2) Subject to the provisions of clause (3), no insecticides shall be used directly on articles of food:

Provided that nothing in this regulation shall apply to the fumigants which are registered and recommended for use as such on articles of food by the Registration Committee, constituted under section 5 of the Insecticides Act, 1968 (46 of 1968).

(3) The insecticide specified in column (2) of the table shall not exceed the Maximum Residue Limits (MRL) prescribed in column (4), for the article of food specified in column (3) of the said table, namely:-

Table

Sl. No.	Name of the Insecticide	Food	Maximum Residue Limit (MRL) in mg/kg
(1)	(2)	(3)	(4)
1.	2,4-Dichlorophenoxy Acetic Acid	Sugarcane	0.05
		Food grains	Maize-0.05, Wheat-2 and Rice-0.1 and other food grains- 0.01
		Milled food grains	0.01
		Potato	0.2
		Milk and Milk products	0.05
		Meat and Poultry	0.2
		Eggs	0.05 (shell free basis)
		Fruits	2
2.	Acephate (expressed as mixture of Methamidophos and acephate).	Rice	1
		Safflower seed	2
		Cottonseed	2
		Milk and Milk products	0.02
		Meat and Meat products	0.05
3.	Acetamiprid	Chilli	2
		Dried Chilli	20
		Rice	0.01
		Okra	0.1
		Cabbage	0.7
		Milk and Milk products	0.02
		Meat and Meat products	0.05
		Cotton seed Oil	0.1



4.	Alachlor	Cotton seed	0.05
		Groundnut	0.05
		Maize	0.1
		Soya bean	0.1
5.	Alpha cypermethrin	Cotton seed Oil	0.05
		Pine apple	0.5
6.	Alpha naphthyl Acetic Acid	Tomato	0.1
		Chilli	0.2
		Dried Chilli	2
		Mango	0.05
		Cotton seed Oil	0.05
		Grapes	0.05
		Pineapple	0.5
7.	Ametroctradin	Grapes	6
		Potato	0.05
		Cucumber	0.4
		Tomato	0.3
8.	Anilophos	Rice	0.1
9.	Atrazine	Maize	0.01
		Sugarcane	0.25
10.	Azimsulfuron	Rice	0.02*
11.	Azoxystrobin	Grapes	2
		Tomato	1
		Mango	0.7
		Chilli	1
		Dried Chilli	10
		Cucumber	0.05*
		Potato	7
		Milk and Milk products	0.01
		Cumin	0.03*
		Maize	0.03*
		Wheat	0.2
		Rice	0.03*
		Onion	0.05
12.	Benfuracarb	Red Gram	0.05
		Rice	0.05
13.	Sum of benomyl and carbendazim expressed as carbendazim	Food grains	0.5
		Milled food grains	0.1
		Vegetables	0.5
		Mango	2
		Banana (whole)	1
		Other fruits	5
		Cottonseed	0.1
		Groundnut	0.1
		Sugar beet	0.1
		Dry fruits	0.1
		Eggs	0.1 (shell free basis)
		Meat and Poultry	0.1 (carcass fat basis)

		Milk and Milk products	0.1 (F)
14.	Bensulfuron Methyl	Rice	0.01
15.	Beta Cyfluthrin	Okra	0.01*
		Brinjal	0.2
		Cotton seed	0.7
		Soya bean	0.03
		Soya bean Oil	0.01*
16.	Bifenthrin	Sugarcane	0.03
		Rice	0.05
		Apple	0.5
		Tea	30
		Cotton seed	0.5
		Milk and Milk products	0.2
17.	Bispyribac Sodium	Rice	0.05
18.	Bitertanol	Wheat	0.05
		Groundnut	0.05
		Milk and Milk products	0.05
		Meat and Meat products	0.05
		Tea	0.05*
		Apple	0.4
19.	Buprofezin	Cotton seed Oil	0.01
		Chilli	2
		Dried Chilli	20
		Mango	0.1
		Grapes	1
		Okra	0.01*
		Rice	0.05
		Milk and Milk products	0.01
20.	Butachlor	Rice	0.05
21.	Captan	Rice	0.3
		Fruit and Vegetables	Cherries-25, Grapes-25 and Melons-10, other fruits & other vegetables 15
		Black gram	0.01*
22.	Carbaryl	Sesamum	0.05
		Fish	0.2
		Food grains	Wheat-2.0 and Maize-0.02, other food grains 1.5
		Milled food grains	0.01
		Okra and leafy vegetables	10
		Potato	0.2
		Other vegetables	5
		Cotton seed (whole)	1
		Maize cob (kernels)	1
		Rice	2.5
		Maize	0.5

		Chilli	5
		Dried Chilli	50
		Citrus (Orange)	15
		Milk and Milk products	0.05
23.	Carbendazim	Food grains	Wheat-0.05, Rice-2.0 and other food grains 0.1
		Milled food grains	0.1
		Vegetables	0.5
		Mango	5
		Banana (whole)	1
		Other fruits	5
		Cotton seed	0.1
		Groundnut	0.1
		Sugar beet	0.1
		Dry fruits	0.1
		Eggs	0.1(shell free basis)
		Meat & Poultry	0.1(Carcass fat basis)
		Milk and Milk products	0.1 (F)
		Potato	0.01*
		Tea	0.5
		Grapes	3
		Rice	2*
24.	Carbofuran (sum of carbofuran and 3-hydroxy carbofuran expressed as carbofuran)	Food grains	0.10
		Milled food grains	0.03
		Fruits & Vegetables	0.10
		Oil seeds	0.10
		Sugarcane	0.10
		Meat & Poultry	0.10 (carcass fat basis)
		Milk and Milk products	0.05 (fat basis)
25.	Carbosulfan	Chilli	2
		Dried Chilli	20
		Rice	0.2
26.	Carfentrazone Ethyl	Wheat	0.01
		Rice	0.1*
		Tea	0.02*
27.	Carpropamid	Rice	1
28.	Cartap Hydrochloride	Rice	0.5
29.	Chlorantraniliprole	Bengal Gram	0.03*
		Black Gram	0.03*
		Bitter Gourd	0.03*
		Okra	0.3
		Soya bean	0.03*
		Pigeon pea	0.03*
		Tomato	0.6
		Chilli	0.6
		Dried Chilli	6
		Brinjal	0.6

		Rice	0.4
		Cabbage	2
		Sugarcane	0.5
		Cotton	0.3
		Milk and Milk products	0.05
		Meat and Meat products	0.2
		Groundnut	0.03*
		Groundnut Oil	0.03*
		Maize	0.03*
30.	Chlorfenapyr	Chilli	0.05
		Dried Chilli	0.5
		Cabbage	0.05
31.	Chlorfluazuron	Cabbage	0.1*
		Cotton seed	0.01*
32.	Chlorimuron ethyl	Rice	0.01
		Soya bean seed	0.01
		Wheat	0.05
33.	Chlormequat Chloride (CCC)	Potato	0.1
		Brinjal	0.1
		Grape	0.05*
		Cotton seed	1
34.	Chlorothalonil	Groundnut	0.1
		Potato	0.1
		Milk and Milk products	0.07
		Meat and Meat products	0.02
35.	Chlorpropham	Potato	30
36.	Chlorpyrifos	Tea	2
		Food grains	Wheat-0.5, Rice-0.5 and Food grains 0.05
		Milled food grains	0.01
		Fruits	Strawberry-0.03, Plum-0.5, Pomefruit-1.0 and other Fruits 0.5
		Potatoes and Onions	Potato-2.0, Onions 0.01
		Cauliflower and Cabbage	1
		Other vegetables	0.2
		Meat and Poultry (carcass fat)	0.1
		Milk and Milk products	0.02
		Cotton seed	0.3
		Cotton seed oil (crude)	0.05
		Carbonated Water	0.001
37.	Chlothianidin (Chlothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymethylurea (TZMU), Methylnitroguanidine (MNG) TMG)	Sugarcane	0.4
		Cotton seed	0.02
		Cotton seed Oil	0.02
		Rice	0.5
		Tea	0.7
		Milk and Milk products	0.02

		Meat and Meat products	0.02
38.	Chromafenozide	Rice	0.03*
39.	Cinmethylene	Rice	0.05
40.	Clodinafop-propargyl	Soya bean	0.05*
		Wheat	0.1
41.	Clomazone	Rice	0.01
		Soya bean seed	0.01
		Soya bean seed oil	0.01
42.	Copper Hydroxide (Copper determined as elemental copper)	Rice	\$
		Potato	\$
		Grapes	\$
43.	Copper Oxychloride(Copper determined as elemental copper)	Fruit	\$
		Potato	\$
		Other vegetables	\$
		Areca nut	\$
		Cardamom	\$
		Coconut	\$
		Coffee	\$
		Pepper	\$
		Paddy	\$
44.	Copper Sulphate (Copper determined as elemental copper)	Coffee	\$
		Cardamom	\$
		Citrus	\$
		Coconut	\$
		Guava	\$
		Papaya	\$
		Pea	\$
		Grapes	\$
45.	Cuprous Oxide (Copper determined as elemental copper)	Paddy	\$
		Potato	\$
		Areca nut	\$
		Chilli	\$
		Citrus	\$
		Coffee	\$
		Grapes	\$
46.	Cyantranilipole	Grapes	0.01
		Pomegranate seed	0.01
		Pomegranate Juice	0.01
		Cabbage	2
		Chilli	0.5
		Dried Chilli	5
		Tomato	0.5
		Gherkin	0.3
		Okra	0.5
		Brinjal	0.06
		Cotton seed or Cotton seed Oil	1.5
47.	Cyazofamid	Potato	0.02*

		Tomato	0.01*
		Grapes	1
48.	Cyhalofop-butyl	Rice	0.5
49.	Cymoxanil	Tomato	0.01*
		Potato	0.01
		Grapes	0.1
		Citrus	0.05*
		Gherkin	0.05*
		Cucumber	0.1
50.	Cypermethrin (sum of isomers) (Fat soluble residue)	Rice	2
		Cottonseed Oil	0.01
		Wheat grains	2
		Milled wheat grains	0.01
		Brinjal	0.2
		Cabbage	2
		Okra	0.5
		Oil seeds except groundnut	0.2
		Meat and Poultry	2
		Milk and Milk products	0.05
	(a) Alpha Cypermethrin	Cotton seed Oil	0.05
51.	Deltamethrin (Decamethrin)	Chilli	0.05
		Dried Chilli	0.5
		Red gram	0.01
		Mango	0.01
		Tea	5
		Okra	0.05
		Tomato	0.3
		Brinjal	0.3
		Groundnut	0.01*
		Cotton seed	0.1
		Food grains	2.0
		Milled food grains	Milled Food grains- 0.2 and Wheat Flour-0.3
		Rice	2.0
		Wheat	2.0
		Milk and Milk products	0.05
		Meat and Meat products	0.5
52.	Diafenthiuron	Cardamom	0.5
		Brinjal	1
		Chilli	0.05
		Dried Chilli	0.5
		Cotton seed Oil	1
		Cabbage	1
		Citrus	0.2
53.	Dichlorvos (DDVP) (content of di-chloroacetaldehyde (D.C.A.) be reported where possible)	Food grains	Wheat-7.0, Rice-7.0 and other Food grains-1
		Milled food grains	0.25
		Vegetables	0.15

		Fruits	0.1
		Milk and Milk products	0.01
		Groundnut seeds	0.05
		Groundnut Oil	0.2
		Mustard seed or Mustard Oil	0.01
54.	Diclofop (sum diclofop-methyl and diclofop acid expressed as diclofop-methyl)"	Wheat	0.1
55.	Diclosulam	Soya bean	0.05*
56.	Dicofol (sum of o,p' and p,p' isomers)"	Fruits and Vegetables	5
		Tea	40
		Chilli	1
		Dried Chilli	10
57.	Difenoconazole	Chilli	0.01
		Dried Chilli	0.1
		Rice	0.01
		Pomegranate	0.8
		Milk and Milk products	0.02
		Meat and Meat products	0.2
		Apple	0.01
		Grapes	3
		Maize	0.01*
		Wheat	0.02
		Tomato	0.2
58.	Diflubenzuron	Cotton seed	0.2
59.	Dimethoate	Mustard	0.01
		Fruits and Vegetables	2
		Chilli	0.5
		Dried Chilli	5
		Milk and Milk products	0.05
		Meat and Meat products	0.05
60.	Dimethomorph	Grapes	2
		Potato	0.05
		Cucumber	0.2
		Tomato	0.2
61.	Dinocap	Mango	0.1
62.	Dinotefuran	Rice	8
		Cotton seed Oil	0.05*
		Milk and Milk products	0.1
63.	Dithianon	Apple	0.1
64.	Dithiocarbamates(the residue tolerance limit are determined and expressed as mg/CS2/kg and refer separately to the residues arising from any or each group of dithiocarbamates)	Chilli	1
		Dry chilli	10
		Food grains	Wheat-1.0 and other Food Grains-0.2
		Milled food grains	0.05
		Potato	0.2
	(b) Ethylene bis- dithiocarbamates	Cherries	1

	resulting from the use of mancozeb, maneb or zineb (including zineb derived from nabam plus zinc sulphate)	Other fruits	3
	(c) Mancozeb	Chilli	1
		Dried Chilli	10
		Cauliflower	0.02
		Groundnut	0.1
		Cumin	10
		Black pepper	2
		Mustard seed	0.1
		Gherkin	0.1*
		Onion	4
		Milk and Milk products	0.05
		Meat and Meat products	0.1
		Mango	2
		Grapes	5
		Citrus	0.05*
		Cucumber	0.4
		Tea	3
		Rice	0.5*
	(d) Metiram as CS2	Chilli	1
		Dry chilli	10
		Grapes	5
		Potato	0.2
		Tomato	5
		Groundnut seed	0.1
		Groundnut seed oil	0.1
		Milk and Milk products	0.05
		Onion	0.05*
		Apple	0.05*
		Cotton seed	0.05*
		Cotton seed Oil	0.05*
		Cumin	10
		Banana	2
		Black gram	0.05*
		Cucumber	2
		Pomegranate	0.05*
		Green gram	0.05*
	(e) Zineb as CS2	Turmeric	2
		Tea	0.1*
65.	Diuron	Sugarcane	0.02
		Cottonseed	1
		Banana	0.1
		Maize	0.5
		Citrus (Sweet Orange)	1
		Grapes	1
66.	Dodine	Apple	5



67.	Edifenphos	Rice	0.02
		Rice bran	1
		Eggs	0.01 (shell free basis)
		Meat and poultry	0.02 (carcass fat basis)
		Milk and Milk products	0.01 ( F)
68.	Emamectin Benzoate	Cotton seed	0.02
		Cotton seed oil	0.02
		Okra	0.05
		Groundnut oil	0.05
		Milk and Milk products	0.01*
		Tea	0.01*
			Highlighted provision substituted (operationalized) through direction no. F.No. SS-T007/1/2023-standard-FSSAI dated 27 <sup>th</sup> April,2023 with the following:  "0.06"
69.	Epoxyconazole	Ground nut oil	0.05*
		Groundnut cake	0.05*
		Maize	0.01*
		Cumin	0.01*
		coffee	0.05*
		wheat	0.01*
		Soya bean	0.05*
		Soya bean Oil	0.05*
		Rice	0.05*
70.	Ethephon	Pomegranate	0.05
		Pine apple	2
		Coffee	0.1
		Tomato	2
		Mango	2
71.	Ethion(Residues to be determined as ethion and its oxygen analogue and expressed as ethion)	Gram	0.01
		Pigeon Pea	0.01
		Soya bean Seed	0.01
		Tea	5
		Cucumber and Squash	0.5
		Other Vegetables	1
		Cottonseed	0.5
		Milk and Milk products	0.5 (F)
		Meat and Poultry	0.2 (carcass fat basis)
		Eggs	0.2 (shell free basis)
		Dry fruits	0.1 (shell free basis)
		Food grains	0.03
		Milled food grains	0.01
		Peaches	1
		Other fruits	2
72.	Ethofenprox (Etofenprox)	Rice	0.01

		Milk and Milk products	0.02
		Meat and Meat products	0.5
73.	Ethoxysulfuron	Rice	0.01
74.	Etoxazole	Brinjal	0.2
		Tea	15
75.	Famoxadone	Grapes	2
		Potato	0.05

		Tomato	2
		Gherkin	0.3
76.	Fenamidone	Potato	0.02
		Grapes	0.6
		Gherkin	0.2
		Tomato	1.5
77.	Fenarimol	Apple	5
78.	Fenazaquin	Apple	0.2
		Chilli	0.5
		Dried Chilli	5
		Okra	0.01
		Brinjal	0.01
		Tomato	0.01
		Tea	3
79.	Fenobucarb (BPMC)	Rice	0.01
80.	Fenoxaprop-p-ethyl	Cotton seed	0.02
		Black gram	0.01
		Rice	0.02*
		Wheat	0.02
		Soya bean seed	0.02
		Onion	0.05*
		Groundnut	0.01*
81.	Fenpropathrin	Brinjal	0.2
		Okra	0.5
		Chilli	0.2
		Tea	2
		Green tea	2
		Rice	0.03*
		Cottonseed oil	3
		Milk and Milk products	0.1
		Meat and Meat products	0.02
82.	Fenpyroximate	Chilli	1
		Dried Chilli	10
		Green Tea	2
		Coconut Water	0.02
		Tea	2
			Highlighted provision substituted (operationalized) through direction no. F.No. SS-T007/1/2023-standard-FSSAI dated 27 <sup>th</sup> April,2023 with the following:  "6"
83.	Fenvalerate (Fat soluble residue)	Cauliflower	2
		Brinjal	2
		Okra	2

84.	Fipronil	Cotton seed	0.2
		Cottonseed Oil	0.1
		Meat and Poultry	1.0 (carcass fat basis)
		Milk and Milk products	0.01 (F)
		Cotton seed Oil	0.01
		Rice	0.01
		Chilli	0.01
		Dried Chilli	0.1
		Sugarcane	0.01

		Cabbage	0.02
		Grapes	0.01*
		Milk and Milk products	0.02
		Meat and Meat products	0.01
		Wheat	0.01*
		Onion	0.04
85.	Flonicamid	Rice	0.05*
		Cotton seed Oil	0.02*
86.	Fluazifop-p-butyl	Soya bean	0.05
		Cotton seed Oil	0.01*
		Groundnut	0.01*
		Groundnut oil	0.01*
87.	Flubendiamide	Brinjal	0.1
		Bengal Gram	1.0
		Cotton seed Oil	1.5
		Rice	0.1
		Cabbage	4
		Tomato	2
		Pigeon pea	1.0
		Black Gram	1.0
		Chilli	0.02
		Dried Chilli	0.2
		Milk and Milk products	0.1
		Tea	50
		Soya bean	0.07
		Soya bean Oil	0.07
		Soya bean cake	0.07
88.	Fluchloralin	Cotton seed	0.05
		Soya bean	0.05
89.	Flufenacet	Rice	0.05
90.	Flusilazole	Rice	0.01
		Chilli	0.01
		Dried Chilli	0.1
		Milk and Milk products	0.05
		Meat and Meat products	1
		Groundnut	0.05*
		Apple	0.05
		Grapes	0.05
91.	Fluvalinate	Cotton seed Oil	0.05
		Tea	0.01
92.	Forchlorfenuron	Grapes	0.01
93.	Fosetyl-Al	Grapes	10
		Cardamom	0.2
94.	Glufosinate Ammonium	Cotton seed Oil	0.05*
		Tea	0.01
		Milk and Milk products	0.02
95.	Glyphosate	Tea	1
		Rice	0.01

		Meat and Meat products	0.05
96.	Halosulfuron methyl	Sugarcane	0.03*
		Maize	0.01*
		Bottle Gourd	0.01*
97.	Hexaconazole	Mango	0.02
		Rice	0.02
		Ground nut seed	0.02
		Tea	0.02
		<p>Highlighted provision substituted (operationalized) through direction no. F.No. SS-T007/1/2023-standard-FSSAI dated 27<sup>th</sup> April,2023 with the following:</p> <p>“5”</p>	
		Grapes	0.1
		Chilli	0.5
		Dried Chilli	5
		Potato	0.02
		Soya bean	0.02
		Apple	0.1
		Blackgram	0.01*
98.	Hexazinone	Sugarcane	0.02
99.	Hexythiazox	Tea	15
		Chilli	0.01
		Dried Chilli	0.1
		Apple	0.3
100.	Hydrogen Cyanamide	Grapes	0.01
		Sugarcane	0.03*
101.	Iodosulfuron Methyl Sodium	Wheat	0.01
102.	Imazethapyr	Soyabean	0.03
		Soyabean oil	0.1
		Groundnut oil	0.1
103.	Imidacloprid	Citrus (Acid Lime)	1
		Groundnut Seed	1
		Mango	0.2
		Sugarcane	0.1
		Okra	2
		Sunflower Seed	0.5
		Chilli	0.3
		Dried Chilli	3
		Grapes	1
		Tomato	1
		Cucumber	1
		Cotton seed Oil	0.05

104.	Indoxacarb	Rice	0.05
		Brinjal	0.2
		Milk and Milk products	0.1
		Meat and Meat products	0.1
		Soya bean	3.0
		Soya bean Oil	0.01*
		Tomato	0.5
		Chilli	0.01
		Dried Chilli	0.1
		Pigeon pea	0.1

		Chick Pea	0.2
		Rice	0.05
		Soya bean	0.5
		Cottonseed	1
		Cottonseed Oil	0.1
		Cabbage	3
		Milk and Milk products	0.1
		Meat and Meat products	2
105.	Iprobenfos (Kitazin)	Rice	0.2
106.	Iprodione	Rape seed	0.5
		Mustard seed	0.5
		Rice	10
		Tomato	5
		Grapes	10
107.	Isoprothiolane	Rice	0.1
108.	Isoproturon	Wheat	0.1
109.	Kasugamycin	Rice	0.05
		Tomato	0.05
110.	Kresoxim Methyl	Milk and Milk products	0.01
		Meat and Meat products	0.05
		Maize	0.02*
		Wheat	0.05*
		Chilli	0.15
		Dried Chilli	1.5
		Potato	0.02*
		Soya bean	0.02*
		Soya bean Oil	0.02*
		Soya bean Cake	0.02*
		Cotton seed Oil	0.02*
111.	Lambda cyhalothrin	Brinjal	0.2
		Tomato	0.1
		Rice	1
		Okra	2
		Red Gram	0.05
		Bengal Gram	0.05
		Chilli	0.05
		Dried Chilli	0.5
		Groundnut seed	0.01
		Onion	0.01
		Soya bean	0.01
		Mango	0.2
		Grapes	0.05
		Cotton seed Oil	0.05
		Tea	0.05*
		Maize	0.01*
112.	Linuron	Pea	0.05
113.	Lufenuron	Cauliflower	0.1
		Cotton seed	0.01



		Black Gram	0.02*
		Chilli	0.05
		Dried Chilli	0.5
		Cabbage	0.3
		Pigeon pea	0.01
114.	Malathion (Malathion to be determined and expressed as combined residues of malathion and malaoxon)	Food grains	Wheat-10.0, Maize-0.05 and other food grains-4
		Milled food grains	1
		Fruits	4
		Vegetables	3
		Dried fruits	8
		Carbonated Water	0.01
115.	Mandipropamid	Grapes	2
		Tomato	0.3
		Potato	0.05*
116.	Mepiquat Chloride	Potato	0.1
		Cotton seed	0.5
		Cotton seed Oil	0.5
117.	Mesosulfuron Methyl	Wheat	0.01
118.	Metaflumizone	Cabbage	0.05
119.	Metalaxyl	Pearl Millet (Bajra)	0.05
		Maize	0.05
		Sorghum	0.05
120.	Metalaxyl-M	Potato	0.05*
		Grapes	1
		Black pepper	0.5
		Mustard Seed	0.01
		Chilli	0.02
		Dried Chilli	0.2
		Tomato	0.5
121.	Methabenzthiazuron	Wheat	0.5
122.	Methomyl	Tomato	1
		Pigeon pea seeds	0.05
		Chilli	0.05
		Dried Chilli	0.5
		Groundnut seed	0.05
		Grapes	0.3
		Soya bean	0.2
		Milk and Milk products	0.02
		Meat and Meat products	0.02
123.	Methyl Chlorophenoxy Acetic Acid (MCPA)	Rice	0.05
		Wheat	0.2
		Milk and Milk products	0.04
124.	Methyl Parathion (combined residues of methyl parathion and its oxygen analogue to be determined and expressed as methyl parathion)	Rice	0.01
		Black Gram	0.01
		Cotton seed oil	0.01
		Mustard seed or Mustard oil	0.01

125.	Metolachlor	Soya bean Oil	0.05
		Milk and Milk products	0.01*
126.	Metribuzin	Tomato	0.05*
		Sugarcane	0.01*
		Potato	0.05*
		Soya bean Oil	0.1
		Wheat	0.03
127.	Metsulfuron Methyl	Rice	0.01
		Wheat	0.1
		Sugarcane	0.02
128.	Milbemectin	Chilli	0.01
		Dried Chilli	0.1
129.	Monocrotophos	Food grains	0.03
		Milled food grains	0.01
		Citrus fruits	0.2
		Other fruits	1
		Cotton seed	0.1
		Cotton seed Oil (raw)	0.05
		Meat and Poultry	0.02
		Milk and Milk products	0.02
		Eggs	0.02 (shell free basis)
		Coffee (Raw beans)	0.1
		Chilli	0.2
		Dried Chilli	2
		Cardamom	0.5
130.	Myclobutanil	Apple	0.01
		Chilli	0.2
		Dried Chilli	2
		Groundnut seed	0.1
		Grapes	1
131.	Novaluron	Chilli	0.01
		Dried Chilli	0.1
		Chickpea	0.01
		Cotton seed	0.5
		Cotton seed Oil	0.01
		Tomato	0.01
		Cabbage	0.7
132.	Orthosulfamuron	Paddy	0.1
133.	Oxadiazon	Mustard Seed	0.05
		Onion	0.1
		Cumin	0.01
		Rice	0.1
		Sunflower seed	0.05*
		Sunflower Oil	0.05*
134.	Oxadiuron	Rice	0.03
135.	Oxydemeton-Methyl	Cotton seed oil	0.01
		Chilli	2
		Dried chilli	20

		Mustard oil	0.01
		Food grains	Wheat-0.02, Rye-0.02 and other Food grains- 0.02
		Milk and Milk products	0.01
		Meat and Meat products	0.05
136.	Oxyfluorfen	Rice	0.05
		Groundnut Oil	0.05
		Mentha	0.01
		Tea	0.2
		Potato	0.01
		Onion	0.05
137.	Paclobutrazol	Mango	0.01
138.	Paraquat dichloride (Determined as Paraquatcations)	Food grains	Sorghum-0.03 and other food grains- 0.1
		Milled food grains	0.03
		Potato	0.2
		Other vegetables	0.05
		Cotton seed	2
		Cotton seed oil (edible refined)	0.05
		Milk and Milk products (whole)	0.01
		Fruits	0.05
		Tea	0.2
139.	Penconazole	Grapes	0.4
		Black gram seed	0.02
		Mango	0.05
		Apple	0.1
		Milk and Milk products	0.01
		Meat and Meat products	0.05
140.	Pencycuron	Rice	0.01
141.	Pendimethalin	Wheat	0.05
		Rice	0.05
		Soyabean Oil	0.05
		Cotton seed Oil	0.05
		Chilli	0.05*
		Dried Chilli	0.5
		Onion	0.4
		Red gram	0.05*
142.	Penoxuslum	Rice	0.1*
143.	Permethrin	Cucumber	0.5
		Cotton seed	0.5
		Soya bean	0.05
		Sunflower Seed	1
144.	Phenthoate	Food grains	0.05
		Milled food grains	0.01
		Oilseeds	0.03

		Edible oils	0.01
		Eggs	0.05 (shell free basis)
		Meat and Poultry	0.05 (carcass fat basis)
		Milk and Milk products	0.01 (F)
145.	Phorate (sum of Phorate, its oxygen analogue and their sulphoxides and sulphones, expressed as phorate)	Food Grains	0.05
		Milled food grains	0.01
		Tomato	0.1
		Fruits	0.05
		Oil seeds	0.05
		Sugarcane	0.05
		Eggs	0.05 (shell free basis)
		Meat & Poultry	0.02* (carcass fat basis)
		Milk and Milk products	0.05 (F)
		Green gram	0.01*
		Cotton seed Oil	0.05
146.	Phosalone	Pears	2
		Citrus fruits	1
		Other fruits	Apple-5.0, Pome fruit-2.0 and other fruits- 2.0
		Potato	0.1
		Other vegetables	1
		Rapeseed or Mustard Oil (crude)	0.05
147.	Picoxystrobin	Rice	0.05*
		Grapes	0.05*
		Chilli	0.05*
		Dried Chilli	0.5
		Soya bean	0.05*
		Soya bean Oil	0.05*
		Cumin	0.05*
		Wheat	0.05*
148.	Pinoxaden	Wheat	0.7
149.	Pretilachlor	Rice	0.05
150.	Pirimiphos-methyl	Rice	0.5
		Food grains except Rice	7
		Milled food grains except rice	1
		Eggs	0.05 (shell free basis)
		Meat & Poultry	0.05 (carcass fat basis)
		Milk and Milk products	0.05 (F)
151.	Profenofos	Cotton seed oil	3
		Soya bean	0.01*
		Meat and Meat products	0.05
152.	Prohexadione calcium	Apple	0.01*
153.	Propaquizafop	Black gram	0.01
		Soya bean	0.01
		Onion	0.01*
154.	Propargite	Brinjal	2

		Chilli	2
		Dried Chilli	20
		Apple	3
		Tea	10
155.	Propiconazole	Tea	0.1
		<div> Highlighted provision substituted (operationalized) through direction no. F.No. SS-T007/1/2023-standard-FSSAI dated 27<sup>th</sup> April,2023 with the following:   "6" </div>	
		Groundnut seed	0.1
		Rice	0.05
		Soya bean seed	0.07
		Wheat	0.05
		Milk and Milk products	0.01
		Meat and Meat products	0.01
156.	Propineb	Rice	0.05
		Tomato	1
		Apple	1
		Pomegranate	0.5
		Potato	0.5
		Chilli	2
		Dried Chilli	20
		Grapes	0.5
157.	Pyraclostrobin	Grapes	2
		Potato	0.05*
		Tomato	0.3
		Chilli	0.05*
		Dry chilli	0.5
		Soya bean	0.05
		Cotton	0.02*
		Milk and Milk products	0.03
		Onion	1.5
		Groundnut oil	0.05*
		Ground nut cake	0.05*
		Apple	0.5
		Corn	0.02*
		Cumin	0.02*
		Banana	0.02*
		Black gram	0.02*
		Cucumber	0.2
		coffee	0.05*
		Wheat	0.01*

		Pomegranate	0.02*
		Green gram	0.02*
		Rice	0.02*
158.	Pyrazosulfuron ethyl	Rice	0.01
159.	Pyridalyl	Cotton seed Oil	0.02
		Cabbage	0.02
		Okra	0.02
		Chilli	0.02
		Dried Chilli	0.2
160.	Pyriproxyfen	Cotton seed	0.05

		Cotton seed Oil	0.03*
		Brinjal	0.02
		Okra	0.03
		Chilli	0.02
		Dried Chilli	0.2
161.	Pyrithiolac Sodium	Cotton seed Oil	0.02
162.	Pymetrozine	Rice	0.01*
163.	Quinalphos	Cauliflower	0.1
		Citrus	0.05
		Bengal Gram	0.05
		Cotton seed Oil	0.05
		Mustard seed oil	0.1
		Soya bean	0.05
		Groundnut oil	0.3
		Rice	0.01
		Pigeon pea	0.01
		Cardamom	0.01
		Tea	0.01
			Highlighted provision substituted (operationalized) through direction no. F.No. SS-T007/1/2023-standard-FSSAI dated 27 <sup>th</sup> April,2023 with the following:  "0.7"
		Fish	0.01
		Chilli	0.2
		Dried Chilli	2
164.	Quizalofop ethyl	Cotton seed	0.1
		Soya bean seed	0.05
		Onion	0.01*
		Groundnut	0.1
		Black Gram	0.01*
165.	Quizalofop-P-tefuryl	Soya bean Seed	0.02
		Cotton seed or Cotton seed oil	0.05*
166.	Sodium Aceflourofen	Soya bean	0.05*
167.	Spinosad	Cotton seed oil	0.02
		Cabbage	2
		Cauliflower	0.02
		Red gram	0.01
		Chilli	0.01
		Dried Chilli	0.1
		Meat and Meat products	2

168.	Spiromesifen	Tomato	0.7
		Cottonseed	0.7
		Apple	0.01
		Brinjal	0.5
		Chilli	0.1
		Dried Chilli	1
		Tea	70
		Green Tea	70
		Okra	0.03
169.	Sulfosulfuron	Wheat	0.02
170.	Tebuconazole	Rice	1.5



		Groundnut seed	0.15
		Groundnut oil	0.05
		Wheat	0.15
		Milk and Milk products	0.01
		Tomato	2
		Meat and Meat products	0.05
		Onion	0.15
		Soya bean	0.15
		Mango	0.2
		Grapes	6
		Chilli	0.4
		Dry Chilli	4
		Cotton seed Oil	2
		Apple	1
		Banana	1.5
		Black Gram	0.01*
		Maize	0.05*
		Cabbage	1.0
171.	Thiacloprid	Cotton seed	0.05
		Cotton seed Oil	0.05
		Rice	0.02
		Brinjal	0.7
		Tea	5
		Soya bean seed	0.03*
		Apple	0.7
		Milk and Milk products	0.05
		Meat and Meat products	0.1
		Chilli	0.02
		Dried Chilli	0.2
172.	Thifluzamide	Rice	0.05
173.	Thiodicarb	Cabbage	0.02
		Brinjal	0.05
		Red Gram	0.05
		Black Gram	0.03
		Chilli	0.01
		Dried Chilli	0.1
		Cotton seed oil	0.02
		Meat and Meat products	0.02
174.	Thiamethoxam	Rice	0.02
		Okra	0.5
		Cotton seed Oil	0.01
		Brinjal	0.3
		Tomato	0.70
		Wheat	0.05
		Tea	20
		Mango	0.20
		Potato	0.30
		Mustard seed	0.01

		Cumin	0.01
		Acid Lime	0.5
		Milk and Milk products	0.05
		Meat and Meat products	0.02
		Groundnut	0.05*
		Groundnut Oil	0.05*
		Sugarcane	0.05*
		Maize	0.05*
		Soya bean	0.05*
		Soya bean Oil	0.05*
		Chilli	0.5
		Dried Chilli	5
175.	Thiometon(Residues determined as thiometon its sulfoxide and sulphone expressed as thiometon)	Food grains	0.03
		Milled food grains	0.01
		Fruits	0.5
		Potato, Carrots and Sugar beets	0.05
		Other vegetables	0.5
176.	Thiophanate-Methyl	Apple	5
		Papaya	7
		Milk and Milk products	0.05
		Wheat	0.03*
		Bottle gourd	0.4
		Pigeon pea	0.03*
		Cucumber	0.2
		Grapes	3
177.	Tolfenpyrad	Cabbage	0.01*
		Okra	0.7
178.	Trichlorfon	Food grains	0.05
		Milled food grains	0.01
		Sugar beet	0.05
		Fruits and Vegetables	0.1
		Oil seeds	0.1
		Edible oil (Refined)	0.05
		Meat and Poultry	0.1
		Milk and Milk products	0.05
179.	Triaccontanol	Milk and Milk products	0.01
180.	Triadimefon	Wheat	0.5
		Pea	0.1
		Grapes	2
		Milk and Milk products	0.01*
		Meat and Meat products	0.02*
		Chilli	0.4
		Dried Chilli	4
		Coffee	0.5
		Mango	0.03*
		Soya bean	0.02*
181.	Trifloxystrobin	Tomato	1

		Wheat	0.2
		Mango	0.4
		Grapes	3
		Chilly	0.4
		Dry Chilly	4
		Cotton seed Oil	0.02
		Apple	0.7
		Banana	0.1
		Maize	0.1
		Cabbage	0.5
182.	Triallate	Wheat	0.05
183.	Triasulfuron	Wheat	0.01*
184.	Triazophos	Chilli	0.2
		Dried Chilli	2
		Rice	0.6
		Cotton seed oil	1
		Soya bean oil	0.05
185.	Tricyclazole	Rice	3
		Chilli	0.3
		Dried Chilli	3
186.	Tridemorph	Wheat	0.1
		Grapes	0.5
		Mango	0.05
187.	Trifluralin	Wheat	0.05
188.	Validamycin	Rice	0.01
189.	Fluopicolide	Grapes	2.0
190.	Tembotrione	Maize	0.02*
191.	Propanil	Rice	0.05*
192.	Fluopyram and its metabolites	Grapes	2
193.	Topramezone	Corn	0.05*
194.	Thiocyclam Hydrogen Oxalate	Rice	0.01*
195.	2,4-D Amine Salt	Tea	0.05*
196.	Ametyrn	Sugarcane	0.05*
197.	Fomesafen	Soya bean	0.02*
		Soya bean oil	0.02*
		Ground nut	0.02*
		Ground nut oil	0.02*
198.	Imazamox	Ground nut	0.01*
		Ground nut oil	0.01*
199.	Spinetoram and its metabolites (Spinosyn-J and Spinosyn-L)	Chilli	0.05
		Dry Chilli	0.5
		Cottonseed Oil	0.02
		Soya bean	0.02
		Soya bean Oil	0.02
200.	Sodium Para Nitro Phenolate	Tomato	0.3
		Cottonseed	0.5*
		Cottonseed oil	0.5*
201.	Bentazone	Soya bean	0.05*

		Soya bean oil	0.05*
		Rice	0.05*
202.	Cyflumetofen	Tea	0.05*
203.	Boscalid	Grapes	5
204.	Flucetosulfuron	Rice	0.02*
205.	Haloxypop-R Methyl	Soya bean	2
		Soya bean Oil	0.02*
		Soya bean deoiled Cake	0.02*
206.	Sulfentrazone and its metabolite Desmethylsulfentrazone and 3- Hydroxymethylsulfentrazone	Soya bean	0.2
		Soya bean Oil	0.2
		Soya bean deoiled Cake	0.2
207.	Spirotetramat	Okra	1.0
		Brinjal	1.0
		Chilli	2
		Dry Chilli	20
208.	Metrafenone	Grapes	5
209.	Fluxapyroxad	Grapes	3.0
		Apple	0.9
		Rice	5
210.	Tetraconazole	Watermelon	0.01*
211.	Abamectin	Grapes	0.05*
		Chilli	0.05*
		Dry Chilli	0.5
212.	Flupyradifurone and its metabolites Difluroacetic Acid and Difluroethylamino-furanone	Okra	0.8
213.	Sulfoxaflor	Cotton seed and Cotton seed Oil	0.4
		Rice	0.01*

\* Maximum Residue Limit fixed at Limit of Quantification (LOQ)

F: Maximum Residue Limit Calculation on Fat Basis

\$: The limit shall be for copper in the regulations 2.1 metal contaminants of the Food Safety and Standards (Contaminants, Toxins And Residues) Regulations, 2011 and as amended from time to time.

Note: Tolerance limit of 0.01 mg/kg shall apply in cases of pesticides for which MRL have not been fixed.]

### 2.3.2 : ANTIBIOTIC AND OTHER PHARMA-COLOGICALLY ACTIVE SUBSTANCES

1) The amount of antibiotic mentioned in column (2), on the sea foods including shrimps, prawns or any other variety of fish and fishery products, shall not exceed the tolerance limit prescribed in column (3) of the table given below:—

Table

S.No.	Name of Antibiotics	Tolerance limit mg/kg (ppm)
(1)	(2)	(3)
1.	Tetracycline	0.1
2.	Oxytetracycline	0.1
3.	Trimethoprim	0.05
4.	Oxolinic acid	0.3

<sup>16</sup>[(2) Following antimicrobials and other drugs used in veterinary practices are not permitted to be used at any stage of production of meat and meat products, milk and milk products, poultry and eggs, aquaculture and its products; and the Extraneous Maximum Residue Limits (EMRL) of 0.001 mg/kg shall be applicable except for Chloramphenicol for which it shall be 0.0003 mg/kg (0.3 ug/kg).

1. Carbadox
2. Chloramphenicol
3. Chlorpromazine
4. Clenbuterol
5. Colistin
6. Crystal Violet (Sum of Crystal Violet and Leucocrystal Violet)
7. Glycopeptides
8. Malachite Green (Sum of Malachite green and Leucomalachite green)
9. Nitrofurans and its metabolites furazolidone (AOZ), nitrofurazone (SEM), furaltadone (AMOZ) and nitrofurantoin (AHD)
10. Streptomycin and its metabolite dihydrostreptomycin
11. Nitroimidazoles including-
  - (A) Dimetridazole (DMZ)
  - (B) Ronidazole (RNZ) and its metabolite 2-hydroxymethyl-1-methyl-3 nitroimidazole (HMMNI)
  - (C) Iprnidazole (IPZ) and its metabolite Hydroxyipronidazole
  - (D) Metronidazole (MNZ) and its metabolite 3 hydroxymetronidazole
12. Steroids
13. Stilbenes
14. Sulphamethoxazole

(3) The use of any antibiotic is not permitted during the honey production, but, in order to test the misuse of antibiotics, the antibiotics specified in column (2) shall not exceed the Minimum Required Performance Limit (MRPL) specified in column (3) of the Table below, namely: -

Table

Serial No.	Name of Antibiotics	Maximum Residue Performance Limit (MRPL) (ug/kg)
(1)	(2)	(3)
1	Chloramphenicol	0.3
2	Nitrofurans and its metabolites	1
3	Sulphonamides and its metabolites	10 either individually or collectively
4	Streptomycin	10 either individually or collectively

5	Tetracycline	10
6	(a) Oxytetracycline	10
	(b) Chlortetracycline	10
7	Ampicillin	10
8	Enrofloxacin	10
9	Ciprofloxacin	10
10	Erythromycin	10
11	Tylosin	10

(4) The antimicrobials and other drugs used in veterinary practices specified in column (2) shall not exceed the tolerance limit specified in column (4) for the article of food in column (3) of the Table below, namely:-

Table

Serial No.	Antimicrobials and other drugs used in veterinary practices	Food	Tolerance limit (mg/Kg)
(1)	(2)	(3)	(4)
1.	Ampicillin	All edible animal tissues Fats derived from animal tissues Milk Finfish	0.01   0.05
2.	Amprolium	Cattle Kidney, Liver, Muscle Fat Poultry Kidney and Liver Egg Muscle	   1.0 7.0 0.5
3	Apramycin	All edible animal tissues except in fish Fats derived from animal tissues Milk	0.01
4.	Albendazole	Species not specified Muscle Liver Kidney Fat Milk Fish	 0.1 5.0 5.0 0.1 0.1 0.1
5.	Amoxicillin	Cattle Kidney Liver Muscle Milk Fat Finfish Fillet Muscle Pig Liver Fat or Skin Muscle	 0.05 0.05 0.05 0.004 0.05  0.05 0.05  0.05 0.05 0.05

		Kidney	0.05
		Sheep	
		Muscle	0.05
		Kidney	0.05
		Milk	0.004
		Fat	0.05
		Liver	0.05
		Muscle	0.05
6.	Cloxacillin	All edible animal tissues	0.01
		Fats derived from animal tissues	
		Milk	0.03
7.	Chlortetracycline or Oxytetracycline or Tetracycline	Cattle	
		Muscle	0.2
		Liver	0.6
		Kidney	1.2
		Milk	0.1
		Muscle	0.2
		Giant prawn (Paeneusmonodon) (muscle)	0.2
		Pig	
		Muscle	0.2
		Liver	0.6
		Kidney	1.2
		Poultry	
		Muscle	0.2
		Liver	0.6
		Kidney	1.2
		Eggs	0.4
		Sheep	
		Muscle	0.2
		Liver	0.6
		Kidney	1.2
		Milk	0.1
	Oxytetracycline	Fish	0.2
8.	Ceftiofur	Cattle	
		Muscle	1.0
		Liver	2.0
		Kidney	6.0
		Fat	2.0
		Milk	0.1 mg/l
		Pig	
		Muscle	1.0
		Liver	2.0
		Kidney	6.0
		Fat	2.0
		Sheep	
		Muscle	1.0
		Liver	2.0
		Kidney	6.0
		Fat	2.0
9.	Cephapirine	All edible animal tissues except in fish	0.01

		Fats derived from animal tissues	
		Milk	0.06
10.	Clopidol	All edible animal tissues except in fish Fats derived from animal tissues	0.01
11.	Closantel	Cattle	
		Muscle	1.0
		Liver	1.0
		Kidney	3.0
		Fat	3.0
		Sheep	
		Muscle	1.5
		Liver	1.5
		Kidney	5.0
		Fat	2.0
		Milk (Bovine)	0.045
12.	Cefphacetrile	All edible animal tissues except in fish Fats derived from animal tissues	0.01
		Milk	0.125
13.	Cephalexin	All edible animal tissues except in fish Fats derived from animal tissues	0.01
		Milk	0.1
14.	Danofloxacin	Cattle	
		Muscle	0.2
		Liver	0.4
		Kidney	0.4
		Fat	0.1
		Pig	
		Muscle	0.1
		Liver	0.05
		Kidney	0.2
		Fat	0.1
		Chicken	
		Muscle	0.2
		Liver	0.4
		Kidney	0.4
		Fat	0.1
15.	Doramectin	Cattle	
		Muscle	0.01
		Liver	0.1
		Kidney	0.03
		Fat	0.15
		Milk	0.015
		Pig	
		Muscle	0.005
		Liver	0.1
		Kidney	0.03
		Fat	0.15
16.	Diminazene	Cattle	
		Muscle	0.5
		Liver	12.0
		Kidney	6.0
		Milk	0.15



17.	Erythromycin	Chicken			
		Muscle	0.1		
		Liver	0.1		
		Kidney	0.1		
		Fat	0.1		
		Eggs	0.05		
		Turkey			
		Muscle	0.1		
		Liver	0.1		
		Kidney	0.1		
		Fat	0.1		
		18.	Flumequine	Cattle	
Muscle	0.5				
Liver	0.5				
Kidney	3.0				
Fat	1.0				
Chicken					
Muscle	0.5				
Liver	0.5				
Kidney	3.0				
Fat	1.0				
Pig					
Muscle	0.5				
Liver	0.5				
Kidney	3.0				
Fat	1.0				
Sheep					
Muscle	0.5				
Liver	0.5				
Kidney	3.0				
Fat	1.0				
Trout					
Muscle	0.5				
19.	Flunixin			All edible animal tissues except in fish	0.01
				Fats derived from animal tissues	
				Milk	
20.	Febantel or Fenbendazole or Oxyfendazole			Cattle	
				Muscle	0.1
				Liver	0.5
		Kidney	0.1		
		Fat	0.1		
		Milk	0.1		
		Pig			
		Muscle	0.1		
		Liver	0.5		
		Kidney	0.1		
		Fat	0.1		
		Sheep			
		Muscle	0.1		
		Liver	0.5		
		Kidney	0.1		

		Fat	0.1
		Milk	0.1
		Goat	
		Muscle	0.1
		Liver	0.5
		Kidney	0.1
		Fat	0.1
21.	Gentamicin	Cattle	
		Milk	0.2 mg/l
		Liver	2.0
		Fat	0.1
		Kidney	5.0
		Muscle	0.1
		Pig	
		Muscle	0.1
		Kidney	5.0
		Fat	0.1
		Liver	2.0
22.	Ivermectin	Cattle	
		Milk	0.01
		Liver	0.8
		Fat	0.4
		Muscle	0.03
		Kidney	0.1
		Pig	
		Liver	0.015
		Fat	0.02
		Sheep	
		Liver	0.015
		Fat	0.02
23.	Lincomycin	Cattle	
		Milk	0.15
		Chicken	
		Muscle	0.2
		Liver	0.5
		Kidney	0.5
		Fat	0.1
		Pig	
		Muscle	0.2
		Liver	0.5
		Kidney	1.5
		Fat	0.1
24.	Levamisole	Cattle	
		Muscle	0.01
		Liver	0.1
		Kidney	0.01
		Fat	0.01
		Pig	
		Muscle	0.01
		Liver	0.1
		Kidney	0.01

		Fat	0.01
		Sheep	
		Muscle	0.01
		Liver	0.1
		Kidney	0.01
		Fat	0.01
		Poultry	
		Muscle	0.01
		Liver	0.1
		Kidney	0.01
		Fat	0.01
25.	Monensin	Cattle	
		Muscle	0.01
		Liver	0.1
		Kidney	0.01
		Fat	0.1
		Milk	0.002
		Sheep	
		Muscle	0.01
		Liver	0.02
		Kidney	0.01
		Fat	0.1
		Goat	
		Muscle	0.01
		Liver	0.02
		Kidney	0.01
		Fat	0.1
		Chicken	
		Muscle	0.01
		Liver	0.01
		Kidney	0.01
		Fat	0.1
		Turkey	
		Muscle	0.01
		Liver	0.01
		Kidney	0.01
		Fat	0.1
		Quail	
		Liver	0.01
		Kidney	0.01
		Muscle	0.01
		Fat	0.1
26.	Moxidectin	Cattle	
		Muscle	0.02
		Liver	0.1
		Kidney	0.05
		Fat	0.5
		Sheep	
		Muscle	0.05
		Liver	0.1
		Kidney	0.05

		Fat	0.5
27.	Meloxicam	Bovines	
		Muscle	0.02
		Kidney	0.065
		Liver	0.065
		Milk	0.015
28.	Neomycin	Cattle	
		Liver	0.5
		Milk	1.5
		Kidney	10
		Fat	0.5
		Muscle	0.5
		Chicken	
		Liver	0.5
		Eggs	0.5
		Muscle	0.5
		Kidney	10
		Fat	0.5
		Duck	
		Fat	0.5
		Liver	0.5
		Kidney	10
		Muscle	0.5
		Goat	
		Liver	0.5
		Kidney	10
		Fat	0.5
		Muscle	0.5
		Pig	
		Kidney	10
		Liver	0.5
		Muscle	0.5
		Fat	0.5
		Sheep	
		Kidney	10
		Muscle	0.5
		Fat	0.5
		Liver	0.5
		Turkey	
		Liver	0.5
		Muscle	0.5
		Kidney	10
		Fat	0.5
29.	Nicarbazin	Chicken	
		Kidney	0.2
		Fat or skin	0.2
		Liver	0.2
		Muscle	0.2
30.	Oxybendazole	All edible animal tissues except in fish	0.01
		Fats derived from animal tissues	

31.	Oxyclozanide	All edible animal tissues except in fish Fats derived from animal tissues Milk	0.01
32.	Parbendazole	All edible animal tissues except in fish Fats derived from animal tissues Milk	0.01
33.	Praziquantel	All edible tissues of pig	0.01
		Sheep:	
		All edible tissues (Muscle, Liver, Kidney, Fat)-	0.05
34.	Pencillin G/Benzylpenicillin	Pig	
		Liver	0.05
		Muscle	0.05
		Kidney	0.05
		Chicken	
		Kidney	0.05
		Liver	0.05
		Muscle	0.05
		Cattle	
		Muscle	0.05
		Milk	0.004
		Liver	0.05
		Kidney	0.05
35.	Spectinomycin	Cattle	
		Muscle	0.5
		Liver	2.0
		Kidney	5.0
		Fat	2.0
		Milk	0.2 mg/l
		Chicken	
		Muscle	0.5
		Liver	2.0
		Kidney	5.0
		Fat	2.0
		Eggs	2.0
		Pig	
		Muscle	0.5
		Liver	2.0
		Kidney	5.0
		Fat	2.0
		Sheep	
		Muscle	0.5
		Liver	2.0
		Kidney	5.0
		Fat	2.0
36.	Sulfadiazine	All edible animal tissues Fats derived from animal tissues Milk	0.01
37.	Sulfanilamide	All edible animal tissues Fats derived from animal tissues Milk	0.01

38.	Sulfaquinoxaline	All edible animal tissues except in fish Fats derived from animal tissues Milk	0.01
39.	Sulfadimidine	Cattle	
		Milk	0.025
		No Specified	
		Muscle	0.1
		Fat	0.1
		Kidney	0.1
		Liver	0.1
40.	SulfaChloropyrazine	All edible animal tissues except in fish Fats derived from animal tissues Milk	0.01
41.	Sulfamethazine	All edible animal tissues except in fish Fats derived from animal tissues	0.01
42.	Sulfadimethoxine	All edible animal tissues except in fish Fats derived from animal tissues Milk	0.01
43.	Thiabendazole	Cattle	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
		Fat	0.1
		Milk	0.1
		Pig	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
		Fat	0.1
		Sheep	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
		Fat	0.1
		Goat	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
		Fat	0.1
		Milk	0.1
44.	Triclabendazole	Cattle	
		Muscle	0.25
		Liver	0.85
		Kidney	0.4
		Fat or skin	0.1
		Sheep	
		Muscle	0.2
		Liver	0.3
		Kidney	0.2
		Fat or skin	0.1
		Milk (All ruminants)	0.01

45.	Trimethoprim	All edible animal tissues except in fish Fats derived from animal tissues	0.01
		Milk	0.05
46.	Tylosin	Cattle	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
		Fat	0.1
		Milk	0.1
		Pig	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
		Fat	0.1
		Sheep	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
		Chicken	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
		Fat or skin	0.1
		Eggs	0.3
47.	Virginiamycin	Poultry and egg	0.01
48.	Xylazine	All edible animal tissues except in fish Fats derived from animal tissues	0.01
49.	Zinc Bacitracin (minimum 60IU/mg dried substance)	All edible animal tissues except in fish Fats derived from animal tissues	0.01
		Milk	0.1".]

#### <sup>5</sup> [2.4. Limits of biotoxins in fish and fishery products:

Sl. No.	Name of the contaminants	Article of food	Limit (µg/kg)
(1)	(2)	(3)	(4)
1.	Paralytic Shellfish Poison (PSP)	Bivalve Molluscs	80 µg/100g (Saxitoxin Equivalent)
2.	Amnesic Shellfish Poison (ASP)	Bivalve Molluscs	20 µg/g (Domoic acid equivalent)
3.	Diarrhetic shellfish poison (DSP)	Bivalve Molluscs	160 µg of Okadaic acid equivalent/Kg
4.	Azaspiracid poison (AZP)	Bivalve Molluscs	160 µg of azaspiracid equivalent/Kg
5.	Brevetoxin (BTX)	Bivalve Molluscs	200 mouse units or equivalent/Kg]

#### <sup>6</sup> [2.5 Other Contaminants

2.5.1 : The contaminant mentioned in column 2 on the foods mentioned in column 3, shall not exceed the Maximum Level prescribed in column 4 of the Table given below:

<b>Sl.No.</b>	<b>Name of the contaminants</b>	<b>Food</b>	<b>Maximum level (mg/kg)</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
1.	Melamine	Powdered infant formula	1.0
		Liquid infant formula	0.15
		Other foods	2.5]



<sup>9</sup> [2.5.2 Histamine in Fish and Fishery Products contaminants, toxins and Residues

1. Fish species having potential to cause histamine poisoning

Sl.No.	Family	Scientific Name	Common Name
1.	Carangidae	<i>Alectis indica</i>	Indian Threadfish
		<i>Alepes</i> spp.	Scad
		<i>Atropus atropus</i>	Cleftbelly trevally
		<i>Carangoides bartholomaei</i>	Yellow Jack
		<i>Carangoides</i> spp.	Trevally
		<i>Caranx crysos</i>	Blue runner
		<i>Caranx</i> spp.	Jack/Trevally
		<i>Decapterus koheru</i>	Koheru
		<i>Decapterus russelli</i>	Indian scad
		<i>Decapterus</i> spp.	Scad
		<i>Elagatis bipinnulata</i>	Rainbow Runner
		<i>Megalaspis cordyla</i>	Horse Mackerel/Torpedo Scad
		<i>Nematistius pectoralis</i>	Roosterfish
		<i>Oligoplites saurus</i>	Leather Jacket
		<i>Pseudocaranx dentex</i>	White trevally
		<i>Scomberoides commersonianus</i>	Talang queenfish
		<i>Scomberoides</i> spp.	Leather Jacket/Queen Fish
		<i>Selene</i> spp.	Moonfish
		<i>Seriola dumerili</i>	Greater/Japanese Amberjack or Rudder Fish
		<i>Seriola lalandi</i>	Yellowtail Amberjack
		<i>Seriola quinqueradiata</i>	Japanese Amberjack
		<i>Seriola rivoliana</i>	Longfin Yellowtail
		<i>Seriola</i> spp.	Amberjack or Yellowtail
		<i>Trachurus capensis</i>	Cape Horse Mackerel
		<i>Trachurus japonicas</i>	Japanese Jack Mackerel
		<i>Trachurus murphyi</i>	Chilean Jack Mackerel
		<i>Trachurus novaezelandiae</i>	Yellowtail Horse Mackerel
		<i>Trachurus</i> spp.	Jack Mackerel/Horse Mackerel
		<i>Trachurus trachurus</i>	Atlantic Horse Mackerel
		<i>Uraspis secunda</i>	Cottonmouth jack
2.	Chanidae	<i>Chanos chanos</i>	Milkfish
3.	Clupeidae	<i>Alosa pseudoharengus</i>	Alewife
		<i>Alosa</i> spp.	Herring
		<i>Amblygaster sirm</i>	Spotted Sardinella
		<i>Anodontostoma chacunda</i>	Chacunda gizzard shad
		<i>Brevoortia patronus</i>	Gulf Menhaden
		<i>Brevoortia</i> spp.	Menhaden

		<i>Brevoortia tyrannus</i>	Atlantic Menhaden
		<i>Clupea bentincki</i>	Araucanian herring
		<i>Clupea harengus</i>	Atlantic herring
		<i>Clupea pallasii pallasii</i>	Pacific herring
		<i>Clupea</i> spp.	Pichard/Shad/Herring
		<i>Dorosoma</i> spp.	Gizzard Shad
		<i>Ethmalosa fimbriata</i>	Bonga Shad
		<i>Ethmidium maculatum</i>	Pacific Menhaden
		<i>Etrumeus sadina</i>	Red-eye round herring
		<i>Harengula</i> spp.	Sprat/Herring
		<i>Harengula thrissina</i>	Pacific flatiron herring
		<i>Hilsa</i> spp.	Shad
		<i>Nematolosa</i> spp.	Gizzard Shad
		<i>Opisthonema libertate</i>	Pacific thread herring
		<i>Opisthonema</i> spp	Thread Herring
		<i>Opisthopterus tardoore</i>	Tardoore
		<i>Sardina pilchardus</i>	European Pilchard
		<i>Sardinella aurita</i>	Round Sardinella
		<i>Sardinella gibbosa</i>	Gold stripe Sardinella
		<i>Sardinella longiceps</i>	Indian Oil Sardine
		<i>Sardinella maderensis</i>	Madeiran Sardinella
		<i>Sardinella</i> spp.	Sardine
		<i>Sardinops sagax</i>	South American Pilchard
		<i>Sardinops</i> spp.	South American Pilchard
		<i>Spratelloides gracilis</i>	Silver-stripe round herring
		<i>Tenualosa ilisha</i>	Hilsa shad
		<i>Tenualosa</i> spp.	Shad
4	Coryphaenidae	<i>Coryphaena hippurus</i>	Mahi-Mahi /Dolphin fish
5	Engraulidae	<i>Anchoa</i> spp.	Anchovy
		<i>Anchoviella</i> spp.	Anchovy
		<i>Cetengraulis mysticetus</i>	Pacific anchoveta
		<i>Engraulis capensis</i>	Southern African anchovy
		<i>Engraulis encrasicolus</i>	European anchovy
		<i>Engraulis japonicus</i>	Japanese anchovy
		<i>Engraulis ringens</i>	Peruvian anchovy
		<i>Engraulis</i> spp.	Anchovy
		<i>Stolephorus</i> spp.	Anchovy
6	Istiophoridae	<i>Istiompax indica</i>	Black Marlin
		<i>Istiophorus albicans</i>	Atlantic sailfish
		<i>Istiophorus platypterus</i>	Indo-Pacific sailfish
		<i>Kajikia albida</i>	Atlantic white marlin
		<i>Kajikia audax</i>	Striped Marlin
		<i>Makaira mazara</i>	Indo-Pacific blue marlin
		<i>Makaira</i> spp.	Marlin/Sailfish
		<i>Tetrapturus</i> spp.	Marlin/Spearfish

		<i>Tetrapturus</i> spp.	Spearfish
7	Mugilidae	<i>Mugil cephalus</i>	Flathead Grey Mullet
8	Pristigasteridae	<i>Ilisha</i> spp.	Ilisha/Pellona
		<i>Pellona ditchella</i>	Indian pellona
9	Scombridae	<i>Acanthocybium solandri</i>	Wahoo
		<i>Auxis</i> spp.	Bullet Tuna/Frigate Tuna
		<i>Cybiosarda elegans</i>	Leaping Bonito
		<i>Euthynnus affinis</i>	Little tuna or Kawakawa
		<i>Euthynnus</i> spp.	Bonito
		<i>Gasterochisma melampus</i>	Butterfly kingfish
		<i>Grammatorcynus</i> spp.	Short Mackerel
		<i>Gymnosarda unicolor</i>	Dogtooth tuna
		<i>Katsuwonus pelamis</i>	Skipjack Tuna
		<i>Orcynopsis unicolor</i>	Plain Bonito
		<i>Rastrelliger brachysoma</i>	Short Mackerel
		<i>Rastrelliger kanagurta</i>	Indian Mackerel
		<i>Sarda</i> spp	Bonito
		<i>Scomber australasicus</i>	Blue mackerel
		<i>Scomber japonicas</i>	Chub mackerel
		<i>Scomber scombrus</i>	Atlantic mackerel
		<i>Scomber</i> spp.	Mackerel
		<i>Scomberomorus cavalla</i>	King Mackerel
		<i>Scomberomorus commerson</i>	Narrow-barred Spanish mackerel
		<i>Scomberomorus guttatus</i>	Indo-Pacific king mackerel/Spotted Spanish Mackerel
		<i>Scomberomorus niphonius</i>	Japanese Spanish mackerel
		<i>Scomberomorus</i> spp.	Spanish Mackerel
		<i>Scomeromorus lineolatus</i>	Streaked seerfish
		<i>Thunnus alalunga</i>	Albacore Tuna
		<i>Thunnus albacares</i>	Yellowfin Tuna
		<i>Thunnus atlanticus</i>	Blackfin Tuna
		<i>Thunnus maccoyi</i>	Southern bluefin tuna
		<i>Thunnus obesus</i>	Bigeye Tuna
		<i>Thunnus orientalis</i>	Pacific bluefin tuna
		<i>Thunnus</i> spp.	Tuna
		<i>Thunnus thynnus</i>	Atlantic bluefin tuna
		<i>Thunnus tonggol</i>	Longtail Tuna
10	Xiphiidae	<i>Xiphias gladius</i>	Swordfish

## 2. Limits of histamine level in fish and fishery products

S. No.	Product Category	Applicable to	Histamine Level
1.	Raw/Chilled/Frozen Finfish	Species with high amount of free histidine (Listed fish species with potential to cause histamine fish poisoning)	n=9, c=2; m=100 mg/kg, M=200 mg/kg
2.	Thermally Processed Fishery Products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
3.	Smoked fishery products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
4.	Fish Mince/Surimi and analogues		n=9, c=2; m=100 mg/kg, M=200 mg/kg
5.	Battered and breaded fishery products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
6.	Other Ready to Eat fishery products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
7.	Other value added fishery products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
8.	Other fish based products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
9.	Dried/ Salted and Dried fishery products		n=9, c=2; m=200 mg/kg, M=400 mg/kg
10.	Fermented Fishery products		n=9, c=2; m=200 mg/kg, M=400 mg/kg
11.	Fish Pickle		n=9, c=2; m=200 mg/kg, M=400 mg/kg

Where,

n: Number of units comprising the sample

c: Maximum allowable number of defective sample units

m: Acceptable level in a sample

M: Specified level when exceeded in one or more samples would cause the lot to be rejected

Satisfactory, if the following requirements are fulfilled:

1. the mean value observed is  $\leq m$
2. a maximum of c/n values observed are between m and M
3. no values observed exceed the limit of M,

Unsatisfactory, if the mean value observed exceeds m or more than c/n values are between m and M or one or more of the values observed are  $>M$ .

**Note:**

1. Inserted by notification no. F. No. 1-12/Sci.Panel/(Notification)/FSSAI/2012, dated the 3<sup>rd</sup> December, 2014
2. Substituted by notification no. F.No. P.15025/264/13-PA/FSSAI, dated the 4<sup>th</sup> November, 2015
3. Inserted by notification no. F.No. 1-99/4/SP(Contaminants)/FSSAI/2014, dated the 4<sup>th</sup> November, 2015
4. Substituted by notification no. F.No.1-99/1/SP(contaminants)/FSSAI/2009, dated the 4<sup>th</sup> November, 2015
5. Inserted by notification no. F. No. 1-10(6)/Standards/SP (Fish and Fisheries Products)/FSSAI-2013, dated the 4<sup>th</sup> January, 2016
6. Inserted by notification no. F. No. P. 15025/264/13-PA/FSSAI, dated the 5<sup>th</sup> January, 2016.
7. Inserted by notification no. F. No. P.15025/264/13-PA/FSSAI, dated the 3<sup>rd</sup> May, 2016
8. Omitted by Notification F. No.1-99/SP (Contaminants)/REG/FSSAI/2015 dated the 10<sup>th</sup> October, 2016
9. Inserted by notification no. F. No. 1-10(2)/Standards/SP (Fish and Fisheries Products)/FSSAI-2013, dated the 18<sup>th</sup> January, 2017
10. Inserted by notification no. F. No. P/15025/264/13-PA/FSSAI, dated the 21<sup>st</sup> July, 2017.
11. Inserted by notification no F. No. P.15025/264/13-PA/FSSAI-2017, dated 27<sup>th</sup> December, 2017.
12. omitted by notification no. 1-100/SPPAR-NOTIFICATION-CTR/FSSAI/2016, dated 19<sup>th</sup> March, 2018.
13. Inserted by notification no No. 1-100/SP(PAR)- Notification/Enf/FSSAI/2014, dated 20<sup>th</sup> July, 2018.
14. substituted by notification No. 1-SP(PAR)- Notification-pesticide/stds-FSSAI/2017, dated 24<sup>th</sup> December, 2018;
15. substituted by F. No. Stds/SP/(Contaminants)/Notification-1/FSSAI-2018, dated 7<sup>th</sup> August, 2020;
16. No.01-SP (PAR)-Notification-Pesticides/Std-FSSAI/2017, 17<sup>th</sup> October 2024.