

# **Draft of Sanitation Standard for Contaminants and Toxins in Food**

## **Article 1**

This Standard is prescribed in accordance with the provisions of Article 17 of the Act Governing Food Safety and Sanitation.

## **Article 2**

The contaminants in this standard shall mean the substance not intentionally added to food, which one present in food as a result of the manufacturing, processing, blending, packaging, transportation, storage, production or trafficking of the polluter, or as a result of environmental contamination. It does not include insect fragments, hairs and other extraneous matters.

The toxins in this standard include the mycotoxins, marine bio-toxins and natural toxins in plant origin.

The scope of this standard does not include the residues of pesticide and veterinary drugs, atomic dust and radioactivity contamination, polychlorinated biphenyl, dioxin, microorganisms and microbial toxins, and processing aids.

## **Article 3**

The maximum levels of metals in food, shall meet the standard on Appendix 1.

## **Article 4**

The maximum levels of mycotoxins in food, shall meet the standard on Appendix 2.

## **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 the date of promulgation.

## Appendix1. Maximum levels (ML) of metals in foods

<b>1.Total Arsenic (As-tot) and Inorganic Arsenic (As-in)</b>		
<b>Foodstuffs</b>	<b>ML (mg/kg)</b>	
	<b>As-tot</b>	<b>As-in</b>
1.1 Grains		
1.1.1 Polished rice		0.2 <sup>(1)</sup>
1.1.2 Grains (include rice), exception of foodstuffs listed in 1.1.1	1	
1.2 Seaweed <sup>(2)</sup>		1.0
1.3 Aquatic animal <sup>(2)</sup>		
1.3.1 Fish		0.5
1.3.2 Shellfish and Cephalopod (except organ)		0.5
1.3.3 Muscle meat of Crustaceans, include muscle meat from appendages.		0.5
1.3.4 Other aquatic animal <sup>(3)</sup>		0.5
1.4 Edible fats and oils		
1.4.1 Edible fats and oils <sup>(4)</sup>	0.1	
1.4.2 Fat spreads and blended spreads <sup>(5)</sup>	0.1	
1.5 Bottled and packaged drinking water	0.01	
1.6 Beverage (natural and concentrated fruit and vegetable juices are not included)	0.2	
1.7 Salt, food grade <sup>(6)(7)</sup>	0.2	
1.8 Ice cubes, food grade	0.01	
<b>2. Lead</b>		
<b>Foodstuffs</b>	<b>ML (mg/kg)</b>	
2.1 Grains		
2.1.1 Grains, include rice		0.2
2.2 Vegetables, Fruits and Plant origin <sup>(2)</sup>		
2.2.1 Leafy vegetables: The ML also applies to Brassica leafy vegetables.		0.3
2.2.2 Brassica vegetables: The ML applies to head cabbages and kohlrabi, cauliflower and broccoli, brussels sprouts (“buttons” only). The ML does not apply to Brassica leafy vegetables.		0.1
2.2.3 Root and tuber vegetables: The ML applies to whole commodity after removing tops and adhering soil. Potato must peel. The ML does not apply to celeriac.		0.1
2.2.4 Bulb vegetables: The ML applies to dry onions and garlic must removal of roots and adhering soil and whatever parchment skin is easily detached.		0.1

2.2.5 Fruiting vegetables: The ML applies to whole commodity after removal of stems. Fresh corn without husk, excluding sweet corn.	0.05
2.2.6 Legume vegetables, including edible pods.	0.1
2.2.7 Pulses, including edible crops harvested solely for dry seeds.	0.2
2.2.8 Peanuts	0.2
2.2.9 Cranberry, Currants, Elderberry and Strawberry	0.2
2.2.10 Other vegetables and fruits	0.1
2.2.11 Herbs and Spices, fresh	0.3
2.3 Seaweed <sup>(2)</sup>	1.0
2.4 Mushrooms <sup>(8)</sup>	3 <sup>(9)</sup>
2.5 Aquatic animal <sup>(2)</sup>	
2.5.1 Fish	0.3
2.5.2 Shellfish	2
2.5.3 Cephalopod (except organ)	0.3
2.5.4 Muscle meat of Crustaceans, include muscle meat from appendages.	0.5
2.5.5 Other aquatic animal <sup>(3)</sup>	0.3
2.6 Livestock and Poultry Products <sup>(2)</sup>	
2.6.1 Meat of cattle, sheep, pigs and poultry	0.1
2.6.2 Edible offal of cattle, pigs and poultry	0.5
2.6.3 Eggs	0.3
2.7 Edible fats and oils	
2.7.1 Edible fats and oils <sup>(4)</sup>	0.1
2.7.2 Fat spreads and blended spreads <sup>(5)</sup>	0.1
2.7.3 Butter, Cream and other products which mainly containing milk fat	0.1
2.8 Milk and milk products (exception of foodstuffs listed in 2.7.3)	0.02
2.9 Beverage	
2.9.1 Naturally fruit and vegetable juices, reconstituted fruit and vegetable juices and nectars, exception concentrated fruit and vegetable juices, and juices or nectars which from berries and other small fruits	0.03
2.9.2 Naturally fruit and vegetable juices, reconstituted fruit and vegetable juices and nectars which from berries and other small fruits, exception concentrated fruit and vegetable juices	0.05
2.9.3 Other beverage intended for direct human consumption, exception of foodstuffs listed in 2.9.1, 2.9.2 and concentrated fruit and vegetable	0.3

2.10 Bottled and packaged drinking water	0.01
2.11 Canned foods, exception canned beverage	1
2.12 Food for infant and young child <sup>(10)(15)</sup>	
2.12.1 Infant formula <sup>(11)</sup> and follow-up infant formula <sup>(12)</sup>	
2.12.1.1 marketed as liquid	0.010
2.12.1.2 marketed as powder	0.050
2.12.2 Infant formula for special medical purposes <sup>(13)</sup> and foods for special medical purposes intended specifically for young children:	
2.12.2.1 marketed as liquid	0.010
2.12.2.2 marketed as powder	0.050
2.12.3 Baby food <sup>(14)</sup>	0.050
2.12.6 Drinks which labelled and sold to infants and young children, exception of foodstuffs listed in 2.12.1.1, 2.12.2.1 and 2.12.3	0.030
2.13 Salt, food grade <sup>(6)(7)</sup>	2
2.14 Ice cubes, food grade	0.01
2.15 Honey	0.1
<b>3. Cadmium</b>	
<b>Foodstuffs</b>	<b>ML (mg/kg)</b>
3.1 Grains	
3.1.1 Rice	0.4
3.1.2 Wheat	0.2
3.1.3 Wheat bran and wheat germ for direct consumption	0.2
3.1.4 Other grains	0.1
3.2 Vegetables, Fruits and Plant origin <sup>(2)</sup>	
3.2.1 Leafy vegetables: The ML also applies to Brassica leafy vegetables.	0.2
3.2.2 Brassica vegetables: Head cabbages and kohlrabi, Cauliflower and broccoli, Brussels sprouts (“buttons” only). The ML does not apply to Brassica leafy vegetables.	0.05
3.2.3 Root and tuber vegetables: Whole commodity after removing tops and adhering soil. Potato must peel. The ML does not apply to celeriac and parsnips.	0.1
3.2.4 Celeriac and parsnips	0.2
3.2.5 Stalk and stem vegetables: Rhubarb: leaf stems only. Globe artichoke: flower head only. Celery and asparagus: remove adhering soil.	0.1
3.2.6 Bulb vegetables: Dry onions and garlic must	0.05

removal of roots and adhering soil and whatever parchment skin is easily detached.	
3.2.7 Fruiting vegetables: Whole commodity after removal of stems. Sweet corn and fresh corn without husk.	0.05
3.2.8 Legume vegetables: Including edible pods.	0.1
3.2.9 Pulses: Including edible crops harvested solely for dry seeds. The ML does not apply to soy bean.	0.1
3.2.10 Soy beans and Peanuts	0.2
3.2.11 Other vegetables and fruits	0.05
3.2.12 Herbs and Spices (fresh)	0.2
3.3 Seaweed <sup>(2)</sup>	1.0
3.4 Mushrooms <sup>(8)</sup>	2 <sup>(9)</sup>
3.5 Aquatic animal <sup>(2)</sup>	
3.5.1 Fish	0.3
3.5.2 Shellfish, Cephalopod (except organ)	2
3.5.3 Muscle meat of Crustaceans, include muscle meat from appendages	0.5
3.5.4 Other aquatic animal <sup>(3)</sup>	0.3
3.6 Livestock and Poultry Products <sup>(2)</sup>	
3.6.1 Meat of cattle, sheep, pigs and poultry	0.050
3.6.2 Meat of horse	0.20
3.6.3 Liver of cattle, sheep, pigs, poultry and horse	0.50
3.6.4 Kidney of cattle, sheep, pigs, poultry and horse	1.0
3.7 Bottled and packaged drinking water	0.005
3.8 Food for infant and young child <sup>(10)(15)</sup>	
3.8.1 Infant formula <sup>(11)</sup> and follow-up infant formula <sup>(12)</sup>	
3.8.1.1 Formulae manufactured from cows' milk proteins or protein hydrolysates	
3.8.1.1.1 marketed as liquid	0.005
3.8.1.1.2 marketed as powder	0.010
3.8.1.2 Formulae manufactured form soya protein isolates, alone or in a mixture with cows' milk proteins	
3.8.1.2.1 marketed as liquid	0.010
3.8.1.2.2 marketed as powder	0.020
3.8.2 Baby food <sup>(14)</sup>	0.040
3.9 Salt, food grade <sup>(6)(7)</sup>	0.2
<b>4. Mercury (Hg) and Methylmercury (MeHg)</b>	
<b>Foodstuffs</b>	<b>ML (mg/kg)</b>
	<b>Hg      MeHg</b>

4.1 Grains		
4.1.1 Rice	0.05	
4.2 Seaweed <sup>(2)</sup>	0.5	
4.3 Edible fats and oils		
4.3.1 Edible fats and oils <sup>(4)</sup> (excluding derived from marine sources)	0.05	
4.3.2 Edible fats and oils derived from marine sources	0.1	
4.4 Aquatic animal <sup>(2)</sup>		
4.4.1 Shark, swordfish, tuna and oilfish		2
4.4.2 Grenadier, plain bonito, pandora, atlantic catfish, anglerfish, red seabream, megrim, mullet, rays, scabbard fish, red seabream, snack mackerel, butterfish, sturgeon, spotted butter fish, eel, pike.		1
4.4.3 Other fish		0.5
4.4.4 Shellfish, Cephalopod (except organ)		0.5
4.4.5 Muscle meat of Crustaceans, include muscle meat from appendages		0.5
4.4.6 Other aquatic animal <sup>(3)</sup>		0.5
4.5 Bottled and packaged drinking water	0.001	
4.6 Ice cubes, food grade	0.001	
4.7 Salt, food grade <sup>(6)(7)</sup>	0.1	
<b>5.Tin</b>		
<b>Foodstuffs</b>	<b>ML (mg/kg)</b>	
5.1 Canned edible fats and oils <sup>(4)</sup>	250	
5.2 Canned beverage	150	
5.3 Canned food for infant and young child <sup>(10)(15)</sup>		
5.3.1 Canned infant formulae <sup>(11)</sup> and follow-up infant formula <sup>(12)</sup> , excluding dried and powdered products	50	
5.3.2 Canned infant formula for special medical purposes <sup>(13)</sup> , excluding dried and powdered products	50	
5.3.3 Canned baby food <sup>(14)</sup> , excluding dried and powdered products	50	
5.4 Other canned foods	250	
<b>6.Copper</b>		
<b>Foodstuffs</b>	<b>ML (mg/kg)</b>	
6.1 Edible fats and oils <sup>(4)</sup>	0.4	
6.2 Eggs	5	
6.3 Beverage, excluding naturally and concentrated fruit and vegetable juices.	5.0	
6.4 Salt, food grade <sup>(6)(7)</sup>	2	

Note.

- (1) If the total Arsenic concentration is below the ML for inorganic Arsenic, no further testing is required.
- (2) Wet weight basis.
- (3) Other aquatic animals, for example, the sea urchin and the sea cucumber.
- (4) Edible fats and oils include all fat-based products that are derived from vegetable, animal or marine sources, or their mixtures. The animal fats shall from health animals which have been lawful slaughter; the fatty tissues shall clean and fit for human consumption.
- (5) The ML does not apply to fat spreads derived exclusively from milk and/or milk products, for example, the butter.
- (6) The food grade salt is obtained from the sea, from underground rock salt deposits or from natural brine. It is used as an ingredient of food, both for direct sale to the consumer and for food manufacture. The content of NaCl shall not be less than 97 % on a dry matter basis, exclusive of additives. In addition, the food grade salt refers to seawater drawn from 200 meters below sea level or deeper, the content of NaCl shall not less than 95 % on a dry matter basis. It also applies to salt used as a carrier of food additives and / or nutrients.
- (7) The by-products from chemical industries shall not be used.
- (8) The ML applies to the carpophores, not included mycelium.
- (9) Dry weight basis.
- (10) 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).
- (11) Infant formula means a breast-milk substitute specially manufactured to satisfy, by itself, the nutritional requirements of infants from birth to six months of age up to the introduction of appropriate complementary feeding.
- (12) 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 infants under six months consumption.
- (13) Infant formula for special medical purposes means a substitute for human milk or infant formula, by itself, the special nutritional requirements of infants with specific disorder, disease or medical condition during the first months of life up to the introduction of appropriate complementary feeding.
- (14) Baby food means food intended to fulfil the particular requirements of infants in good health while they are being weaned, and of young children in good health as a supplement to their diet and/or for their progressive adaptation to ordinary food, including use of cereal, fruits, vegetables, meat or other food ingredients as mainly materials, or rusks and biscuits.
- (15) The maximum level refers to the product as sold.

## Appendix2. Maximum levels (ML) of mycotoxins in foods

1.Aflatoxins total (B <sub>1</sub> +B <sub>2</sub> +G <sub>1</sub> +G <sub>2</sub> )	
Foodstuffs	ML (µg/kg)
1.1 Grains	
1.1.1 Rice, Maize and Wheat, raw material <sup>(2)</sup>	10
1.1.2 Other cereals and processed cereal products, exception of foodstuffs listed in 1.1.1	4
1.2 Edible fats and oils	10
1.3 Vegetables, Fruits and Plant origin	
1.3.1 Tree nuts and Oilseeds <sup>(1)</sup>	
1.3.1.1 Peanuts (also known as groundnuts) and Oilseeds, raw material <sup>(2)</sup> and removal of shell or husk, with the exception for crushing for refined vegetable oil production.	15
1.3.1.2 Almonds, Pistachios, Hazelnuts and Brazil nuts, raw material <sup>(2)</sup> and removal of shell or husk.	15
1.3.1.3 Other tree nuts (exception of foodstuffs listed in 1.3.1.2), raw material <sup>(2)</sup> and removal of shell or husk.	10
1.3.1.4 Peanuts (also known as groundnuts) and Oilseeds, intended for direct human consumption or use as an ingredient in foodstuffs, removal of shell or husk.	4
1.3.1.5 Almonds, Pistachios, Hazelnuts and Brazil nuts, intended for direct human consumption or use as an ingredient in foodstuffs, removal of shell or husk.	10
1.3.1.6 Other tree nuts (exception of foodstuffs listed in 1.3.1.5), intended for direct human consumption or use as an ingredient in foodstuffs, removal of shell or husk.	4
1.3.2 Dried fruit	
1.3.2.1 Dried figs, intended for direct human consumption or use as an ingredient in foodstuffs.	10
1.3.2.2 Other dried fruit raw material <sup>(2)</sup> (excluding of dried figs).	10
1.3.2.3 Other dried fruit (excluding dried figs and processed products thereof), intended for direct human consumption or use as an ingredient in foodstuffs.	4
1.4 Following species of spices: - <i>Capsicum</i> spp. and its processed products, including chillies, chilli powder, cayenne and paprika.	10



- <i>Piper</i> spp. and its processed products, including white and black pepper. - <i>Myristica fragrans</i> (nutmeg) - <i>Zingiber officinale</i> (ginger) - <i>Curcuma longa</i> (turmeric) -Mixtures of spices containing one or more of the abovementioned spices	
1.5 Other foods	10
<b>2. Aflatoxin M<sub>1</sub></b>	
<b>Foodstuffs</b>	<b>ML (µg/kg)</b>
2.1 Milks <sup>(3)</sup>	0.5
2.2 Food for infant and young child <sup>(4)</sup>	
2.2.1 Infant formulae <sup>(5)</sup> and follow-up infant formula <sup>(6)</sup>	0.025 <sup>(7)</sup>
2.2.2 Infant formula for special medical purposes <sup>(8)</sup>	0.025 <sup>(7)</sup>
<b>3. Aflatoxin B<sub>1</sub></b>	
<b>Foodstuffs</b>	<b>ML (µg/kg)</b>
3.1 Grains	
3.1.1 Rice and Maize, raw material <sup>(2)</sup>	5
3.1.2 All cereals and all products derived from cereals, including processed cereal products, exception of foodstuffs listed in 3.1.1, 3.4.1 and 3.4.2.	2
3.2 Vegetables, Fruits and Plant origin	
3.2.1 Tree nuts and Oilseeds	
3.2.1.1 Peanuts (also known as groundnuts) and Oilseeds <sup>(1)</sup> , raw material <sup>(2)</sup> and removal of shell or husk, with the exception for crushing for refined vegetable oil production.	8
3.2.1.2 Hazelnuts and Brazil nuts, raw material <sup>(2)</sup> and removal of shell or husk.	8
3.2.1.3 Almonds, Pistachios and Apricot kernels, raw material <sup>(2)</sup> and removal of shell or husk.	12
3.2.1.4 Other tree nuts (exception of foodstuffs listed in 3.2.1.2, 3.2.1.3), raw material <sup>(2)</sup> and removal of shell or husk.	5
3.2.1.5 Hazelnuts and Brazil nuts intended for direct human consumption or use as an ingredient in foodstuffs, removal of shell or husk.	5
3.2.1.6 Almonds, Pistachios and Apricot kernels, intended for direct human consumption or use as an ingredient in foodstuffs, removal of shell or husk.	8
3.2.1.7 Peanuts (also known as groundnuts) and Oilseeds and processed products thereof, intended for	2

direct human consumption or use as an ingredient in foodstuffs, exception of crude vegetable oils destined for refining and refined vegetable oil.	
3.2.1.8 Other tree nuts (exception of foodstuffs listed in 3.2.1.5 and 3.2.1.6), intended for direct human consumption or use as an ingredient in foodstuffs.	2
3.2.2 Dried fruit	
3.2.2.1 Dried figs, intended for direct human consumption or use as an ingredient in foodstuffs.	6
3.2.2.2 Other dried fruit raw material <sup>(2)</sup> (excluding of dried figs).	5
3.2.2.3 Other dried fruit (excluding dried figs and processed products thereof), intended for direct human consumption or use as an ingredient in foodstuffs.	2
3.3 Following species of spices: - <i>Capsicum</i> spp. and its processed products, including chillies, chilli powder, cayenne and paprika. - <i>Piper</i> spp. and its processed products, including white and black pepper. - <i>Myristica fragrans</i> (nutmeg) - <i>Zingiber officinale</i> (ginger) - <i>Curcuma longa</i> (turmeric) -Mixtures of spices containing one or more of the abovementioned spices	5
3.4 Food for infant and young child <sup>(4)</sup>	
3.4.1 Baby food <sup>(9)</sup>	0.10 <sup>(10)</sup>
3.4.2 Infant formula for special medical purposes <sup>(8)</sup>	0.10 <sup>(7)</sup>
<b>4. Ochratoxin A</b>	
<b>Foodstuffs</b>	<b>ML (µg/kg)</b>
4.1 Grains	
4.1.1 Rice, Maize, Wheat, and other cereals, raw material <sup>(2)</sup>	5
4.1.2 Other processed cereal products and cereals intended for direct human consumption.	3
4.1.3 Processed peanuts-based foods and peanuts intended for direct human consumption.	3
4.2 Vegetables, Fruits and Plant origin	
4.2.1 Dried vine fruit (currants, raisins and sultanas)	10
4.3 Coffee	
4.3.1 Roasted coffee beans and roasted coffee powder	5
4.3.2 Soluble coffee (instant coffee)	10

4.4 Beverage	
4.4.1 Grape juice, concentrated grape juice as reconstituted and grape nectar, intended for direct human consumption.	2
4.5 Spices, including dried spices: - <i>Piper</i> spp (fruits thereof, including white and black pepper) - <i>Myristica fragrans</i> (nutmeg) - <i>Zingiber officinale</i> (ginger) - <i>Curcuma longa</i> (turmeric) - <i>Capsicum</i> spp. (dried fruits thereof, including chillies, chilli powder, cayenne and paprika) -Mixtures of spices containing one or more of the abovementioned spices	15
4.6 Food for infant and young child <sup>(4)</sup>	
4.6.1 Baby food <sup>(9)</sup>	0.50 <sup>(10)</sup>
4.6.2 Infant formula for special medical purposes <sup>(8)</sup>	0.50 <sup>(7)</sup>
<b>5. Patulin</b>	
<b>Foodstuffs</b>	<b>ML (µg/kg)</b>
5.1 Vegetables, Fruits and Plant origin	
5.1.1 Solid apple products, including apple compote, apple puree intended for direct consumption	25
5.2 Beverage	
5.2.1 Fruit juices, concentrated fruit juices as reconstituted and fruit nectars	50
5.2.2 Fermented drinks derived from apples or containing apple juice	50
5.3 Food for infant and young child <sup>(4)</sup>	
5.3.1 Apple juice and solid apple products, including apple compote and apple puree, for infants and young children and labelled and sold as such	10.0 <sup>(7)</sup>
5.3.2 Baby foods <sup>(9)</sup> other than processed cereal-based foods for infants and young children	10.0 <sup>(7)</sup>
<b>6. Citrinin</b>	
<b>Foodstuffs</b>	<b>ML (µg/kg)</b>
6.1 Grains	
6.1.1 Red yeast rice	5000
6.2 Complex food and food supplements containing red yeast rice	2000
6.3 <i>Monascus color</i>	200
<b>7. Fumonisin (B<sub>1</sub>+B<sub>2</sub>)</b>	
<b>Foodstuffs</b>	<b>ML (µg/kg)</b>

7.1 Grains	
7.1.1 Raw maize grain <sup>(2)</sup>	4000
7.1.2 Maize flour and maize meal	2000
7.1.3 Maize-based breakfast cereals and maize-based snacks	800
7.1.4 Other maize intended for direct human consumption, maize-based foods for direct human consumption	1000
7.2 Food for infant and young child <sup>(4)</sup>	
7.2.1 Baby food <sup>(9)</sup>	200 <sup>(10)</sup>
<b>8. Deoxynivalenol (DON)</b>	
<b>Foodstuffs</b>	<b>ML (µg/kg)</b>
8.1 Grains	
8.1.1 Unprocessed durum wheat, oats and maize <sup>(2)</sup>	1750
8.1.2 Other unprocessed cereals <sup>(2)(11)</sup>	1250
8.1.3 Flour, meal, semolina and flakes derived from wheat, maize or barley	1000
8.1.4 Pasta (dry, water content approximately 12 %)	750
8.1.5 Cereals intended for direct human consumption, cereal flour, bran and germ as end product marketed for direct human consumption <sup>(11)</sup>	750
8.1.6 Bread (including small bakery wares), pastries, biscuits, cereal snacks and breakfast cereals <sup>(11)</sup>	500
8.2 Food for infant and young child <sup>(4)</sup>	
8.2.1 Baby food <sup>(9)</sup>	200 <sup>(10)</sup>
<b>9. Zearalenone</b>	
<b>Foodstuffs</b>	<b>ML (µg/kg)</b>
9.1 Grains	
9.1.1 Unprocessed maize	350
9.1.2 Cereals intended for direct human consumption, cereal flour, bran and germ as end product marketed for direct human consumption <sup>(11)</sup>	75
9.1.3 Maize intended for direct human consumption, maize-based snacks and maize-based breakfast cereals	100
9.1.4 Bread (including small bakery wares), pastries, biscuits, cereal snacks and breakfast cereals, excluding maize-snacks and maize-based breakfast cereals, exception of foodstuffs listed in 9.1.3 <sup>(11)</sup>	50
9.1.5 Unprocessed cereals other than maize <sup>(2)(11)</sup>	100
9.2 Refined maize oil	400
9.3 Food for infant and young child <sup>(4)</sup>	
9.3.1 Baby food <sup>(9)(11)</sup>	20 <sup>(10)</sup>

- (1) Oilseeds include Rapeseeds, Sunflower seeds, Melon seeds, Soybeans and Linseeds etc.
- (2) "raw material" means it's must intended for further processing, intended to undergo an additional sorting or treatment that has proven to reduce levels of mycotoxins before being used as an ingredient in foodstuffs, otherwise processed or offered for human consumption.
- (3) Milk is the normal mammary secretion of milking animals obtained from one or more milkings without either addition to it or extraction from it, intended for consumption as liquid milk or for further processing. A concentration factor applies to partially or wholly dehydrated milks (e.g. evaporated milk, condensed milk and milk powders).
- (4) 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).
- (5) Infant formula means a breast-milk substitute specially manufactured to satisfy, by itself, the nutritional requirements of infants from birth to six months of age up to the introduction of appropriate complementary feeding.
- (6) 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 infants under six months consumption.
- (7) The ML refers to the products ready to use (marketed as such or after reconstitution as instructed by the manufacturer).
- (8) Infant formula for special medical purposes means a substitute for human milk or infant formula, by itself, the special nutritional requirements of infants with specific disorder, disease or medical condition during the first months of life up to the introduction of appropriate complementary feeding.
- (9) Baby food means food intended to fulfil the particular requirements of infants in good health while they are being weaned, and of young children in good health as a supplement to their diet and/or for their progressive adaptation to ordinary food, including use of cereal, fruits, vegetables, meat or other food ingredients as mainly materials, or rusks and biscuits.
- (10) Dry weight basis.
- (11) Rice and rice products are not applicable.

### 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 <sup>(1)</sup>	0.4	
2. Polycyclic aromatic hydrocarbons (PAHs)		
Foodstuffs	ML (µg/kg)	
	Benzo(a)pyrene	4PAHs <sup>(2)</sup>
2.1 Edible fats and oils		
2.1.1 Edible fats and oils (excluding cocoa butter and coconut oil) intended for direct human consumption or use as an ingredient in food	2.0	10.0
2.1.2 Coconut oil intended for direct human consumption or use as an ingredient in food	2.0	20.0
2.2 Cocoa beans and derived products	5.0	30.0
2.3 Meat and meat products		
2.3.1 Smoked meat and smoked meat products	2.0	12.0
2.3.2 Heat treated meat and heat treated meat products sold to the final consumer <sup>(3)</sup>	5.0	30.0
2.4 Aquatic animal		
2.4.1 Muscle meat of smoked fish and smoked fishery products <sup>(4)</sup> , exception fishery products listed in points 2.4.2, 2.4.3 and 2.4.4. The ML for smoked crustaceans applies to muscle meat from appendages and abdomen. In case of smoked crabs and crab-like crustaceans ( <i>Brachyura</i> and <i>Anomura</i> ) it applies to muscle meat from appendages.	2.0	12.0
2.4.2 Smoked sprats and canned smoked sprats ( <i>Sprattus sprattus</i> ) <sup>(4)</sup> ; Smoked Baltic herring $\leq$ 14 cm length and canned smoked Baltic herring $\leq$ 14 cm length ( <i>Clupea harengus membras</i> ) <sup>(4)</sup>	5.0	30.0
2.4.3 Katsuobushi (dried bonito, <i>Katsuwonus pelamis</i> );	5.0	30.0
2.4.4 Smoked bivalve molluscs	6.0	35.0

2.4.5 Bivalve molluscs (fresh, chilled or frozen) <sup>(5)</sup>	5.0	30.0
2.8 Food for infant and young child <sup>(6)</sup>		
2.8.1 Infant formulae <sup>(8)</sup> and follow-up infant formula <sup>(9)(7)</sup>	1.0	1.0
2.8.2 Infant formula for special medical purposes <sup>(7)</sup>	1.0	1.0
2.8.3 Baby food <sup>(7)(10)</sup>	1.0	1.0
<b>3. Plant toxins</b>		
<b>3.1 Hydrocyanic acid</b>		
<b>Foodstuffs</b>	<b>ML (mg/kg)</b>	
3.1.1 Cassava flour	10 <sup>(11)</sup>	
3.1.2 Gari	2 <sup>(12)</sup>	
<b>3.2 Gossypol</b>		
<b>Foodstuffs</b>	<b>ML (mg/kg)</b>	
3.2.1 Edible cotton seed oil	Not detected <sup>(13)</sup>	
<b>3.3 Glycoalkaloids, total (sum of alpha-solanine and alpha-chaconine)</b>		
<b>Foodstuffs</b>	<b>ML (mg/kg)</b>	
3.3.1 Potato tubers (fresh weight)	200	
<b>3.4 Erucic acid</b>		
<b>Foodstuffs</b>	<b>ML (g/kg)<sup>(14)</sup></b>	
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 vegetable oils and fats, exception of foodstuffs listed in 3.4.4.	50	
3.4.4 Infant formulae <sup>(8)</sup> and follow-up infant formula <sup>(9)</sup>	10	
<b>4. Marine biotoxins</b>		
<b>4.1 Paralytic shellfish poisons (PSP)</b>		
<b>Foodstuffs</b>	<b>ML (mg/kg)</b>	
4.1.1 The edible parts of live bivalve mollusk (saxitoxin equivalent)	0.8	
<b>4.2 Diarrhetic shellfish poisons (DSP)</b>		
<b>Foodstuffs</b>	<b>ML (mg/kg)</b>	
4.2.1 The edible parts of live bivalve mollusk (okadaic equivalent)	0.16	
<b>4.3 Amnesic shellfish poisons (ASP)</b>		
<b>Foodstuffs</b>	<b>ML (mg/kg)</b>	
4.3.1 The edible parts of live bivalve mollusk (domoic acid)	20	

<b>4.4 Azaspiracid (AZP)</b>		
<b>Foodstuffs</b>	<b>ML (mg/kg)</b>	
4.4.1 The edible parts of live bivalve mollusk	0.16	
<b>4.5 Neurotoxic shellfish poisons (NSP)- Brevetoxin (BTX) *</b>		
<b>Foodstuffs</b>	<b>ML (MU/kg)</b>	
4.5.1 The edible parts of live bivalve mollusk	200 <sup>(15)</sup>	
<b>5. Pheophorbide</b>		
<b>Foodstuffs</b>	<b>ML (mg/100g)</b>	
	<b>Existing pheophorbide</b>	<b>Total pheophorbide</b>
5.1 Green algae <sup>(16)</sup>	60	80
5.2 Blue algae <sup>(16)</sup>	50	100
<b>6. Volatile basic nitrogen (VBN)</b>		
<b>Foodstuffs</b>	<b>ML (mg/100 g)</b>	
6.1 Unprocessed fishery products		
6.1.1 Species belonging to the <i>Pleuronectidae</i> family, exception 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 unprocessed fishery products, exception of foodstuffs listed in 6.1.1, 6.1.2 and 6.1.3.	25	
6.2 Fishes and shellfishes to be eaten raw	15	
<b>7. Histamine</b>		
<b>Foodstuffs</b>	<b>ML (mg/kg)</b>	
7.1 Fishery products from fish species associated with a high amount of histidine <sup>(17)</sup>	<b>100</b> <sup>(18)</sup>	
7.2 Fishery products which have undergone enzyme maturation treatment in brine, manufactured from fish species associated with a high amount of histidine <sup>(17)</sup> , for example, the fermented fish sauces and pastes.	<b>200</b> <sup>(18)</sup>	
<sup>(1)</sup> “Soy sauce and soy sauce-based condiments” such as soy sauce paste, oyster soy sauce etc. The maximum level applies to liquid condiments containing acid hydrolyzed vegetable proteins, does not apply to naturally fermented		



soy sauce.

- (2) "4PAHs" means sum of benzo(a)pyrene, benz(a)anthracene, benzo(b)fluoranthene and chrysene
- (3) Meat and meat products that have undergone a heat treatment potentially resulting in formation of PAH, i.e. only grilling and barbecuing.
- (4) Where fish are intended to be eaten whole, the maximum level shall apply to the whole fish.
- (5) In case of *Pecten maximus*, the maximum level applies to the adductor muscle and gonad only.
- (6) 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).
- (7) The maximum level refers to the product as sold.
- (8) Infant formula means a breast-milk substitute specially manufactured to satisfy, by itself, the nutritional requirements of infants from birth to six months of age up to the introduction of appropriate complementary feeding.
- (9) 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 infants under six months consumption.
- (10) Baby food means food intended to fulfil the particular requirements of infants in good health while they are being weaned, and of young children in good health as a supplement to their diet and/or for their progressive adaptation to ordinary food, including use of cereal, fruits, vegetables, meat or other food ingredients as mainly materials, or rusks and biscuits.
- (11) The maximum level is expressed as total hydrocyanic acid.
- (12) The maximum level is expressed as free hydrocyanic acid.
- (13) The detection limit of analysis method is 0.05 ppm for free form gossypol and 1 ppm of total gossypol.
- (14) The maximum level refers to the level of erucic acid, calculated on the total level of fatty acids in the fat component in food.
- (15) Mouse units or equivalent.
- (16) The maximum level 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) The species of *Scombridae*, *Clupeidae*, *Engraulidae*, *Coryfenidae*, *Pomatomidae* and *Scombresosidae* families.
- (18) Products placed on the market during their shelf-life