Uniform Sanitary and Epidemiological and Hygienic Requirements for Goods Subject to Sanitary and Epidemiological Supervision (Control)

Chapter II

Section 16. Regulations on Materials and Articles of Polymer and Other Materials Intended to Come into Contact with Food Products and Mediums

Regulations on Materials and Articles of Polymer and Other Materials Intended to Come into Contact with Food Products and Mediums

(as amended by Decision of the Customs Union Commission No 889 of 9 December 2011)

1. AREA OF APPLICATION

This section establishes sanitary and epidemiological requirements for materials and articles of polymer and other materials intended to come into contact with food products and mediums, which shall not release into contiguous model solutions and ambient air any staffs, the amounts of which threaten human health, exceed the acceptable migration limits, and any compounds that may cause tumorigenic, mutagenic and any other long-term effect.

Sanitary and chemical studies shall be carried out in compliance with the established procedure. Non-compliance with the sanitary and epidemiological safety requirements endangers human life and health.

This section of the Uniform Requirements shall set requirements for the following groups of food contact articles subject to sanitary and epidemiological supervision pursuant to the codes of the Commodity Nomenclature of Foreign Economic Activity of the Customs Union:
from 3917, from 3920, from 3923, from 3924, from 4415, from 4416 00 000 0, from 4503, from 4819, from 6305, from 6911, from 6912 00, from 7010, from 7013, from 7310, from 7310 10 000 0, from 7323 92, from 7323 93, from 7323 94, from 7323 99 990 0, from 7418, from 7612, from 7615, from 8418, 8418 21, 8418 30 910, 8418 30 990, 8418 40 910, 8418 40 990, from 8422 40 000, from 8423, from 8434,from 8437, 8438, 8509 40 000 0, 8516 50 000 0, 8516 60, 8516 60 10, 8516 60 101 0, 8516 60 109 0). The list is specified in Table 1.

The following groups of articles subject to sanitary and epidemiological supervision pursuant to the codes of the Commodity Nomenclature of Foreign Economic Activity of the Customs Union: from 8418, 8418 21, 8418 30 910, 8418 30 990, 8418 40 910, 8418 40 990, from 8422 40 000, from 8423, from 8434,from 8437, 8438, 8509 40 000 0, 8516 50 000 0, 8516 60, 8516 60 10, 8516 60 101 0, 8516 60 109 0 shall undergo additional examination as per physical effects parameters specified in Section 7 ‘Regulations on Mechanical, Instrument and Electrical Engineering Products’

2. TERMS AND DEFINITIONS

AML – acceptable migration limits for chemical substances, (mg/l, mg/dm^2)

MAC_w – maximum acceptable concentration of chemical substances in drinking water, (mg/l)

$MAC_{d.a.}$ – maximum acceptable daily average concentration of pollutants in the ambient air of settlements, (mg/m^3)

TSELs – tentative safe exposure levels of pollutants in the ambient air of settlements, (mg/m^3)

3. GENERAL PROVISIONS

AML (Acceptable Migration Limits for chemical substances) values (mg/l) shall be the major evaluation criteria for sanitary and chemical examinations of articles intended to come into contact with food products with humidity of more than 15 %. In such a case the chemical substance migration level shall be determined on the basis of model solutions (distilled water, weak acid solutions, etc.) that simulate the properties of the prospective food products range under time–temperature conditions close to the real usage conditions.

Organoleptic indicators found out in the course of examination of materials and articles intended to come into contact with food products and mediums shall comply with the requirements set in Tables 4 and 5.

Amount of identified substances in model solutions shall not exceed the respective AML values.

MACw (maximum acceptable concentration of substances in drinking water) values (mg/l) shall be applied only if the AML values for identified substances cannot be found (not present).

In the course of sanitary and chemical examinations of articles intended to come into contact with dry food products with humidity of less than 15 % released chemical substances shall be determined in the ambient air under time–temperature conditions close to the real usage conditions. The amounts found shall be assessed according to MACd.a. (mg/m^3) and TSELs (mg/m^3) values.

MACd.a. (maximum acceptable daily average concentration of chemical substances in the ambient air of settlements) values (mg/m^3) shall be the criteria for assessment of the level of migration of substances into the ambient air.

If the MACd.a. value is not available, the identified substance shall be assessed on the basis of TSELs value (mg/m^3), that is tentative safe exposure levels of pollutants in the ambient air of settlements.

Along with the hygienic requirements there is a specification of hazard classes of chemical substances contained in water and air. Hazardous substances are classified on the basis of their impact on human health according to the classification and labelling rules of the Customs Union member-states. There are four hazard classes: Class 1 – extremely hazardous substances, Class 2 – highly hazardous substances, Class 3 – moderately hazardous substances, Class 4 – low hazardous substances.

Use of polystyrene for packaging of food products designated for nutrition of children of preschool age (older than 3 years) and school age is allowed.

In the course of examination of materials and articles intended for packaging of baby food, production of articles for children, inclusive children dishes, migration of chemical substances of Hazard Classes 1 and 2 shall not be allowed.

This section specifies the main types of food contact materials (polymers, plastics, steels, alloys, etc.) and their main chemical properties thereof that shall be subject to supervision in the course of sanitary and chemical examinations. Hygienic safety indicators and substance standards are specified in Tables 2 and 3.

Organoleptic indicators found out in the course of examination of food contact materials and articles and their standards are set in Tables 4 and 5.

Standard sample is a sample of single-type articles, which are produced by the same manufacturer using the same production means with application of the same materials and applicable in the same areas and under the same usage conditions (temperature mode, contact time).

Standard sample of multi-layer and composite polymer materials and articles thereof is a sample of the layer that has direct contact with food, such sample shall represent single-type articles, which are produced by the same manufacturer of the same material, without regard to the presence and contents of any other layers.

Table 1

UNIFORM LIST
of Goods Subject to Sanitary and Epidemiological Supervision (Control) at the Customs Border and the Customs Territory of the Customs Union

Goods Classification under the Code of the Commodity Nomenclature of Foreign Economic Activity of the Customs Union	**Short Article Name**
Group 39 Plastics and Plastic Articles	
From 3917	Tubes, pipes, hoses and their fittings (such as joints, elbows, flanges) of plastics (for drinking water supply); artificial guts (for sausage products) from hardened proteins or cellulosic materials
From 3920	Other plates, sheets, films, strip, etc. of plastics, non-porous and not reinforced, not laminated, unsupported and not combined in such a way with other materials for inside premises as well as intended for contact with food products and for production of children clothes, shoes and toys
From 3923	Articles for transportation or packaging of plastic goods (boxes, cases, baskets and similar articles), intended for contact with food
From 3924	Tableware and cookware, flatware and kitchen utensils intended for contact with food
Group 44 Wood and Wood Articles; Charcoal	
From 4415	Cases, boxes, crates and baskets, drums and similar packaging items of wood, intended for food packaging
From 4416 00 000 0	Casks, barrels, vats, tubs and other cooperage articles of wood, intended for food packaging
Group 45 Cork and Articles Thereof	
From 4503	Articles of natural cork, intended for contact with food

Goods Classification under the Code of the Commodity Nomenclature of Foreign Economic Activity of the Customs Union	Short Article Name
Group 48 Paper and Cardboard; Articles of Paper Pulp, Paper or Cardboard	
From 4805	Paper for food packaging; filtered paper and cardboard used in food industry
From 4819	Cartons, boxes, cases, bags and other packing containers of paper, cardboard, intended for food packaging
Group 63 Other Finished Textiles; Sets; Second-Hand Clothes and Textiles; Rag	
From 6305	Packing sacks and bags, intended for contact with food
Group 69 Ceramics	
From 6911, From 6912 00	Tableware and cookware
Group 70 Glass and Glass Articles	
From 7010	Carboys, bottles, flasks, jars, pots, cans and other glass containers intended for storage, transportation or packaging of food products for industry and household use
From 7013	Tableware and cookware
Group 73 Articles of Ferrous Materials (Intended for Contact with Food Products and Drinking Water)	
From 7310 7310 10 000 0	Tanks, casks, drums, jerricans, boxes and similar containers of ferrous materials intended for any substances (other than compressed or liquefied gas) with a capacity of or below 300 l, whether or not lined or heat-insulated, but not fitted with mechanical or thermal equipment, except those with a capacity of or above 50 l
From 7323 92	Flatware, kitchen and other household utensils and parts thereof

Goods Classification under the Code of the Commodity Nomenclature of Foreign Economic Activity of the Customs Union	Short Article Name
	made of ferrous materials: cast iron, enamel-lined
From 7323 93	Flatware, kitchen and other household utensils and parts thereof made of ferrous materials: of corrosion-resistant steel
From 7323 94	Flatware, kitchen and other household utensils and parts thereof made of ferrous materials (except cast iron), enamel-lined:
From 7323 99 990 0	Flatware, kitchen and other household utensils and parts thereof made of ferrous materials: metal lids for glass containers
Group 74 Copper and Copper Articles	
From 7418	Flatware, kitchen and other household utensils of melchior, brass, nickel silver with chrome, nickel, gold or silver coating
Group 76 Aluminium and Aluminium Articles	
From 7612	Metal flasks for milk and dairy products
From 7615	Flatware, kitchen and other household utensils and parts thereof made of aluminium
Group 84 Nuclear Reactors, Boilers, Equipment and Mechanical Appliances; Parts Thereof	
From 8418 8418 21, 8418 30 910, 8418 30 990, 8418 40 910, 8418	Cabinets, chilling and refrigerating chambers

Goods Classification under the Code of the Commodity Nomenclature of Foreign Economic Activity of the Customs Union	Short Article Name
40 990	
From 8422 40,000	Equipment for packaging and wrapping (including equipment for thermal setting of wrapping material) intended for use in sugar, starch and syrup industry; equipment for opening and re-closure of cans and bottles;
From 8423	Equipment for food weighting
From 8434	Milking machines and appliances, equipment for milk treatment and processing
From 8437	Equipment for flour-milling industry or for corn or dried bean treatment, except for the equipment used at agricultural farms
8438	Equipment for industrial food and beverage making or production that cannot be included into the above sections of the group, except for the equipment for extraction or production of animal and involatile vegetable fats and oils:
Group 85 Electrical Machinery and Equipment, Parts Thereof; Sound Recording and Reproducing Equipment, Television Image and Sound Recording and Reproducing Equipment, Parts and Accessories Thereof	
8509 40 000 0	Food grinders and mixers; squeezers for fruits or vegetables
8516 50 000 0	Microwave ovens
8516 60	Other ovens; electric plates, portable cooking appliances, electric cooking boilers, grills, roasters
8516 60 10	Electric plates (at least with an oven and panel with electric heating elements)
8516 60101 0	Stationary household plates

Goods Classification under the Code of the Commodity Nomenclature of Foreign Economic Activity of the Customs Union	Short Article Name
8516 60109 0	Other plates; portable electric plates, cooking boilers and panels with electric heating elements for electric plates

Table 2

Hygienic Safety Indicators and Standards of Substances Evolving from Materials, Articles Intended to Come into Contact with Food Products

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3 in Atmospheric Air	TSELs, mg/m^3 in Atmospheric Air	Hazard Class
1	2	3	4	5	6	7	8
1. Polymer Materials and Plastics on their Basis							
1.1. Polyethylene (high-pressure polyethylene, low density polyethylene), polypropylene copolymer of propylene with ethylene, polybutylene, polyisobutylene, combined materials based on polyolefins	Formaldehyde	0.100	--	2	0.003*	--	2
	Acetaldehyde	--	0.200	4	0.010	--	3
	Ethyl acetate	0.100	--	2	0.100	--	4
	Hexane	0.100	--	4	--	--	--
	Heptane	0.100	--	4			
	Hexene	--	--	--	0.085	--	3
	Heptene	--	--	--	0.065	--	3
	Acetone	0.100	--	3	0.350	--	4
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	propyl	0.100	--	4	0.300	--	3
	isopropyl	0.100	--	4	0.600	--	3
	butyl	0.500	--	2	0.100	--	3
	isobutyl	0.500	--	2	0.100	--	4
1.2. Polystyrene plastic:							
1.2.1. Polystyrene bulk-polymerized, impact-resistant	Styrene	0.010	--	2	0.002	--	2
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	butyl	0.500	--	2	0.100	--	3
	Formaldehyde	0.100	--	2	0.003*	--	2
	Benzene	--	0.010	2	0.100	--	2
	Toluene	--	0.500	4	0.600	--	3
	Ethylbenzene	--	0.010	4	0.020	--	3
1.2.2. Copolymer of styrene with acrylonitrile	Styrene	0.010	--	2	0.002	--	2
	Acrylonitrile	0.020	--	2	0.030	--	2
	Formaldehyde	0.100	--	2	0.003*	--	2
	Benzaldehyde	--	0.003	4	0.040	--	3
1. 2. 3. ABS resin	Styrene	0.010	--	2	0.002	--	2
	Acrylonitrile	0.020	--	2	0.030	--	2
	Alpha-methylstyrene	--	0.100	3	0.040	--	3

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3 in Atmospheric Air	TSELs, mg/m^3 in Atmospheric Air	Hazard Class
	Benzene	--	0.010	2	0.100	--	2
	Toluene	--	0.500	4	0.600	--	3
	Ethylbenzene	--	0.010	4	0.020	--	3
	Benzaldehyde	--	0.003	4	0.040	--	3
	Xylols (isomer mixture)	0.010	--	2	0.002	--	2
1. 2. 4. Copolymer of styrene with methyl methacrylate	Styrene	0.010	--	2	0.002	--	2
	Methyl methacrylate	0.250	--	2	0.010	--	3
	Methanol	0.200	--	2	0.500	--	3
	Formaldehyde	0.100	--	2	0.003*	--	2
1. 2. 5. Copolymer of styrene with methyl methacrylate and acrylonitrile	Styrene	0.010	--	2	0.002	--	2
	Methyl methacrylate	0.250	--	2	0.010	--	3
	Acrylonitrile	0.020	--	2	0.030	--	2
	Methanol	0.200	--	2	0.500	--	3
	Formaldehyde	0.100	--	2	0.003*	--	2
1. 2. 6. Copolymer of styrene with alpha-methylstyrene	Styrene	0.010	--	2	0.002	--	2
	Alpha-methylstyrene	--	0.100	3	0.040	--	3
	Benzaldehyde	--	0.003	4	0.040	--	3
	Acetophenone	--	0.100	3	0.003	--	3
1. 2. 7. Copolymer of styrene with butadiene	Styrene	0.010	--	2	0.002	--	2
	Butadiene	--	0.050	4	1.000	--	4
	Acetaldehyde	--	0.200	4	0.010	--	3
	Acetone	0.100	--	3	0.350	--	4
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	butyl	0.500	--	2	0.100	--	3
	Xylols (isomer mixture)	--	0.050	3	0.200	--	3
1. 2. 8. Foamed polystyrenes	Styrene	0.010	--	2	0.002	--	2
	Benzene	--	0.010	2	0.100	--	2
	Toluene	--	0.500	4	0.600	--	3
	Ethylbenzene	--	0.010	4	0.020	--	3
	Cumene (isopropylbenzene)	--	0.100	3	0.014	--	4

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3 in Atmospheric Air	TSELs, mg/m^3 in Atmospheric Air	Hazard Class
	Methanol	0.200	--	2	0.500	--	3
	Formaldehyde	0.100	--	2	0.003*	--	2
1.3. Polyvinyl chloride plastics							
	Acetaldehyde	--	0.200	4	0.010	--	3
	Acetone	0.100	--	3	0.350	--	4
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	propyl	0.100	--	4	0.300	--	3
	isopropyl	0.100	--	4	0.600	--	3
	butyl	0.500	--	2	0.100	--	3
	isobutyl	0.500	--	2	0.100	--	4
	Benzene	--	0.010	2	0.100	--	2
	Toluene	--	0.500	4	0.600	--	3
	Zinc (Zn)	1.000	--	3	--	--	--
	Stannum (Sn)	--	2.000	3	--	--	--
	Dioctylphthalate	2.000	--	3	0.020	--	--
	Dibutyl phthalate	Not allowed					
	Vinyl chloride	0.01	-	2	0.01	-	1
1.4. Polymers based on vinyl acetate and its derivatives polyvinyl acetate polyvinyl alcohol copolymer dispersion of vinyl acetate with dibutyl maleate	Vinyl acetate	--	0.200	2	0.150	--	3
	Formaldehyde	0.100	--	2	0.003*	--	2
	Acetaldehyde	--	0.200	4	0.010	--	3
	Hexane	0.100	--	4	--	--	--
	Heptane	0.100	--	4	--	--	--
1.5. Polyacrylates	Hexane	0.100	--	4	--	--	--
	Heptane	0.100	--	4	--	--	--
	Acrylonitrile	0.020	--	2	0.030	--	2
	Methylacrylate	--	0.020	4	0.010	--	4
	Methyl methacrylate	0.250	--	2	0.010	--	3
	Butyl acrylate	--	0.010	4	0.0075	--	2

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3 in Atmospheric Air	TSELs, mg/m^3 in Atmospheric Air	Hazard Class
1.6. Polyorganosiloxane (silicones)	Formaldehyde	0.100	--	2	0.003*	--	2
	Acetaldehyde	--	0.200	4	0.010	--	3
	Phenol	0.050	--	4	0.003	--	2
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	butyl	0.500	--	2	0.100	--	3
	Benzene	--	0.010	2	0.100	--	2
1.7. Polyamides:							
1.7.1. Polyamide 6 (polycaproamid, capron)	E-caprolactam	0.500	--	4	0.060	--	3
	Benzene	--	0.010	2	0.100	--	2
	Phenol	0.050	--	4	0.003	--	2
1.7.2. Polyamide 66 (polyhexamethylene adipamide, nylon)	Hexamethylenediamine	0.010	--	2	0.001	--	2
	Methanol	0.200	--	2	0.500	--	3
	Benzene	--	0.010	2	0.100	--	2
1.7.3. Polyamide 610 (polyhexamethylene sebacamide)	Hexamethylenediamine	0.010	--	2	0.001	--	2
	Methanol	0.200	--	2	0.500	--	3
	Benzene	--	0.010	2	0.100	--	2
1.8. Polyurethanes	Ethylene glycol	--	1.000	3	1.000	--	--
	Acetaldehyde	--	0.200	4	0.010	--	3
	Formaldehyde	0.100	--	2	0.003*	--	2
	Ethyl acetate	0.100	--	2	0.100	--	4
	Butyl acetate	--	0.100	4	0.100	--	4
	Acetone	0.100	--	3	0.350	--	4
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	propyl	0.100	--	4	0.300	--	3
	isopropyl	0.100	--	4	0.600	--	3
	Benzene	--	0.010	2	0.100	--	2
	Toluene	--	0.500	4	0.600	--	3
1.9. Polyethers:							
1.9.1.	Formaldehyde	0.100	--	2	0.003*	--	2

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3 in Atmospheric Air	TSELs, mg/m^3 in Atmospheric Air	Hazard Class
Polyethylene oxide	Acetaldehyde	--	0.200	4	0.010	--	3
1.9.2. Polypropylene oxide	Methyl acetate	--	0.100	3	0.070	--	4
	Acetone	0.100	--	3	0.350	--	4
	Formaldehyde	0.100	--	2	0.003*	--	2
	Acetaldehyde	--	0.200	4	0.010	--	3
1.9.3. Polytetramethylene oxide	Propyl alcohol	0.100	--	4	0.300	--	3
	Acetaldehyde	--	0.200	4	0.010	--	3
	Formaldehyde	0.100	--	2	0.003*	--	2
1.9.4. Polyphenylene oxide	Phenol	0.050	--	4	0.003	--	2
	Formaldehyde	0.100	--	2	0.003*	--	2
	Methanol	0.200	--	2	0.500	--	3
1.9.5. Polyethylene terephthalate and copolymers on the basis of terephthalic acid	Acetaldehyde	--	0.200	4	0.010	--	3
	Ethylene glycol	--	1.000	3	1.000	--	--
	Dimethyl terephthalate	--	1.500	4	0.010	--	--
	Formaldehyde	0.100	--	2	0.003*	--	2
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	butyl	0.500	--	2	0.100	--	3
	isobutyl	0.500	--	2	0.100	--	4
	Acetone	0.100	--	3	0.350	--	4
1.9.6. Polycarbonate	Phenol	0.050	--	4	0.003	--	2
	Methylene chloride	--	7.500	3	--	--	--
	Chlorobenzene	--	0.020	3	0.100	--	3
	Benzene	--	0.010	2	0.100	--	2
	Phenol	0.050	--	4	0.003	--	2
1.9.8. Polyphenylene sulphide	Phenol	0.050	--	4	0.003	--	2
	Acetaldehyde	--	0.200	4	0.010	--	3
	Methanol	0.200	--	2	0.500	--	3
	Dichlorobenzene	--	0.002	3	0.030	--	--
	Borium (B)	0.500	--	2	--	--	--
1.9.9. In case of using as a cohesive element:							
Phenol formaldehyde resins	Phenol	0.050	--	4	0.003	--	2
	Formaldehyde	0.100	--	2	0.003*	--	2
Silicone resin	Formaldehyde	0.100	--	2	0.003*	--	2

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3 in Atmospheric Air	TSELs, mg/m^3 in Atmospheric Air	Hazard Class
	Acetaldehyde	--	0.200	4	0.010	--	3
	Phenol	0.050	--	4	0.003	--	2
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	butyl	0.500	--	2	0.100	--	3
	Benzene	--	0.010	2	0.100	--	2
Epoxide resins	Epichlorohydrin	0.100	--	2	0.200	--	2
	Phenol	0.050	--	4	0.003	--	2
	Formaldehyde	0.100	--	2	0.003*	--	2
1.10. Fluoroplastic: fluoroplastic-3 fluoroplastic-4, teflon	Fluorine ion	0.500	--	2	--	--	--
	Formaldehyde	0.100	--	2	0.003*	--	2
	Hexane	0.100	--	4	--	--	--
	Heptane	0.100	--	4	--	--	--
1.11. Plastics on the basis of phenol aldehyde resins (phenolic resins)	Formaldehyde	0.100	--	2	0.003*	--	2
	Acetaldehyde	--	0.200	4	0.010	--	3
	Phenol	0.050	--	4	0.003	--	2
1.12. Polyformaldehyde	Formaldehyde	0.100	--	2	0.003*	--	2
	Acetaldehyde	--	0.200	4	0.010	--	3
1.13. Aminoplasts (condensed masses carbamido- and melamine formaldehyde)	Formaldehyde	0.100	--	2	0.003*	--	2
1.14. Polymer materials on the basis of epoxy resins	Epichlorohydrin	0.100	--	2	0.200	--	2
	Phenol	0.050	--	4	0.003	--	2
	Formaldehyde	0.100	--	2	0.003*	--	2
1.15. Ionomeric resins, including resin	Formaldehyde	0.100	--	2	0.003*	--	2
	Acetaldehyde	--	0.200	4	0.010	--	3
	Formaldehyde	0.100	--	2	0.003*	--	2
	Methanol	0.200	--	2	0.500	--	3
	Zinc (Zn)	1.000	--	3	--	--	--
1.16. Cellulose	Ethyl acetate	0.100	--	2	0.100	--	4

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3 in Atmospheric Air	TSELs, mg/m^3 in Atmospheric Air	Hazard Class
	Formaldehyde	0.100	--	2	0.003*	--	2
	Benzene	--	0.010	2	0.100	--	2
	Acetone	0.100	--	3	0.350	--	4
1.17. Ether cellulose plastics (etrols)	Ethyl acetate	0.100	--	2	0.100	--	4
	Acetaldehyde	--	0.200	4	0.010	--	3
	Formaldehyde	0.100	--	2	0.003*	--	2
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	isobutyl	0.500	--	2	0.100	--	4
	Acetone	0.100	--	3	0.350	--	4
1.18. Collagen (biopolymer)	Formaldehyde**	0.100	--	2	0.003*	--	2
	Acetaldehyde	--	0.200	4	0.010	--	3
	Ethyl acetate	0.100	--	2	0.100	--	4
	Butyl acetate	--	0.100	4	0.100	--	4
	Acetone	0.100	--	3	0.350	--	4
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	propyl	0.100	--	4	0.300	--	3
	isopropyl	0.100	--	4	0.600	--	3
	butyl	0.500	--	2	0.100	--	3
	isobutyl	0.500	--	2	0.100	--	4
2. Paraffins and Waxes							
2.1. Paraffins and waxes	Hexane	0.100	--	4	--	--	--
	Heptane	0.100	--	4	--	--	--
	Benz(a)pyrene	Not allowed		1	Not allowed		
	Acetaldehyde	--	0.200	4	0.010	--	3
	Formaldehyde	0.100	--	2	0.003*	--	2
	Acetone	0.100	--	3	0.350	--	4
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	butyl	0.500	--	2	0.100	--	3
	Toluene	--	0.500	4	0.600	--	3

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
3. Paper, Paperboard, Parchment, Imitation Parchment							
3.1. Paper	Ethyl acetate	0.100	--	2	0.100	--	4
	Formaldehyde	0.100	--	2	0.003*	--	2
	Acetaldehyde	--	0.200	4	0.010	--	3
	Acetone	0.100	--	3	0.350	--	4
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	butyl	0.500	--	2	0.100	--	3
	Toluene	--	0.500	4	0.600	--	3
	Benzene	--	0.010	2	0.100	--	2
	Lead (Pb)	0.030	--	2	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--
	Arsenic (As)	0.050		2			
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
3.2. Paraffin paper, in addition to the indicators specified for paper, it is necessary to determine	Hexane	0.100	--	4	--	--	--
	Heptane	0.100	--	4	--	--	--
	Benz(a)pyrene	Not allowed					
3.3. Paperboard	Ethyl acetate	0.100	--	2	0.100	--	4
	Butyl acetate	--	0.100	4	0.100	--	4
	Acetaldehyde	--	0.200	4	0.010	--	3
	Formaldehyde	0.100	--	2	0.003*	--	2
	Acetone	0.100	--	3	0.350	--	4
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	isopropyl	0.100	--	4	0.600	--	3
	butyl	0.500	--	2	0.100	--	3
	isobutyl	0.500	--	2	0.100	--	4
	Benzene	--	0.010	2	0.100	--	2
	Toluene	--	0.500	4	0.600	--	3

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
	Xylols (isomer mixture)	--	0.050	3	0.200	--	3
	Lead (Pb)	0.030	--	2	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--
	Arsenic (As)	0.050	--	2	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
Coated paperboard to be additionally defined	Titanium (Ti)	0.100	--	3	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
	Barium (Ba)	0.100	--	2	--	--	--
3.4. Chipboard**	Butyl acetate	--	0.100	4	0.100	--	4
	Ethyl acetate	0.100	--	2	0.100	--	4
	Acetaldehyde	--	0.200	4	0.010	--	3
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	butyl	0.500	--	2	0.100	--	3
	Acetone	0.100	--	3	0.350	--	4
	Formaldehyde	0.100	--	2	0.003*	--	2
	Benzene	--	0.010	2	0.100	--	2
	Toluene	--	0.500	4	0.600	--	3
	Xylols (isomer mixture)	--	0.050	3	0.200	--	3
	Lead (Pb)	0.030	--	2	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--
	Arsenic (As)	0.050	--	2	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Cadmium (Cd)	0.001	--	2	--	--	--
	Barium (Ba)	0.100	--	2	--	--	--
3.5. Filtered paperboard	Ethyl acetate	0.100	--	2	0.100	--	4
	Acetaldehyde	--	0.200	4	0.010	--	3
	Methanol	0.200	--	2	0.500	--	3
	Acetone	0.100	--	3	0.350	--	4
	Formaldehyde	0.100	--	2	0.003*	--	2
	Lead (Pb)	0.030	--	2	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
	Arsenic (As)	0.050	--	2	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
with addition of polyamide-epichlorohydrin resins	E-caprolactam	0.500	--	4	0.060	--	3
	Phenol	0.050	--	4	0.003	--	2
	Epichlorohydrin	0.100	--	2	0.200	--	2
with addition of fine dispersed aluminium	Aluminium (Al)	0.500	--	2	--	--	--
with addition of diatomite	Aluminium (Al)	0.500	--	2	--	--	--
	Silicium (Si)	--	10.000	2	--	--	--
	Iron (Fe)	0.300					
	Lead (Pb)	0.030	--	2	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Beryllium (Be)	0.0002	--	1	--	--	--
	Titanium (Ti)	0.100	--	3	--	--	--
3.6. Vegetable parchment	Ethyl acetate	0.100	--	2	0.100	--	4
	Formaldehyde	0.100	--	2	0.003*	--	2
	Alcohols:						
	Methyl	0.200	--	2	0.500	--	3
	propyl	0.100	--	4	0.300	--	3
	isopropyl	0.100	--	4	0.600	--	3
	butyl	0.500	--	2	0.100	--	3
	isobutyl	0.500	--	2	0.100	--	4
	Acetone	0.100	--	3	0.350	--	4
	Lead (Pb)	0.030	--	2	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--
	Arsenic (As)	0.050	--	2	--	--	--
	Copper (Cu)	1.000	--	3	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
3.7. Imitation	Ethyl acetate	0.100	--	2	0.100	--	4

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
parchment (paper with additive agents imitating vegetable parchment properties)	Formaldehyde	0.100	--	2	0.003*	--	2
	Acetaldehyde	--	0.200	4	0.010	--	3
	Phenol	0.050	--	4	0.003	--	2
	Epichlorohydrin	0.100	--	2	0.200	--	2
	E-caprolactam	0.500	--	4	0.060	--	3
	Alcohols:						
	Methyl	0.200	--	2	0.500	--	3
	propyl	0.100	--	4	0.300	--	3
	isopropyl	0.100	--	4	0.600	--	3
	butyl	0.500	--	2	0.100	--	3
	isobutyl	0.500	--	2	0.100	--	4
	Acetone	0.100	--	3	0.350	--	4
	Benzene	--	0.010	2	0.100	--	2
	Toluene	--	0.500	4	0.600	--	3
	Xylols (isomer mixture)	--	0.050	3	0.200	--	3
	Zinc (Zn)	1.000	--	3	--	--	--
	Lead (Pb)	0.030	--	2	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Arsenic (As)	0.050	--	2	--	--	--
	Titanium (Ti)	0.100	--	3	--	--	--
	Cadmium (Cd)	0.001	--	2	--	--	--
4. Glass and Glass Articles****)							
4.1. Glass containers for food products							
- colourless and semi-white glasses	Boron (B)	0.500	--	2	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
	Arsenic (As)	0.050	--	2	--	--	--
- green glasses	Aluminium (Al)	0.500	--	2	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Copper (Cu)	1.000	--	3	--	--	--
	Boron (B)	0.500	--	2	--	--	--
- brown glasses	Aluminium (Al)	0.500	--	2	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Boron (B)	0.500	--	2	--	--	--
- crystal glass	Lead (Pb)	****)	--	2	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
	Boron (B)	0.500	--	2	--	--	--
	Cadmium (Cd)	****)	--	2	--	--	--
in addition when assessing barium crystal glass	Barium (Ba)	0.100	--	2	--	--	--
In addition when dyeing:							
- blue	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Copper (Cu)	1.000	--	3	--	--	--
- dark blue	Cobalt (Co)	0.100	--	2	--	--	--
- red	Copper (Cu)	1.000	--	3	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
- yellow	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Cadmium (Cd)	****	--	2	--	--	--
	Barium (Ba)	0.100	--	2	--	--	--
4.2. Glass articles with decorative finish							
- titanium, titanium nitride, titanium dioxide	Titanium (Ti)	0.100	--	3	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
	Boron (B)	0.500	--	2	--	--	--
- zirconium, zirconium nitride, zirconium dioxide	Boron (B)	0.500	--	2	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
- chrome	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Silicium (Si)	--	10.000	2	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
	Boron (B)	0.500	--	2	--	--	--
5. Ceramics ****)							
5.1. Ceramic articles	Boron (B)	0.500	--	2	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--
	Titanium (Ti)	0.100	--	3	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
	Cadmium (Cd)	****)	--	2	--	--	--
	Barium (Ba)	0.100	--	2	--	--	--

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
- when using lead glaze	Lead (Pb)	****)	--	2	--	--	--
- when using selenium-cadmium glaze	Cadmium (Cd)	****)	--	2	--	--	--
- when using barytic glaze	Barium (Ba)	0.100	--	2	--	--	--
- when using colouring agents providing pink-brown shades and black colour	Manganese (Mn)	0.100	--	3	--	--	--
- when using green and black colouring agents	Copper (Cu)	1.000	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
- when using dark blue colouring agents	Cobalt (Co)	0.100	--	2	--	--	--
- when using yellow colouring agents	Cadmium (Cd)	****	--	2	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
6. Porcelain and Faience Articles****)							
6.1. Porcelain and Faience articles with underglaze painting	Lead (Pb)	****	--	2	--	--	--
	Cadmium (Cd)	****	--	2	--	--	--
When cobalt oxide is added to the mass it is required to determine additionally:	Cobalt (Co)	0.100	--	2	--	--	--
- when using lead free glaze	Aluminium (Al)	0.500	--	2	--	--	--
	Boron (B)	0.500	--	2	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--
	Lithium (Li)	--	0.030	2	--	--	--
- when using barytic glaze	Aluminium (Al)	0.500	--	2	--	--	--
	Barium (Ba)	0.100	--	2	--	--	--
	Boron (B)	0.500	--	2	--	--	--

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
When using coloured glaze:							
- pink	Manganese (Mn)	0.100	--	3	--	--	--
- blue	Cobalt (Co)	0.100	--	2	--	--	--
	Copper (Cu)	1.000	--	3	--	--	--
- yellow	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Cadmium (Cd)	****	--	2	--	--	--
6.2. Porcelain and faience articles with underglaze painting	Additionally controlled indicators shall be determined by the paint composition						
7. Steel Enamelware							
7.1. Steel enamelware produced with the use of silicate enamel (ferrits)	Aluminium (Al)	0.500	--	2	--	--	--
	Boron (B)	0.500	--	2	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Cobalt (Co)	0.100	--	2	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
7.2. Steel enamelware produced with the use of titanium enamel	Aluminium (Al)	0.500	--	2	--	--	--
	Boron (B)	0.500	--	2	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Cobalt (Co)	0.100	--	2	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Lead (Pb)	0.030	--	2	--	--	--
	Arsenic (As)	0.050	--	2	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--
	Titanium (Ti)	0.100	--	3	--	--	--
8. Non-Stick Cookware							
8.1. Non-stick cookware on the basis of fluoroplastic	Fluoride ion (cumulatively)	0.500	--	2	--	--	--
	Acetaldehyde	--	0.200	4	0.010	--	3
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	propyl	0.100	--	4	0.300	--	3

Name of Material, Article	Controlled Indicators	AML, mg/l	MAC w, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
	isopropyl	0.100	--	4	0.600	--	3
	butyl	0.500	--	2	0.100	--	3
	isobutyl	0.500	--	2	0.100	--	4
	Xylols (isomer mixture)	--	0.050	3	0.200	--	3
Non-stick coating:							
- grey colour	Titanium (Ti)	0.100	--	3	--	--	--
- dark blue colour	Cobalt (Co)	0.100	--	2	--	--	--
- brown colour	Iron (Fe)	0.300	--	--	--	--	--
- green colour	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
- pink colour	Manganese (Mn)	0.100	--	3	--	--	--
When applying the coating to carbon and low-alloyed steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
When applying the coating to aluminium and aluminium alloys	Aluminium (Al)	0.500	--	2	--	--	--
	Copper (Cu)	1.000	--	3	--	--	--
9. Lacquered Cans							
9.1. Cans lacquered with epoxy phenolic varnish	Epichlorohydrin	0.100	--	2	0.200	--	2
	Formaldehyde	0.100	--	2	0.003*	--	2
	Phenol	0.050	--	4	0.003	--	2
	Zinc (Zn)	1.000	--	3	--	--	--
	Lead (Pb)	0.030	--	2	--	--	--
	Xylols (isomer mixture)	--	0.050	3	0.200	--	3
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	propyl	0.100	--	4	0.300	--	3
	butyl	0.500	--	2	0.100	--	3
	isobutyl	0.500	--	2	0.100	--	4
	Acetone	0.100	--	3	0.350	--	4
	Ethylbenzene	--	0.010	4	0.020	--	3
9.2. Cans lacquered with phenolic oil varnish	Formaldehyde	0.100	--	2	0.003*	--	2
	Phenol	0.050	--	4	0.003	--	2
	Lead (Pb)	0.030	--	2	--	--	--

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
9.3. Cans coated with protein resistant enamel, containing zinc paste	Epichlorohydrin	0.100	--	2	0.200	--	2
	Formaldehyde	0.100	--	2	0.003*	--	2
	Zinc (Zn)	1.000	--	3	--	--	--
	Lead (Pb)	0.030	--	2	--	--	--
9.4. Cans with vinylorgansolic coating	Formaldehyde	0.100	--	2	0.003*	--	2
	Acetaldehyde	--	0.200	4	0.010	--	3
	Phenol	0.050	--	4	0.003	--	2
	Acetone	0.100	--	3	0.350	--	4
	Vinyl acetate	--	0.200	2	0.150	--	3
	Vinyl chloride	0.010	--	2	0.010	--	1
	Alcohols:						
	methyl	0.200	--	2	0.500	--	3
	isopropyl	0.100	--	4	0.600	--	3
	butyl	0.500	--	2	0.100	--	3
	isobutyl	0.500	--	2	0.100	--	4
	Xylols (isomer mixture)	--	0.050	3	0.200	--	3
	Lead (Pb)	0.030	--	2	--	--	--
To be additionally defined:							
- when pigmenting varnish with aluminium powder	Aluminium (Al)	0.500	--	2	--	--	--
- when producing cans from aluminium and aluminium alloys	Aluminium (Al)	0.500	--	2	--	--	--
10. Filter Inorganic Materials							
10.1. Diatomaceous earth	Silicium (Si)	--	10.000	2	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Titanium (Ti)	0.100	--	3	--	--	--
10.2. Perlite	Silicium (Si)	--	10.000	2	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Lead (Pb)	0.030	--	2	--	--	--

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Arsenic (As)	0.050	--	2	--	--	--
	Cadmium (Cd)	0.001	--	2	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Titanium (Ti)	0.100	--	3	--	--	--
11. Metals, Alloys							
11.1. Cast iron	Iron (Fe)	0.300	--	--	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Copper (Cu)	1.000	--	3	--	--	--
11.2. Carbon steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Copper (Cu)	1.000	--	3	--	--	--
11.3. Low-alloyed steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Copper (Cu)	1.000	--	3	--	--	--
11.4. Fine carbon steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
11.5. Chromium steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--

Name of Material, Article	Controlled Indicators	AML, mg/l	MAC w, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
11.6. Chromium-silicon steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Silicium (Si)	--	10.000	2	--	--	--
11.7. Chromium-vanadium steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Copper (Cu)	1.000	--	3	--	--	--
11.8. Chromium-nickel steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
11.9. Chromium-manganese steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
11.10. Chromium-manganese-titanium steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Titanium (Ti)	0.100	--	3	--	--	--
11.11. Silicon-manganese- and chromium-silicon-manganese steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Silicium (Si)	--	10.00	2	--	--	--
11.12.	Iron (Fe)	0.300	--	--	--	--	--

Name of Material, Article	Controlled Indicators	AML, mg/l	MAC w, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
Chromium-molybdenum steel	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Molybdenum (Mo)	0.250	--	2	--	--	--
11.13. Chromium-nickel-tungsten and chromium-nickel-molybdenum steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Tungsten (W)	0.050	--	2	--	--	--
	Molybdenum (Mo)	0.250	--	2	--	--	--
11.14. Chromium-molybdenum-aluminium and chromium-aluminium steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
	Molybdenum (Mo)	0.250	--	2	--	--	--
11.15. Chromium-nickel-tungsten-vanadium steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Vanadium (V)	0.100	--	3	--	--	--
	Tungsten (W)	0.050	--	2	--	--	--
11.16. Fine spring-elastic hot-rolled steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
11.17. Corrosion-	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
resistant and heat-resistant steel	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
11.18. Low-alloyed heat-resistant pearlitic steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Molybdenum (Mo)	0.250	--	2	--	--	--
	Vanadium (V)	0.100	--	3	--	--	--
	Copper (Cu)	1.000	--	3	--	--	--
11.19. Heat-resistant martensitic and martensitic-ferrite steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Molybdenum (Mo)	0.250	--	2	--	--	--
	Vanadium (V)	0.100	--	3	--	--	--
	Tungsten (W)	0.050	--	2	--	--	--
11.20. Heat-resistant austenitic steel	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Molybdenum (Mo)	0.250	--	2	--	--	--
	Tungsten (W)	0.050	--	2	--	--	--
	Columbium (Nb)	--	0.010	2	--	--	--
	Titanium (Ti)	0.100	--	3	--	--	--
11.21. Iron-nickel based alloys	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumul	--	3	--	--	--

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
	Chrome (Cr 6+)	atively 0.100	--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Tungsten (W)	0.050	--	2	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
	Titanium (Ti)	0.100	--	3	--	--	--
11.22. Nickel based alloys	Nickel (Ni)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Tungsten (W)	0.050	--	2	--	--	--
	Molybdenum (Mo)	0.250	--	2	--	--	--
	Columbium (Nb)	--	0.010	2	--	--	--
	Titanium (Ti)	0.100	--	3	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
11.23. Copper	Copper (Cu)	1.000	--	3	--	--	--
	Antimony (Sb)	--	0.050	2	--	--	--
	Arsenic (As)	0.050	--	2	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Lead (Pb)	0.030	--	2	--	--	--
11.24. Brass (alloy of copper and zinc) simple, wrought	Copper (Cu)	1.000	--	3	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Lead (Pb)	0.030	--	2	--	--	--
- special	Copper (Cu)	1.000	--	3	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
	Stannum (Sn)	--	2.000	3	--	--	--
	Lead (Pb)	0.030	--	2	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
- casting	Copper (Cu)	1.000	--	3	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
	Silicium (Si)	--	10.000	2	--	--	--
	Stannum (Sn)	--	2.000	3	--	--	--
	Lead (Pb)	0.030	--	2	--	--	--
- secondary	Copper (Cu)	1.000	--	3	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Silicium (Si)	--	10.000	2	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Stannum (Sn)	--	2.000	3	--	--	--
	Lead (Pb)	0.030	--	2	--	--	--
11.25. Tin bronze	Copper (Cu)	1.000	--	3	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Stannum (Sn)	--	2.000	3	--	--	--
	Lead (Pb)	0.030	--	2	--	--	--
- tinless	Copper (Cu)	1.000	--	3	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Lead (Pb)	0.030	--	2	--	--	--
	Beryllium (Be)	0.0002	--	1	--	--	--
11.26. Copper-nickel alloys							
- melchior	Copper (Cu)	1.000	--	3	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
- nickel silver	Copper (Cu)	1.000	--	3	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
- lead nickel silver	Copper (Cu)	1.000	--	3	--	--	--
	Nickel (Ni)	0.100	--	3	--	--	--
	Lead (Pb)	0.030	--	2	--	--	--
11.27. Nickel alloys							
- silicate nickel	Nickel (Ni)	0.100	--	3	--	--	--
	Silicium (Si)	--	10.000	2	--	--	--
- manganese nickel	Nickel (Ni)	0.100	--	3	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
- alumel	Nickel (Ni)	0.100	--	3	--	--	--
	Silicium (Si)	--	10.000	2	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
- chromel	Nickel (Ni)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0,100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
- monel	Nickel (Ni)	0.100	--	3	--	--	--
	Copper (Cu)	1.000	--	3	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
- nichrome	Nickel (Ni)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.10	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Titanium (Ti)	0.100	--	3	--	--	--
- ferronichrome	Nickel (Ni)	0.100	--	3	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
11.28. Solder							
-tin-lead	Tin (Sn)	--	2.000	3	--	--	--
	Lead (Pb)	0.030	--	2	--	--	--
- lead-silver	Lead (Pb)	0.030	--	2	--	--	--
	Cadmium (Cd)	0.001	--	2	--	--	--
	Silver (Ag)	--	0.050	2	--	--	--
11.29. Zinc and zinc alloys	Zinc (Zn)	1.000	--	3	--	--	--
	Lead (Pb)	0.030	--	2	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Cadmium (Cd)	0.001	--	2	--	--	--
	Copper (Cu)	1.000	--	3	--	--	--
11.30. Primary aluminium							
- of special purity	Aluminium (Al)	0.500	--	2	--	--	--
- of high purity	Aluminium (Al)	0.500	--	2	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Silicium (Si)	--	10.000	2	--	--	--
	Copper (Cu)	1.000	--	3	--	--	--
- of technical	Aluminium (Al)	0.500	--	2	--	--	--

Name of Material, Article	Controlled Indicators	AML, mg/l	MACw, mg/l	Hazard Class	MACd.a., mg/m^3	TSELs, mg/m3	Hazard Class
purity	Iron (Fe)	0.300	--	--	--	--	--
	Silicium (Si)	--	10.000	2	--	--	--
	Copper (Cu)	1.000	--	3	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--
	Titanium (Ti)	0.100	--	3	--	--	--
11.31. Aluminium alloys							
- wrought	Aluminium (Al)	0.500	--	2	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Copper (Cu)	1.000	--	3	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--
	Titanium (Ti)	0.100	--	3	--	--	--
	Vanadium (V)	0.100	--	3	--	--	--
- casting	Aluminium (Al)	0.500	--	2	--	--	--
	Copper (Cu)	1.000	--	3	--	--	--
	Silicium (Si)	--	10.000	2	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Zinc (Zn)	1.000	--	3	--	--	--
	Titanium (Ti)	0.100	--	3	--	--	--
11.32. Technical titanium	Titanium (Ti)	0.100	--	3	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--
	Silicium (Si)	--	10.000	2	--	--	--
11.33. Titanium alloys	Titanium (Ti)	0.100	--	3	--	--	--
	Aluminium (Al)	0.500	--	2	--	--	--
	Chrome (Cr 3+)	cumulatively 0.100	--	3	--	--	--
	Chrome (Cr 6+)		--	3	--	--	--
	Molybdenum (Mo)	0.250	--	2	--	--	--
	Manganese (Mn)	0.100	--	3	--	--	--
	Vanadium (V)	0.100	--	3	--	--	--
	Iron (Fe)	0.300	--	--	--	--	--

*) standard is specified without regard to background ambient air pollution

**) for all types of artificial protein coatings the total quantity of aldehydes (including formaldehyde) AML value is 0.8 mg/l.

***) Paper and paperboard containing paper waste may be used only for packaging of food products with humidity of not more than 15%.

****) AML value for lead and cadmium for glass and glass articles, ceramics, faience and porcelain articles are specified in Table 3.

Table 3

Hygienic Standards for Lead and Cadmium Evolving from Glass and Glass Articles, Ceramics, Faience and Porcelain Articles Coming into Contact with Food Products

Dishware Type	**Controlled Indicators**	**Measurement Units**	AML
Flat	cadmium	mg/dm^2	0.07
	lead	mg/dm^2	0.8
Small deep	cadmium	mg/l	0.5
	lead	mg/l	2.0
Large deep	cadmium	mg/l	0.25
	lead	mg/l	1.0
Deep, for keeping	cadmium	mg/l	0.25
	lead	mg/l	0.5
Cups and mugs	cadmium	mg/l	0.05
	lead	mg/l	0.5
For heat treatment of food products	cadmium	mg/l	0.05
	lead	mg/l	0.5

Table 4

Organoleptic Indicators of Aqueous Extracts Found out in the Course of Examination of Materials and Articles Intended to Come into Contact with Food Products with Humidity of More than 15%.

Controlled Indicators	**Standard**
Smell (scores)	Not more than 1
Aftertaste	Not allowed
Turbidity	Not allowed
Sediment	Not allowed

Table 5

Organoleptic Indicators Found out in the Course of Examination of Materials and Articles Intended to Come into Contact with Food Products with Humidity of not More than 15%.

Controlled Indicators	**Standard**
Smell (scores)	Not allowed
Taste	Not allowed
Colour	Not allowed