

Fish Inspection and Quality Control Division 2015 Department of Fisheries

## Australia and New Zealand

Antibiotic, drug and chemical residue	Products	Maximum residue limits	References
Oxytetracycline	Fish	T0.2 mg/kg	Food Standards Australia New Zealand Standard 1.4.2
	Prawns	0.2 mg/kg	Food Additives Schedule 1 Permitted uses of food
Benzocaine	Abalone	0.05 mg/kg	additives by food type, As at 5 December 2013
	Finfish		http://www.foodstandards.gov. au/foodstandards/foodstandards
Florfenicol: Sum of florfenicol and its metabolites florfenicol alcohol, florfenicol oxamic acid, monochloroflorfeni col and florfenicol amine expressed as florfenicol amine	Fish	T0.5 mg/kg	<u>code.cfm</u>
Isoeugenol: Isoeugenol, sum of cis- and trans- isomers	Diadromous fish (whole commodity) Freshwater fish (whole commodity) Marine fish (whole commodity)	100 mg/kg	

**Maximum residue limit (MRL)** means the maximum level of a residue of a chemical which is permitted to be present in a food.

T = Temporary maximum residue limit or extraneous residue limit



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#### **Products** MRPL Antibiotic, drug References and chemical residue Not permitted for use AOZ = 1.0 ppb- Personal communication Nitrofuran Aquaculture metabolites crustaceans with australian quarantine and inspection service (only Australia) AMOZ = 1.0 ppb(AQIS) AHD = 1.0 ppbImported Food Notice SEM = 1.0 ppb10/07, Issued: 12th November 2007, Malachite green and Aquaculture fish 2.0 ppb Application of leuco-malachite antimicrobial tests to green seafood. Department of (only Australia) agriculture, fisheries and forestry Sum of the following Quinolone Aquaculture crustaceans shall not exceed 2.0 ppb: Flumequin Oxolinic acid Fluoroquinolone Aquaculture fish, Sum of the following crustaceans shall not exceed 2.0 ppb: Ciprofloxacin Ofloxacin Gatifloxacin Enrofloxacin Levofloxacin Moxifloxacin Norfloxacin Sarafloxacin

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**Minimum Required Performance Limits (MRPL)** are defined as "minimum content of an analyst in a sample, which at least has to be detected and confirmed".



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Food Additives	Products	Max permitted level	References
Ascorbic acid and sodium,calcium and potassium ascorbates	Unprocessed fish and fish fillets (including frozen and thawed): Frozen fish	400 mg/kg	Food Standards Australia New Zealand Standard 1.3.1 Food Additives Schedule 1 Permitted uses of food additives by food type, As at
	Uncooked crustacean	GMP	5 December 2013 http://www.foodstandards.go
Erythorbic acid and sodium erythorbate	Unprocessed fish and fish fillets (including frozen and thawed): Frozen fish	400 mg/kg	v.au/foodstandards/foodstand ardscode.cfm
	Uncooked crustacean	GMP	
Sodium, potassium and calcium phosphates	Unprocessed fish and fish fillets (including frozen and thawed): Frozen fish	GMP	
Pyrophosphates			
Triphosphates			
Polyphosphates			
Sulphur dioxide and sodium and	Uncooked crustacean	100 mg/kg	
potassium sulphites	cooked crustacean	30 mg/kg	
	Fully preserved fish including canned fish products	30 mg/kg	
	Canned abalone (paua)	1,000 mg/kg	
Calcium disodium EDTA	Fully preserved fish including canned fish products	250 mg/kg	



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Food Additives	Products	Max permitted level	References
Citric acid and sodium, potassium, calcium and ammonium citrates Sodium carbonates Magnesium carbonates	Uncooked crustacean	GMP	- do -
4-hexylresorcinol			
Amaranth	Processed fish and fish products : roe Fully preserved fish including canned fish products: roe	300 mg/kg	
	Semi preserved fish and fish products: roe		
Annatto extracts	Semi preserved fish and fish products	10 mg/kg	
Sorbic acid and sodium, potassium and calcium sorbates	Semi preserved fish and fish products	2,500 mg/kg	
Benzoic acid and sodium, potassium and calcium benzoates	Semi preserved fish and fish products	2,500 mg/kg	
Ethyl lauroyl arginate	Semi preserved fish and fish products	400 mg/kg	

Maximum permitted level means the maximum amount of additive which may be present in the food



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Metal	Products	Maximum level	References
contaminants			
Arsenic (inorganic)	Crustacea	2.0 mg/kg	Food standards Australia New Zealand Schedule 19 Maximum level of
	Fish	2.0 mg/kg	
	Molluscs	1.0 mg/kg	contaminants and natural toxicants, As at 13 April
	Seaweed	1.0 mg/kg	2017 http://www.foodstandards.go
Cadmium	Molluscs (excluding dredge / bluff oyster and queen scallops)	2.0 mg/kg	v.au/foodstandards/foodstand ardscode.cfm
Lead	Fish	0.5 mg/kg	
	Molluscs	2.0 mg/kg	
Mercury	Crustacea	Mean level of 0.5	
		mg/kg <sup><b>a</b></sup>	
	Molluscs		
	Fish and fish products (Except those in below)		
	Gemfish, billfish (including marlin), southern bluefin tuna,barramundi, ling, orange roughy, rays and all species of shark	Mean level of 1.0 mg/kg <sup><b>a</b></sup>	-
	Fish for which insufficient samples are available to analyse in accordance with clause 6 of the reference	1.0 mg/kg	
Tin	All canned foods	250 mg/kg	

 $\frac{a}{a}$  references to a mean level in the table is to mean level of mercury in the prescribed number of sample units as described in clause 6 of Food Standards Australia New Zealand Standard 1.4.1 contaminants and natural toxicants Issue 135 F2017C00140

**Maximum level(ML)** means the maximum level of a specified contaminant, or specified natural toxicant, which is permitted to be present in a nominated food expressed, unless otherwise specified, in milligrams of the contaminant or the natural toxicant per kilogram of the food (mg/kg).



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Nonmetal contaminants	Products	Maximum level (unless specified otherwise )	References
Amnesic shellfish poisons (Domoic acid equivalent)	Bivalve molluscs	20 mg/kg	Food standards Australia New Zealand Schedule 19 Maximum level of contaminants and natural
Diarrhetic shellfish poisons (Okadaic acid equivalent)	Bivalve molluscs	0.2 mg/kg	toxicants, As at 13 April 2017 http://www.foodstandards.go v.au/foodstandards/foodstand ardscode.cfm
Paralytic shellfish poisons (Saxitoxin equivalent)	Bivalve molluscs	0.8 mg/kg	
Neurotoxic shellfish poisons	Bivalve molluscs	200 MU/kg	
3-chloro-1,2- propanediol (3- MCPD)	Soy sauce and oyster sauce	0.2 mg/kg calculated on a 40% dry matter content	
1,3-dichloro-2- propanol	Soy sauce and oyster sauce	0.005 mg/kg calculated on a 40% dry matter content	
Acrylonitrile	All food	0.02 mg/kg	
Polychlorinated biphenyls, total	Fish	0.5 mg/kg	
Vinyl chloride	All food except packaged water	0.01 mg/kg	

**MU** means Mouse Unit, for further information please refer to *Recommended procedures for examination of seawater and shellfish*, Irwin N. (ed.) 4<sup>th</sup> Ed. 1970, American public health association Inc.



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Natural toxicants	Product	Maximum level	References
Histamine	Histamine poisoning fish <sup>a</sup> and products (excepted fish sauce)	200 mg/kg	<ul> <li>Standard 2.2.3 fish and fish products issue 124</li> <li>F2011C0056</li> <li>Food standards Australia New Zealand standard 1.4.1 contaminants and natural toxicants Issue 135</li> <li>F2017C00140</li> <li>http://www.foodstandards. gov.au/foodstandards/food standardscode.cfm</li> </ul>

<sup>a</sup> This applies only to species of *Clupeidae*, *Scrombridae*, *Scrombresocidae*, *Pomatomidae* and *Coryphaenedae* families.

#### **Definition of terms:**

Fish includes freshwater fish, diadromous fish and marine fish.

Diadromous fish include species which migrate from the sea to brackish and/or fresh water and in the opposite direction. Some species are domesticated and do not migrate. The fleshy parts of the animals and, to a lesser extent, roe and milt are consumed. *Commodities:* Barramundi; Salmon species; Trout species; Eel species.

Freshwater fish include a variety of species which remain lifelong, including the spawning period, in fresh water. Several species of freshwater fish are domesticated and bred in fish farms. The fleshy parts of the animals and, to a lesser extent, roe and milt are consumed. *Commodities:* a variety of species

Marine fish generally live in open seas and are almost exclusively wild species. The fleshy parts of the animals and, to a lesser extent, roe and milt are consumed. *Commodities:* a variety of species.

Molluscs includes Cephalopods and Coelenterates. Cephalopods and Coelenterates are various species of aquatic animals, wild or cultivated, which have an inedible outer or inner shell (invertebrates). A few species of cultivated edible land snails are included in this group. The edible aquatic molluscs live mainly in brackish water or in the sea.

*Commodities:* Clams; Cockles; Cuttlefish; Mussels; Octopus; Oysters; Scallops; Sea-cucumbers; Sea urchins; Snails, edible; Squids.



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Crustaceans include various species of aquatic animals, wild and cultivated, which have an inedible chitinous outer shell. A small number of species live in fresh water, but most species live in brackish water and/or in the sea.

Crustaceans are largely prepared for wholesale and retail distribution after catching by cooking or parboiling and deep freezing.

Commodities: Crabs; Crayfish; Lobsters; Prawns; Shrimps.

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