

Sanitation Standard for Contaminants and Toxins in Food - amended the Article 6 and Article 5 Appendix 3

Article 5

The maximum levels of other contaminants and toxins in food shall meet the standard on Appendix 3.

Article 6

This standard shall be implemented from 1 January, 2019.

The articles of this standard amended on 17th June 2020 shall apply from 1 January 2021.

The articles of this standard amended on 4 February 2021 shall apply from 1 July 2021.

Appendix3. Maximum levels (ML) of other contaminants and toxins

1	3-Monochloropropane-1,2-diol (3-MCPD)	
	Foodstuffs	ML (mg/kg)
1.1	Soy sauce and soy sauce-based condiments ⁽¹⁾	0.3
2	Benzo(a)pyrene, BaP	
	Foodstuffs	ML (µg/kg)
2.1	Fats and oils (exclude cocoa butter) intended for direct human consumption or use as an ingredient in food	2.0
2.2	Vegetables, fruits and plant origin	
2.2.1	Cocoa beans and derived products, based on the cocoa butter content	5.0
2.2.2	Banana chips	2.0
2.2.3	Dried herbs	10.0
2.2.4	Dried spices with the excepte of cardamon and smoked <i>Capsicum spp.</i>	10.0
2.3	Meat and meat products	
2.3.1	Smoked meat and smoked meat products	2.0
2.3.2	Grilling/barbecuing meat and meat products sold to the final consumer	5.0
2.4	Aquatic animal	
2.4.1	Smoked or grilling/barbecuing ⁽²⁾ sprats and canned smoked sprats (<i>Sprattus sprattus</i>) ⁽³⁾ ; Smoked or grilling/barbecuing ⁽²⁾ Baltic herring \leq 14 cm length and canned smoked or grilling/barbecuing ⁽²⁾ Baltic herring \leq 14 cm length (<i>Clupea harengus membras</i>) ⁽³⁾	5.0
2.4.2	Smoked or grilling/barbecuing ⁽²⁾ bivalve molluscs ⁽⁴⁾ (exclude shell)	6.0
2.4.3	Muscle meat of smoked or grilling/barbecuing ⁽²⁾ fish and smoked or grilling/barbecuing ⁽²⁾ fishery products, exclude fishery products listed in points 2.4.1 and 2.4.2 ⁽³⁾ , exclude Katsuobushi (dried bonito). The ML for smoked or grilling/barbecuing ⁽²⁾ crustaceans applies to muscle meat from appendages and abdomen. In case of smoked or grilling/barbecuing ⁽²⁾ crabs and crab-like crustaceans (<i>Brachyura</i> and <i>Anomura</i>) it applies to muscle meat from appendages.	2.0

2.4.4	Bivalve molluscs (fresh, chilled or frozen, exclude shell) ⁽⁴⁾	5.0
2.5	Food for infant and young child ⁽⁵⁾	
2.5.1	Infant formula ⁽⁶⁾ and follow-up infant formula ⁽⁷⁾	1.0 ⁽⁸⁾
2.5.2	Infant formula for special medical purposes ⁽⁹⁾	1.0 ⁽⁸⁾
2.5.3	Cereal based foods for infant and young child ⁽¹⁰⁾ and baby food ⁽¹¹⁾	1.0 ⁽⁸⁾
2.6	Food supplements	
2.6.1	Food supplements containing propolis and royal jellies	10.0 ⁽⁸⁾
2.6.2	Food supplements containing spirulina or their preparations	10.0 ⁽⁸⁾
3	Plant toxins	
3.1	Hydrocyanic acid	
	Foodstuffs	ML (mg/kg)
3.1.1	Cassava flour, Ready-to-eat cassava chips	10 ⁽¹²⁾
3.1.2	Gari	2 ⁽¹³⁾
3.2	Gossypol	
	Foodstuffs	ML (mg/kg)
3.2.1	Edible cotton seed oil	Not detected ⁽¹⁴⁾
3.3	Glycoalkaloids, total (sum of alpha-solanine and alpha-chaconine)	
	Foodstuffs	ML (mg/kg)
3.3.1	Potato tubers (fresh weight)	200
3.4	Erucic acid	
	Foodstuffs	ML (g/kg)
3.4.1	Edible fats and oils	50
3.4.2	Low-erucic acid rapeseed oil (as % of total fatty acids).	20
3.4.3	Foods containing added edible vegetable oils and fats, excepte of foodstuffs listed in 3.4.4, based on the total oil content of that food	50
3.4.4	Infant formulae ⁽⁶⁾ and follow-up infant formula ⁽⁷⁾ , based on the total oil content of that food.	10
4	Marine biotoxins	
4.1	Paralytic shellfish poisons (PSP)	
	Foodstuffs	ML (mg/kg)
4.1.1	The edible parts of live bivalve mollusk (saxitoxin equivalent)	0.8
4.2	Diarrhetic shellfish poisons (DSP)	
	Foodstuffs	ML (mg/kg)
4.2.1	The edible parts of live bivalve mollusk (okadaic equivalent)	0.16

4.3	Amnesic shellfish poisons (ASP)		
Foodstuffs			ML (mg/kg)
4.3.1	The edible parts of live bivalve mollusk (domoic acid)		20
4.4	Azaspiracid (AZP)		
Foodstuffs			ML (mg/kg)
4.4.1	The edible parts of live bivalve mollusk		0.16
4.5	Neurotoxic shellfish poisons (NSP)- Brevetoxin (BTX) *		
Foodstuffs			ML (MU/kg)
4.5.1	The edible parts of live bivalve mollusk		200 ⁽¹⁴⁾
5	Pheophorbide		
Foodstuffs		ML (mg/100g)	
		Existing pheophorbide	Total pheophorbide
5.1	Green algae ⁽¹⁶⁾		80
5.2	Blue algae ⁽¹⁶⁾		100
6	Volatile basic nitrogen (VBN)		
Foodstuffs			ML (mg/100 g)
6.1	Unprocessed fishery products, frozen or chilled		
6.1.1	Species belonging to the <i>Pleuronectidae</i> family, excepte of halibut: <i>Hippoglossus</i> spp.).		30
6.1.2	<i>Salmo salar</i> , species belonging to the <i>Merlucciidae</i> family, species belonging to the <i>Gadidae</i> family.		35
6.1.3	<i>Elasmobranchii</i> (<i>Selachimorpha</i> , <i>Batoidea</i>)		50
6.1.4	Other unlisted fish		25
6.2	Ready-to-eat raw seafood		15
7	Histamine		
Foodstuffs			ML (mg/kg)
7.1	Fishery products from fish species associated with a high amount of histidine ⁽¹⁷⁾		200 ⁽¹⁸⁾
7.2	Fishery products which have undergone enzyme maturation treatment in brine, manufactured from fish species associated with a high amount of histidine ⁽¹⁷⁾ , for example, the fermented fish sauces and pastes.		400 ⁽¹⁸⁾
8	<u>Glycidyl fatty acid esters, expressed as glycidol</u>		
Foodstuffs			ML (μ g/kg)
8.1	<u>Food for infant and young child ⁽⁵⁾</u>		
8.1.1	<u>Infant formula ⁽⁶⁾, follow-up infant formula ⁽⁷⁾ and food for special medical purposes intended for infants ⁽⁹⁾ and young children.</u>		

	<u>-marketed as powder</u>	<u>50</u>
	<u>-marketed as liquid</u>	<u>6.0</u>

Note.

- (1) Such as soy sauce paste, oyster soy sauce etc.
- (2) For grilling/barbecuing fish and fishery products, the ML shall apply to the packaged products made in the food manufacturing industry.
- (3) Where fish are intended to be eaten whole, the ML shall apply to the whole fish.
- (4) In case of *Pecten maximus*, the ML applies to the adductor muscle and gonad only.
- (5) The term “infant” means a person not more than 12 months of age. The term “young child” means a person from the age of more than 12 months up to the age of three years (36 months).
- (6) “Infant formula” means a breast-milk substitute specially manufactured to satisfy, by itself, the nutritional requirements of infant from birth to six months of age up to the introduction of appropriate complementary feeding.
- (7) “Follow-up infant formula” means a food intended for use as formula of the weaning diet for the infant from six months to twelve months of age. Not suitable alone for infant under six months consumption.
- (8) The ML refers to the product as sold.
- (9) “Infant formula for special medical purposes” means a substitute for human milk or infant formula, by itself, the special nutritional requirements of infant with specific disorder, disease or medical condition during the first months of life up to the introduction of appropriate complementary feeding.
- (10) “Cereal based foods for infant and young child” means processed cereal based food intended to fulfil the particular requirements of infant in good health while they are being weaned, and of young child in good health as a supplement to their diet and/or for their progressive adaptation to ordinary food, including cereals which are or have to be reconstituted with milk or other liquids, and pastas, rusks and biscuits.
- (11) “Baby food” means food intended to fulfil the particular requirements of infant in good health while they are being weaned, and of young child in good health as a supplement to their diet and/or for their progressive adaptation to ordinary food, exclude cereal based foods for infant and young child, and milk-based drinks and similar products.
- (12) The ML is expressed as total hydrocyanic acid.
- (13) The ML is expressed as free hydrocyanic acid.
- (14) The detection limit of analysis method is 0.05 ppm for free form gossypol and 1 ppm of total gossypol.
- (15) Mouse units or equivalent.
- (16) The ML is applied to green algae and blue algae which moisture content is less than 7%. Fresh products, red algae and brown algae are not applied.
- (17) Particularly fish species of the families: *Scombridae*, *Clupeidae*, *Engraulidae*,

Coryfenidae, Pomatomidae and Scombresocidae families.

⁽¹⁸⁾Products placed on the market during their shelf-life.