FOOD ACT No.26 of 1980

REGULATIONS made by the Minister of Health under section 32 of the Food Act No. 26 of 1980 in consultation with the Food Advisory Committee.

Minister of Health, Nutrition
and Indigenous Medicine

Colombo…….201**9**

Food (Fish & Fish Products) Regulations – 2020

1. These regulations may be cited as the Food (Fish and Fish Products) Regulations – 2020 and shall come into operation from……
……..
2. Fish means cold blooded (ectothermic) aquatic vertebrates including crustacean, cephalopods, molluscs and other aquatic life that is edible to human beings, harvested from marine, brackish water or fresh water sources. Fish exclude amphibians and aquatic reptiles.

Part I

Fresh Fish

3. a)Fresh Fish means fish, whole or prepared, including vacuum or Modified Atmosphere packaging, which have not undergone any treatment to ensure preservation other than chilling after catching from marine or freshwater sources. It also includes fish roe.
b) Essential quality factors of fresh fish are bright, transparent, convex full eyes, bright red/ pink gills without
mucus, transparent and aqueous surface slime,firm and elastic flesh that springs back when pressed gently with the finger, shiny skin with scales adhering tightly and no discolouration.

4. Fresh Fish shall not contain more than -

(i) 100 mg/kg of Histamine, and
(ii) 5 mg/kg of formaldehyde.

a)

5. Fresh fish, crustaceans and cephalapods shall conform to the following microbiological standards:

	Microorganism	Limit (cfu)		
		Finfish	Crustaceans	Cephalopods
(1)	Aerobic plate count per gram	1×10^7	1×10^7	1×10^6
(2)	*Escherichia coli* MPN per gram	5×10^2	5×10^2	2×10^1
(3)	Salmonella in 25 gram	Absent	Absent	Absent
(4)	*Vibrio cholera*e in 25 gram	Absent	Absent	Absent
(5)	*Vibrio parahaemolytca* per gram	1×10^3	1×10^3	1×10^3

5. Fresh fish shall not contain more than

(a) 0.3* mg/kg Lead (as Pb)
(b) 0.1 mg/kg Arsenic (as As)
(c) 0.05** mg/kg Cadmium (as Cd)
(d) 1.0 mg/kg Mercury (as Hg)

*muscle meat of fish and Cephalopods, 0.5 for Crustaceans and 1.50 for bivalve molluscs

** muscle meat of fish, 0.10 for mackerel, tuna & bichique, 0.15 for bullet tuna , o.25 for anchovy, swordfish , sardine, 0.5 for Crustaceans, 1.0 for bivalve molluscs and Cephalopods without viscera

6.Transportation of fresh fish shall be such that the temperature is maintained at 0^0C to 7^0C.

7.The water used for manufacturing ice which is used for storage of fresh fish shall conform to the requirements laid down in SLS 614 for Potable ***w***ater.

Part II

Chilled Fish

8.Chilled Fish are fish which are cooled to a temperature approaching melting ice (-1 ^{o}C to +4 ^{o}C). Chilled fish are not frozen and the water remains in the liquid state. Chilled fish shall have visual quality characteristics similar to freshly caught fish.

9. Chilled fish shall not contain more than -

(i) 100 mg/kg of Histamine, and
(ii) 5 mg/kg of formaldehyde.

10.(i) Chilled fish, crustaceans and cephalapods shall conform to the microbiological limits for the corresponding values for the fresh products ;

(ii) Chilled bivalves shall conform to the following microbiological limits:

	Microorganisn	Limit(cfu)
(1)	Aerobic Plate Count per gram	1 x 10^6
(2)	*Escherichia coli* MPN per gram	46
(3)	*Salmonella* per 25 gram	Absent
(4)	*Vibrio parahaemolytca* per gram	1 x 10^3
(5)	*Vibrio cholera* per 25 gram	Absent

11. Chilled fish shall not contain more than

(a) 0.3* mg/kg Lead (as Pb)
(b) 0.1 mg/kg Arsenic (as As)
(c) 0.05** mg/kg Cadmium (as Cd)
(d) 1.0 mg/kg Mercury (as Hg)

*muscle meat of fish and Cephalopods,0.5 for Crustaceans and 1.50 for bivalve molluscs

** muscle meat of fish,0.10 for mackerel, tuna & bichique, 0.15 for bullet tuna , o.25 for anchovy,swordfish ,sardine, 0.5 for Crustaceans, 1.0 for bivalve molluscs and Cephalopods without viscera

12.Transportation of chilled fish shall be such that the temperature is maintained between 0^{o}C to 7^{0}C.

Part III
Frozen Fish

13. Frozen fish means fish that have been subjected to a freezing process to reach a core temperature of (minus)-18°C or less after temperature stabilization.

14. Fresh, clean, wholesome fish which do not show any sign of spoilage shall be used for preparing frozen fish.

15. Frozen fish, after thawing, shall be free from foreign matter, blood clots, bruises, dehydration, discolouration, any abnormal textural properties and/or foul odour.

16. Frozen fish, after thawing, shall have the characteristic colour and odour of the particular variety of fish.

17. Frozen fish, after thawing, shall have flesh which is firm and not mushy or gelatinous.

18. Frozen fish shall not contain more than -

(i) 100 mg/kg of Histamine, and
(ii) 5 mg/kg of formaldehyde.

19. (i)Frozen fish, crustaceans and cephalapods shall conform to the microbiological limits for the corresponding values for the fresh products ;

(ii) Frozen bivalves shall conform to the microbiological limits for chilled bivalves.

20. a)Quick Frozen whole fish, fish fillets, steaks and minced fish may contain the food additives given in Schedule I.;
b) Quick frozen lobsters may contain
(i)sodium ascorbate(INS 301), potassium ascorbate (INS 303) at 400mg/kg maximum expressed as ascorbic acid;
(ii) food additives marked with an * in Schedule I.

21. Frozen fish shall not contain more than

(a) 0.3* mg/kg Lead (as Pb)
(b) 0.1 mg/kg Arsenic (as As)
(c) 0.05** mg/kg Cadmium (as Cd)
(d) 1.0 mg/kg Mercury (as Hg)

*muscle meat of fish and Cephalopods,0.5 for Crustaceans and 1.50 for bivalve molluscs
** muscle meat of fish,0.10 for mackerel, tuna & bichique, 0.15 for bullet tuna , o.25 for anchovy,swordfish ,sardine, 0.5 for Crustaceans, 1.0 for bivalve molluscs and Cephalopods without viscera

22.Temperatures during transportation and storage of frozen fish and frozen fishery products shall be maintained below minus(-)18^{o}C, with possibly brief upward fluctuations of not

more than 3^{o}C during transport.

Part IV

Canned Fish

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23.Canned 'X' fish in named packing media shall be fish preserved by thermal sterilization in sealed containers (cans, bottles, laminate packs etc.). It shall be prepared from clean, wholesome fish(fresh or frozen), potable water, its own juice, sauce, brine, edible vegetable oils, refined fish oils or other suitable liquid packing medium including curry medium. It shall be heat processed in an appropriate manner before or after being hermetically sealed in containers so as to prevent spoilage.

(i) The can shall have received a Scheduled Process exactly followed, controlled and monitored. The Scheduled Process shall have been established by a Processing Authority, which is recognized by the regulatory agency to achieve commercial sterility (shelf stability).

(ii) The can shall not show any sign of swelling, denting, seam defects, corrosion or other deformations when observed externally. Insignificant corrosion and deformation due to bad handling shall not be considered as visual defects.

(iii) The can shall give a negative air pressure when punctured. If round cans are used, the vacuum shall be not less than 100 mm of Hg (13.33 kPa), when measured at 27 °C ± 2 °C with a vacuum gauge of the piercing type or an electric vacuum recorder.

(iv) Canned fish may contain-

(a) hydrolyzed edible protein;
(b) spices, spice oils or spice extracts;
(c) vegetables;
(d) natural flavouring substances;
(e) tomato paste/sauce;
(f) other sauces;
(g) seasonings;
(h) vinegar;
(j) natural smoke flavour and extracts.

(v) Canned fish shall not contain -

(a) more than 100 mg/kg Histamine;
(b) viscera, kidney,extremity of the anal canal and large bones;

(c) scales, heads, tails, fins unless product is described as having them ;
(d) units of mushy and brittle texture indicating poor quality.

(vi) Canned fish shall be free from-

(a) parasites;
(b) skin damage and excessive blemishes in the flesh;
(c) excessively soft, mushy, tough or rubbery flesh texture;
(d) unsightly deposits of exuded fish protein curd, loose scales, hard scales, scuta, fibre, sand, grit, viscera or spilled feed and other extraneous matter;
(e) sulphide stains;
(f) presence of "Struvite crystals" (any struvite crystal greater than 5 mm in length).
(g). discolouration indicating excessive lipid oxidation or other chemical or biochemical reaction;

(vii) Canned fish including products in sauce and curry medium, shall contain not less than 65% drained weight of the water capacity of the can.

(viii) Fish packed in brine shall not contain more than 2.5 % m/m sodium chloride;

(ix) Fish packed in brine shall not contain more than 0.5 % m/m acidity expressed as citric acid.

(x) Fish may be packed in curry medium. Curry shall be prepared with salt, seasonings, spices, tomato, onions, chillies, mustard, garlic, potable water and any other suitable ingredients.

(xi) Canned fish shall not contain more than 5% disintegrated units;

(xii) Canned fish shall not contain more than

(a) 0.3* mg/kg Lead (as Pb)
(b) 0.1 mg/kg Arsenic (as As)
(c) 0.05** mg/kg Cadmium (as Cd)
(d) 0.5 mg/kg Mercury (as Hg)
(e) 50 mg/kg Tin (as Sn) .

*muscle meat of fish and Cephalopods,0.5 for Crustaceans and 1.50 for bivalve molluscs
** muscle meat of fish,0.10 for mackerel, tuna & bichique, 0.15 for bullet tuna , o.25 for anchovy,swordfish ,sardine, 0.5 for Crustaceans, 1.0 for bivalve molluscs and Cephalopods without viscera

(xiii) Canned fish shall satisfy the test for "commercial sterility".

(xiv) Canned fish may contain the food additives given in Schedule II.

(xv)The label on the package shall carry a declaration of the percentage drained weight alongside the net contents.

(xvi) The common name of the product as "Canned Fish". In addition, the common or usual name applied to the species of fish shall be given.

Part V

Dried Fish

24.Dried fish is fish which has been dried with or without wet or dry salting.

(i) Dried fish is mainly of three types-whole dried fish, split dried fish and dried fish fillets.

(a)Whole dried fish in its original form and not eviscerated and with its scales intact, is dried, with or without the addition of salt.

(b)Split dried fish is dried after splitting the fish from tail to head, removing its internal organs before salting and drying.

(c) Dried fish fillet is prepared by cutting the fish flesh parallel to its back bone wherin its fins, main bones and sometimes belly flaps are removed .

(ii) Dried fish categorized on the basis of length shall have the following characteristics -

	Group	C	B	A
	Trade names of Fish	'kooney' 'Prawns' 'Sprats'	'Hurulla' 'Kumbalawa' 'Soodaya'	'Mora'(Shark) 'Vanna'
a	Length	<70 mm	70- 150 mm	>150 mm
	Characteristic			
b	Moisture % (max)	20	30	40
c	Acid insoluble ash % (max) on dry basis	7	5	1
d	Sodium chloride % (nax) on dry basis	2-16	10-35	12-35
e	Histamine in edible portion mg/kg	100	100	100

(iii) Dried fish shall be free from -

(a) any putrid, rancid or sour odour indicating decomposition;
(b) mould growth and insect infestation;
(c) burnt or scorched appearance;
(d) bitter or putrid flavour, when cooked;
(e) yellowing, pinking, browning and presence of brown, black or white spots; and
(f) contamination by foreign substances such as fuel oil, organic solvents or cleaning compounds;
(g) loose scales;

(h) detaching of fish parts;
(i) bursting of bellies (for whole dried fish);
(j) presence of liver or blood stains and traces of internal organs (for dried split/filleted fish.

(iv) Dried fish, when cut, shall have the characteristic colour of properly cured dried fish of the particular variety.

(v) Dried fish shall have a texture which is firm and fibrous and shall not have excessive cracks or break when pressed with fingers. The flesh shall not crumble or be mealy or pasty.

(vi) Dried fish shall not contain any additives other than sodium chloride.

(vii) Dried/ salted and dried fish shall conform to the following microbiological limits:

	Microorganisn	Limit(cfu)
(1)	Aerobic Plate Count per gram	1×10^5
(2)	Yeast and Mould Count per gram	1×10^2
(3)	*Escherichia coli* MPN per gram	$2x\ 10^1$
(4)	*Salmonella* per 25 gram	Absent

(viii) Dried, salted fish shall not contain more than

(a) 0.3* mg/kg Lead (as Pb)
(b) 0.1 mg/kg Arsenic (as As)
(c) 0.05** mg/kg Cadmium (as Cd)
(d) 0.5 mg/kg Mercury (as Hg)

*muscle meat of fish and Cephalopods,0.5 for Crustaceans and 1.50 for bivalve molluscs
** muscle meat of fish,0.10 for mackerel, tuna & bichique, 0.15 for bullet tuna , o.25 for anchovy,swordfish ,sardine, 0.5 for Crustaceans, 1.0 for bivalve molluscs and Cephalopods without viscera

(ix) The common name of the product as "Dried Fish". In addition, the common or usual name applied to the species of fish shall be given.

Part VI

Maldive Fish

25**. Maldive fish** shall be the hard, dried product obtained by salting, drying and smoking the flesh of fresh or frozen wholesome fish of the tuna species (*Katsuwonus pelamis* L.(Skip jack tuna, Balaya,Surai)*Thunnus albacores(*Yellow fin tuna)*,* (Bonneterre) , *Euthynnus affinis* (Cantor)(Skip jack tuna) , *Auxisthazard* (Lacepede).

(i) Maldive fish shall not contain more than -

(a) 16.0 % m/m moisture;

(b) 5.0 % m/m and less than 1.5 % m/m sodium chloride on dry basis;
(c) 0.5% acid insoluble ash on dry basis; and
(d) 200 mg /kg Histamine.

(ii) Maldive fish shall be free from -

(a) any putrid, rancid or mouldy odour;
(b) scales, bones, visible mould growth and insect or mite infestation;
(c) burnt or scorched appearance;
(d) bitter,sour, stale or putrid flavour; and
(e) powdery substance both on the surface or within the material.

(iii) Maldive fish, when cut, shall have the characteristic reddish brown sheen of good quality maldive fish.

(iv) Maldive fish shall have a texture which is hard-dried, firm and not rubbery.

(v) Maldive fish shall not contain any additives.

(vi) Maldive fish shall not contain more than

(a) 0.3 mg/kg Lead (as Pb)
(b) 0.1 mg/kg Arsenic (as As)
(c) 0.10* mg/kg Cadmium (as Cd)
(d) 0.5 mg/kg Mercury (as Hg)
* 0.15 for bullet tuna

Part VII

Smoked Fish

26. **Smoked fish** shall be the product prepared from cured, pickled or salted fish and subjected to the action of smoke derived from wood that is free from paint or timber preservative.

(i) Smoked fish shall not contain more than -

(a) 5 mg/kg of formaldehyde incidentally absorbed in the process of smoking, and

(b) 200 mg/kg of Histamine.

(c) 12.0 ug/kg Polycyclic Aromatic Hydrocarbons(PAH)*
*Smoked sprats-30.0 and Smoked bivalve molluscs- 35.0

(ii)Smoked fish shall be free from persistent and objectionable flavours characteristic of decomposition.

(iii)Smoked fish shall comply with the microbiological limits given below

	Microrganisn	Limit(cfu)
(1)	Aerobic Plate Count per gram	1×10^5
(2)	*Escherichia coli* MPN per gram	5×10^2
(3)	*Staphylococcus aureus* coagulase positive per gram	1×10^3
(4)	*Salmonella* per 25 gram	Absent
(5)	*Listeria monocytogenes* per 25 gram	Absent
(6)	*Vibriocholerat (O1 and O139)* per 25 gram	Absent
(7)	*Vibrio parahaemolytca* per gram	1×10^3

(iv) Smoked fish shall not contain more than

(a) 0.3* mg/kg Lead (as Pb)
(b) 0.1 mg/kg Arsenic (as As)
(c) 0.05** mg/kg Cadmium (as Cd)
(d) 0.5 mg/kg Mercury (

*muscle meat of fish and Cephalopods,0.5 for Crustaceans and 1.50 for bivalve molluscs

** muscle meat of fish,0.10 for mackerel, tuna & bichique, 0.15 for bullet tuna , o.25 for anchovy,swordfish ,sardine, 0.5 for Crustaceans, 1.0 for bivalve molluscs and Cephalopods without viscera

Part VIII

Comminuted Fish Products

27.**Comminuted fish products** are fish products prepared from fresh or cured fish and subjected to heat treatment, with or without smoking. The products may contain potable water, wheat flour, corn flour, potato, refined vegetable oil, edible common salt, isolated soya protein, hydrolyzed edible protein, full cream milk powder, cream cheese, onion, ginger, garlic, green chillies, lime, mixed spices and seasoning powder.

(i) Comminuted fish products shall contain not less than 60% m/m total muscle meat of fish content,

(ii) Comminuted fish product shall not contain more than -

(a) 20% m/m fat;and
(b) 4% m/m starch.

(iii) Comminuted fish products may contain the food additives given in Schedule III

(iv) Fresh and cooked / smoked and cooked / dry and semi-dry comminuted fish products shall comply with the microbiological limits specified below:

	Microorganism	Fresh Limit (cfu)	Cooked, smoked & cooked, dry & semi-dry. Limit (cfu)
(a)	Aerobic plate count per gram	5×10^6	1×10^5
(b)	*Escherichia coli*, (MPN)per gram	1×10^2	Absent
(c)	*Staphylococcus aureus*	1×10^3	1×10^2

	(coagulase positive) per gram		
(d)	*Salmonella* per 25 gram	Absent	Absent

(v) Comminuted fish products shall not contain more than

(a) 0.3* mg/kg Lead (as Pb)
(b) 0.1 mg/kg Arsenic (as As)
(c) 0.05** mg/kg Cadmium (as Cd)
(d) 0.5 mg/kg Mercury (

*muscle meat of fish and Cephalopods,0.5 for Crustaceans and 1.50 for bivalve molluscs
** muscle meat of fish,0.10 for mackerel, tuna & bichique, 0.15 for bullet tuna , o.25 for anchovy, swordfish,sardine, 0.5 for Crustaceans, 1.0 for bivalve molluscs and Cephalopods without viscera

(vi) Labelling of comminuted fish products:

The name of the product shall be “X- sausage” or “X- ball” or “X- burger”, "X-finger" or similar products.
“X” means

PartI IX

Fish (or prawn or shrimp) Paste

28. **Fish (or prawn or shrimp) paste** shall be the product in the form of paste obtained by salt fermentation of fish or prawn or shrimp as the case may be.

(i) Fish (or prawn or shrimp) paste shall contain not less than

(a) 15 % m/m salt, and
(b) 30 % m/m protein.

(iii) Fish (or prawn or shrimp) paste shall not contain more than –

(a) 40 % m/m moisture, and
(b) 25 % m/m total ash.

(iii) Fish (or prawn or shrimp) paste may contain

(a) permitted preservative;and
(b) permitted flavour enhancer.

(iv) Fish (or prawn or shrimp) paste shall be clean and wholesome and shall not contain any extraneous matter.

Part X

Fish Sauce

29. Fish Sauce is a translucent, not turbid liquid product with a salty taste and fish flavour obtained from fermentation of a mixture of fish and salt.

(i)Fish sauce shall be prepared from sound and wholesome fish or parts of fish in a condition fit to be sold fresh for human consumption, edible common salt and potable water.

(ii) Fish sauce shall be free from sediments except salt crystals.

(iii)Fish sauce shall have an odour and taste characteristic of the product.

(iv) Fish sauce shall be free from foreign matter.

(v) Fish sauce shall contain not less than-

(a) 10 g/l total nitrogen content;
(b) 40% of total nitrogen content of amino acid nitrogen content; and
(c) 200g/l salt calculated as NaCl.

(vi) Fish sauce shall have a pH between 5.0 - 6.5 typical for a traditional product; but not lower than 4.5 if ingredients are used to assist fermentation.

(vii)Fish sauce shall not contain more than 400 mg/100g Histamine.

(viii)Fish sauce shall not contain marine biotoxins (e.g. Ciguatoxin,Tetrodotoxin and Paralytic shellfish poisoning (PSP) in amounts which could present a risk to human health**.**

(ix)Fish sauce shall be free from any foreign material.

(x)The product should comply with the microbiological criteria given below:

	Microorganisn	Limit(cfu)
(1)	Yeast and Mould Count per gram	1×10^2
(2)	*Escherichia coli* MPN per gram	40
(3)	*Staphylococcus aureus* coagulase positive per gram	1×10^3
(4)	*Salmonella* per 25 gram	Absent

(xi) Permitted acidity regulstors,emulisifiers and stabilizers in fish sauce are given in Schedule IV.

30. Fish products given in Part IV to Part X shall be labelled according to the provisions of the Food (Labelling and Advertising) Regulations-2005 published in Gazette Extraordinary No; 1376/9 of January 19, 2005 as amended from time to time or replaced.

31.Fish products given in Part IV to Part X shall be packaged in accordance with the Food (Packaging Materials and Articles) Regulations 2010 published in Gazette Extraordinary No. 1660/30 of June 29, 2010 as amended from time to time or replaced.

32.Fish sauce may contain Caramel class III (INS 150c) in accordance with the Food (Colouring substances) Regulations 2005 published in Gazette Extraordinary No: 1412/19 of November 23, 2006 as amended from time to time or replaced.

33.Fish products given in Part III-IV, Part VIII, Part IX and Part X may contain antioxidants in accordance with the Food (Antioxidants) Regulations 2009 published in Gazette Extraordinary No: 1617/16 of September 01, 2009 as amended from time to time or replaced.

34.Fish products given in Part I-III may atives in accordance with the Food (Preservatives) Regulations 2018 published in Gazette Extraordinary No: 2113/16 of 5 th March 2019 as amended from time to time or replaced.

35.Fish products given in Part IV, Part VIII, Part IX and Part X may contain flavor enhancers and/ or natural flavouring substances in accordance with the Food (Flavouring Substances and Flavour enhancers) Regulations 2013 published in Gazette Extraordinary No: 1795/51 of February 01, 2013 as amended from time to time or replaced.

36. Interpretation

Freezer burn is a condition that appears as grayish-brown leathery spots on frozen food, and occurs when air reaches the food's surface and dries the product. Color changes result from chemical changes in the food's pigment. It is generally caused by food not being securely wrapped in air-tight packaging

Commercial sterility means the condition achieved by application of heat, sufficient, alone or in combination with other ingredients and/or treatments, to render the product free of microorganisms capable of growing in the product at normal non refrigerated condition (over $50^{o}F$ or $10^{o}C$) at which the product is intended to be held during distribution and storage.

Processing Authority: means a person or organization having expert knowledge of thermal processing requirements for foods packed in hermetically sealed container and having adequate facility to make these processes determinations.

SCHEDULE I

Regulation 20

FOOD ADDITIVES PERMITTED IN FROZEN FISH

Class	INS Number	Name of Food Additive	Limit mg/kg(max)
Acidity Regulators	330	Citric acid*	GMP
Water retention agents	339(i)	Sodium dihydrogen phosphate	2,200 singly or in combination
	340(i)	Potassium dihydrogen phosphate	
	450(iii)	Tetrasodium diphosphate	
	450(v)	Tetrapotassium diphosphate	
	451(i)	Pemtasodium triphosphate*	
	451(ii)	Pemtapotassium triphosphate*	
	452(i)	Sodium polyphosphate*	
	401	Sodium alginate	GMP
Stabilizers	412	Guar gum	GMP
	410	Carob bean gum	
	415	Xanthan gum	
	461	Methyl cellulose	
	466	Sodium carboxymethyl cellulose	
	407	Carrageenan	

*permitted for quick frozen lobsters.

SCHEDULE II

Regulation 23(xiv)

FOOD ADDITIVES PERMITTED IN CANNED FISH*

(* for use in packing media only)

Class	INS Number	Name of Food Additive	Limit mg/kg (max)
	400	Alginic acid	Limited by GMP
	401	Sodium alginate	
	402	Potassium alginate	
	404	Calcium alginate	
	406	Agar	
	407	Carrageenan	
	407a	Processed *Eucheuma* Seaweed (PES)	
	410	Carob bean gum	

Stabilizers	412	Guar gum	
	413	Tragacanth gum	
	415	Xanthan gum	
	440	Pectins	
	466	Sodium carboxymethyl cellulose	
Acidity Regulators	260	Acetic acid glacial	Limited by GMP
	270	Lactic acid (L-,D-, and DL-)	
	330	Citric acid	
	450(i)	Disodium diphosphate	**10 mg/kg****
Modified starch	1401	Acid treated starches (including white and yellow dextrins)	Limited by GMP
	1402	Alkaline treated starches	
	1404	Oxidized starches	
	1410	Monostarch phosphate	
	1412	Distarch phosphate, esterified	
	1413	Phosphated distarch phosphate	
	1414	Acetylated distarch phosphate	
	1420/1421	Starch acetate starch phosphate	
	1422	Acetylated distarch adipate	
	1440	Hydroxypropyl starch	
	1442	Hydroxypropyl starch phosphate	
Natural Flavouring Substances		Spice oils	Limited by GMP
		Spice extracts	
		Smoke flavours (Natural smoke solutions and extracts)	

**expressed as P_2O_5 (includes natural phosphate)for canned tuna and bonito only

SCHEDULE III

Regulation 27 (iii)

FOOD ADDITIVES PERMITTED IN COMMINUTED FISH PRODUCTS

Class	INS number	Name of Food Additive	Limit mg/kg (max)
Water retention agent	450(iii)	Tetrasodium diphosphate	3500 as P*
	451(i)	Pentasodium triphosphate	
	452(i)	Sodium polyphosphate	
	1442	Hydroxypropyl distarch phosphate	
Acidity regulator	330	Citric acid	GMP
	500(ii)	Sodium hydrogen carbonate	
Flavouring substances	Natural flavouring substances		

*added phosphate

SCHEDULE IV

Regulation 29(xi)

FOOD ADDITIVES PERMITTED IN FISH SAUCE

Class	INS Number	Name of Food Additive	Maximum level
Acidity regulators	334	Tartaric acid	200 mg/kg (as tartrates)
	335(i)	Mono sodium tartrate	
	335(ii)	Di sodium tartrate	
	336(i)	Mono potassium tartrate	
	336(ii)	Dipotassium tartrate	
	337	Potassium sodium tartrate	
	330	Citric acid	GMP
	331 (i)	Sodium dihydrogen citrate	GMP
	331 (iii)	Tri sodium citrate	GMP
	332 (i)	Potassium dihydrogen citrate	GMP
	332 (ii)	Tri potassium citrates	GMP
	296	Malic acid	GMP
	350 (i)	Sodium hydrogen DL-malate	GMP
	351 (i)	Potassium hydrogen malate	GMP
	351 (ii)	Potassium malate	GMP
	352 (ii)	Calcium hydrogen malates	GMP
	300	Ascorbic acid	GMP
	325	Sodium lactate	GMP
	260	Acetic acid	GMP
Emulisifiers and Stabilizers	466	Sodium carboxy methyl cellulose	GMP
	468	cross linked sodium carboxy methyl cellulose	GMP