Sanitation standard for food utensils, containers and packages

Article 1
This Standard is prescribed in accordance with the provisions of Article 17 of the Act Governing Food Safety and Sanitation.

Article 2
Plastic food containers and packages shall not be recycled to repackage food then sell.

Article 3
Food utensils, containers and packages shall not have discoloration, off odor and flavor, contamination, moulds, foreign matter or stripped fiber.

Article 4
The food utensils and containers which use for children under the age of three, shall not add di-(2-ethylhexyl) phthalate (DEHP), Di-n-octyl phthalate (DNOP), dibutyl phthalate (DBP) and Benzyl butyl phthalate (BBP).

Article 5
Plastic infant feeding bottles shall not contain of Bisphenol A.

Article 6
Food utensils, containers and packages shall meet the requirements according to the following standard tests：

1. General requirements as Appendix table 1.
2. The plastic materials listed in the Appendix table 2, shall also comply with the Appendix table 1.
3. The containers and packages for dairy products shall comply with the Appendix table 3.

Article 7
This Standard shall be implemented from the date of promulgation.

Appendix table 1. General requirements

Item and raw materials	Material test item and passing standard	Migration test			Note
		Solvent (1)	Migration condition	Item and passing standard	
Utensils	The materials and construction shall not have the risk of coming-off of copper, lead or their alloys.				
Utensils, containers and packages made of copper or copper alloy	The materials shall have their characteristic gloss and be not rusting. Those parts which are in direct contact with food contents shall be completely coated with tin or silver, or subjected to appropriate treatment, which is not causing health hazards.				
Tin for coating	Lead: Not more than 5%				
Solder materials for manufacturing and patching-up utensils, containers and packages	Lead: Not more than 20% Solder materials for use on the outside of empty cans shall meet the following requirements： Double-seam cans: Lead, not more than 98%; Non-double-seam cans: Lead, not more than 60%.				
Utensils, containers and packages	Coloring agents shall meet the regulations set in the Scope and Application Standard of Food Additives, except those coloring agents which have no risk of migration into the foods.				
Glass, porcelain, and enameled utensils or containers；(a)More than		4% Acetic acid	Room temperature (dark place) for 24 hours	Lead: Not more than 5 ppm. Cadmium: Not more than 0.5 ppm.	

2.5 cm in depth but not more than 1.1 L of its capacity.					
Glass, porcelain, and enameled utensils or containers；(b)More than 2.5 cm in depth and more than 1.1 L of its capacity.		4% Acetic acid	Room temperature (dark place) for 24 hours	Lead: Not more than 2.5 ppm. Cadmium: Not more than 0.25 ppm.	
Glass, porcelain, and enameled utensils or containers；(c)Not more than 2.5 cm in depth or unable to be filled up with liquid.		4% Acetic acid	Room temperature (dark place) for 24 hours	Lead: Not more than 17μg/cm^2. Cadmium: Not more than 1.7μg/cm^2.	
Metal alloy-the direct contact surface material with food is metal alloy.	Lead: Not more than 0.1%. Antimony: Not more than 5%.	Water	60℃ for 30 min (2)	Arsenic: Not more than 0.2 ppm. Lead: Not more than 0.4 ppm. Cadmium: Not more than 0.1 ppm.	
		0.5% Citric acid solution	60℃ for 30 min	Arsenic: Not more than 0.2 ppm. Lead: Not more than 0.4 ppm. Cadmium: Not more than 0.1 ppm.	
		n-Heptane	25℃ for 1 hour	Residues after evaporation: Not more than 90 ppm.	Applied to the metal cans for foods with natural fats and oils as the major raw material and the inner side coated with a coating material containing more than

					3%of zinc oxide.
Metal alloy-the direct contact surface material with food is synthetic resins.		Water	60℃ for 30 min (2)	Phenol: Not more than 5 ppm. Formaldehyde: Negative. Residues after evaporation: Not more than 30 ppm. When the residue exceeds 30 ppm, the chloroform-soluble extracts shall not be more than 30 ppm.	
		4%Acetic acid	60℃ for 30 min (2)	Residues after evaporation: Not more than 30 ppm.	
		20% Ethanol	60℃ for 30 min	Residues after evaporation: Not more than 30 ppm.	
		n-Pentane	25℃ for 1 hours	Epichlorohydrin monomer: Not more than 0.5 ppm.	
		Ethanol (99.5%)	Below 5℃ for 24 hours	Vinyl chloride monomer: Not more than 0.05 ppm.	
Electrode for utensils (with devices to directly transmit electric current into foods)	The electrode shall be made only of iron, aluminum, platinum and titanium. (Stainless steel can also be used if the electric current transmitted to foods is minimal.)				
Plastics	Lead: Not more than 100 ppm. Cadmium: Not more than 100 ppm. Plasticizer (3): DEHP, DBP, BBP, DIDP, DINP, DMP,	Water	60℃ for 30 min(2)	Consumption of potassium permanganate：Not more than 10 ppm.	1.Besides the above general requirements, plastic utensils containers
		4% Acetic acid	60℃ for 30 min(2)	Heavy metals: Not more than 1 ppm (as Pb).	

	DNOP and DEP, individual content shall not exceed 0.1%. (by mass)	n-Heptane	25℃ for 1 hr	Plasticizer [3]: DEHP: Not more than 1.5 ppm. DBP: Not more than 0.3 ppm. BBP: Not more than 30 ppm. DIDP: Not more than 9 ppm. DINP: Not more than 9 ppm. DEHA: Not more than 18 ppm.	and packages shall also meet the requirements for plastic materials listed in the Appendix table 2. 2. The standard of phthalates in the material test, not applicable for PVC materials.
Paper [4]- the direct contact surface material with food is wax or pulp product	Fluorescent brightening agent：Negative	Water	60℃ for 30 min [2]	Arsenic: Not more than 0.1 ppm (as As_2O_3); Formaldehyde: Negative; Residues after evaporation: Not more than 30 ppm. When the residue exceeds 30 ppm, the chloroform-soluble extracts shall not be more than 40 ppm.	
		4% Acetic acid	60℃ for 30 min [2]	Arsenic: Not more than 0.1 ppm (as As_2O_3); Heavy metals: Not more than 1 ppm (as Pb); Residues after evaporation: Not more than 30 ppm. When the residue exceeds 30 ppm, the chloroform-soluble extracts shall not be more than 40 ppm.	
		n-Heptane	25℃ for 1 hour	Residues after evaporation: Not more than 30 ppm. When the residue exceeds 30 ppm, the chloroform-soluble extracts shall not be more than 40 ppm.	

		20% Ethanol	60℃ for 30 min.	Residues after evaporation: Not more than 30 ppm. When the residue exceeds 30 ppm, the chloroform-soluble extracts shall not be more than 40 ppm.	
Paper [4]- the direct contact surface material with food is plant fiber					
Paper [4]- the direct contact surface material with food is plastics		Shall meet the requirements set for plastics. 1. When use the raw material which listed in the Appendix table 2, shall comply with the requirements in the table 2. 2.The plastic material except the mentioned earlier, the migration test standard shall apply the "Metal alloy- the direct contact surface material with food is synthetic resins".			

(1) The simulation objects of each solvent are described as follows (glass, porcelain, and enameled utensils or containers project not applicable):
a. Water: simulate the contact with foods containing PH>5.
b. 4% Acetic acid, 0.5% Citric acid solution: simulate the contact with foods containing PH≦5.
c. n-Heptane: simulate the contact with foods containing surface oils or oils and fatty foods.
d. 20% Ethanol: simulate contact foods containing alcohol.

(2) The products which are heated to higher than 100℃ during food processing or cooking, the migration condition shall set 95℃ for 30 min.

(3) Abbreviation table of plasticizers:

Abbreviations	English name
DEHP	Di(2-ethylhexyl)phthalate
DBP	Dibutyl phthalate
BBP	Benzyl butyl phthalate
DIDP	Di-isodecyl phthalate
DINP	Di-isononyl phthalate
DMP	Dimethyl phthalate
DNOP	Di-n-octyl phthalate
DEP	Diethyl phthalate
DEHA	Di-2-ethylhexyl Adipate

(4) Remark for paper:
a. This standard applies to the containers such as meal boxes, plates, dishes, bowls and cups, which is mainly made of paper pulp or the fiber of agricultural materials such as wood, sugar cane, reed, hemp, straw, haulm, hull of paddy, bamboo, etc. the weight for physically detachable plastics, or other metal foil shall be less than 10% of the overall weight.
b. Paper containers for dairy products shall meet the standards of 'Requirements for the containers and packages for dairy products' described below.
c. Additives：only allowed for those substances generally recognized as safe.
d. Requirement of papers: the raw materials shall be well packaged and stored under good

condition. Waste paper shall not be used. The shelf life for normal run and side trim paper shall be maintained within 24 months and 6 months, respectively.

e. Recycled materials shall not be used. Paper used shall only be made form virgin materials. The materials from bamboo and wood containing harmful substances shall not be used.

f. If the contact surface of paper product is not completely covered by plastic (including synthetic resin), it should be classified according to its material as wax, pulp product or plant fiber whose internal material is in direct contact with the content.

Appendix table 2. Requirements for plastic materials

Raw materials	Material test item and passing standard	Migration test			Note
		Solvent (1)	Migration condition	Item and passing standard	
Polyvinyl chloride [PVC]	Lead: Not more than 100 ppm. Cadmium: Not more than 100 ppm. Dibutyltin: Not more than 50 ppm (as dibutyltin dichloride) Cresyl phosphate: Not more than 1000 ppm. Vinyl chloride monomer: Not more than 1 ppm. Plasticizer (3): Sum of the DEHP, DBP, BBP, DIDP, DINP, DMP, DNOP and DEP, shall not exceed 0.1%. (by mass)	Water	60℃ for 30 min (2)	Consumption of potassium permanganate: Not more than 10 ppm. Residues after evaporation: Not more than 30 ppm.	
		4 % Acetic acid	60℃ for 30 min (2)	Heavy metals: Not more than 1 ppm (as Pb); Residues after evaporation: Not more than 30 ppm.	
		n-Heptane	25℃ for 1 hour.	Residues after evaporation: Not more than 150 ppm.	
		20 % Ethanol	60℃ for 30 min.	Residues after evaporation: Not more than 30 ppm.	
Polyvinylidene dichloride [PVDC]	Lead: Not more than 100 ppm. Cadmium: Not more than 100 ppm. Barium: Not more than 100 ppm. Vinylidene-dichloride monomer: Not more than 6 ppm.	Water	60℃ for 30 min (2)	Consumption of potassium permanganate: Not more than 10 ppm. Residues after evaporation: Not more than 30 ppm.	
		4%Acetic acid	60℃ for 30 min (2)	Heavy metals: Not more than 1 ppm (as Pb); Residues after evaporation: Not more than 30 ppm.	
		n-Heptane	25℃ for 1 hour.	Residues after evaporation: Not more than 30 ppm.	
		20 % Ethanol	60℃ for 30 min.	Residues after evaporation: Not more than 30 ppm.	
Polyethylene [PE] and polypropylene [PP]	Lead: Not more than 100 ppm. Cadmium: Not more than 100 ppm.	Water	60℃ for 30 min (2)	Consumption of potassium permanganate: Not more than 10 ppm. Residues after evaporation: Not more than 30 ppm.	
		4%Acetic acid	60℃ for 30 min (2)	Heavy metals: Not more than 1 ppm (as Pb); Residues after evaporation: Not more than 30 ppm.	

		n-Heptane	25℃ for 1 hour	Residues after evaporation: Not more than 30 ppm, 150 ppm for those products which are heated to not higher than 100℃ during food processing and cooking.	
		20 % Ethanol	60℃ for 30 min	Residues after evaporation: Not more than 30 ppm.	
Polystyrene [PS]	Lead: Not more than 100 ppm. Cadmium: Not more than 100 ppm. Volatile compounds (the sum of styrene, toluene, ethyl benzene, n-propyl benzene, and isopropyl benzene): Not more than 5000 ppm. Foaming polystyrene shall be not more than 2000 ppm, among which styrene and ethyl benzene shall not be more than 1000 ppm respectively.	Water	60℃ for 30 min (2)	Consumption of potassium permanganate: Not more than 10 ppm. Residues after evaporation: Not more than 30 ppm.	Tableware made of polystyrene are not suitable for filling foods at a temperature higher than 100℃.
		4% Acetic acid	60℃ for 30 min (2)	Heavy metals: Not more than 1 ppm (as Pb); Residues after evaporation: Not more than 30 ppm.	
		n-Heptane	25℃ for 1 hour.	Residues after evaporation: Not more than 240 ppm.	
		20 % Ethanol	60℃ for 30 min.	Residues after evaporation: Not more than 30 ppm.	
Poly(ethylene terephthalate) [PET]	Lead: Not more than 100 ppm. Cadmium: Not more than 100 ppm.	Water	60℃ for 30 min (2)	Consumption of potassium permanganate: Not more than 10 ppm. Residues after evaporation: Not more than 30 ppm.	
		4% Acetic acid	60℃ for 30 min (2)	Heavy metals: Not more than 1 ppm (as Pb); Antimony: Not more than 0.05 ppm. Germanium: Not more than 0.1 ppm. Residues after evaporation: Not more than 30 ppm.	
		n-Heptane	25℃ for 1 hour	Residues after evaporation: Not more than 30 ppm.	
		20 % Ethanol	60℃ for 30 min	Residues after evaporation: Not more than 30 ppm.	
Plastics with	Lead: Not more than 100 ppm.	Water	60℃ for 30 min (2)	Phenol: Negative Formaldehyde: Negative.	

formaldehyde as raw material for synthesis	Cadmium: Not more than 100 ppm.	4% Acetic acid	60℃ for 30 min (2)	Residues after evaporation: Not more than 30 ppm.	
Plastics with formaldehyde-melamine as raw material for synthesis	Lead: Not more than 100 ppm. Cadmium: Not more than 100 ppm.	Water	60℃ for 30 min (2)	Phenol: Negative. Formaldehyde: Negative.	
		4% Acetic acid	60℃ for 30 min (2)	Residues after evaporation: Not more than 30 ppm.	
		4% Acetic acid	95℃ for 30 min	Melamine: Not more than 2.5 ppm.	
Poly (methyl methacrylate) [PMMA]	Lead: Not more than 100 ppm. Cadmium: Not more than 100 ppm.	Water	60℃ for 30 min (2)	Consumption of potassium permanganate: Not more than 10 ppm. Residues after evaporation: Not more than 30 ppm.	
		4% Acetic acid	60℃ for 30 min (2)	Heavy metals: Not more than 1 ppm (as Pb); Residues after evaporation: Not more than 30 ppm.	
		n-Heptane	25℃ for 1 hour	Residues after evaporation: Not more than 30 ppm.	
		20 % Ethanol	60℃ for 30 min	Residues after evaporation: Not more than 30 ppm. Methyl-methacrylate monomer: Not more than 15 ppm.	
Polyamide [PA, Nylon]	Lead: Not more than 100 ppm. Cadmium: Not more than 100 ppm.	Water	60℃ for 30 min (2)	Consumption of potassium permanganate: Not more than 10 ppm. Residues after evaporation: Not more than 30 ppm.	
		4% Acetic acid	60℃ for 30 min (2)	Heavy metals: Not more than 1 ppm (as Pb); Residues after evaporation: Not more than 30 ppm.	
		n-Heptane	25℃ for 1 hour	Residues after evaporation: Not more than 30 ppm.	
		20 % Ethanol	60℃ for 30 min	Residues after evaporation: Not more than 30 ppm. Caprolactam monomer: Not more than 15 ppm.	
Polymethyl pentene [PMP]	Lead: Not more than 100 ppm. Cadmium: Not more than 100 ppm.	Water	60℃ for 30 min (2)	Consumption of potassium permanganate: Not more than 10 ppm. Residues after evaporation: Not more than 30 ppm.	
		4% Acetic acid	60℃ for 30 min (2)	Heavy metals: Not more than 1 ppm (as Pb); Residues after evaporation: Not more than 30 ppm.	

		n-Heptane	25℃ for 1 hour	Residues after evaporation: Not more than 120 ppm.	
		20 % Ethanol	60℃ for 30 min.	Residues after evaporation: Not more than 30 ppm.	
Rubber-except milk feeders for babies	Lead: Not more than 100 ppm. Cadmium: Not more than 100 ppm. 2-Mercaptoimidazoline: Negative.	Water	60℃ for 30 min [(2)]	Phenol: Nor more than 5 ppm. Formaldehyde: Negative. Residues after evaporation: Not more than 60 ppm.	
		4% Acetic acid	60℃ for 30 min [(2)]	zinc: Not more than 15 ppm. Heavy metals: Not more than 1 ppm (as Pb)	
		20 % Ethanol	60℃ for 30 min	Residues after evaporation: Not more than 60 ppm.	
Rubber-milk feeders for babies	Lead: Not more than 100 ppm. Cadmium: Not more than 100 ppm.	Water	40℃ for 24 hours	Phenol: Nor more than 5 ppm. Formaldehyde: Negative. Residues after evaporation: Not more than 40 ppm. zinc: Not more than 1 ppm.	
		4% Acetic acid	40℃ for 24 hours	Heavy metals: Not more than 1 ppm (as Pb)	
Polycarbonate [PC]	Lead: Not more than 100 ppm. Cadmium: Not more than 100 ppm.	Water	95℃ for 30 min	Consumption of potassium permanganate: Not more than 10 ppm. Residues after evaporation: Not more than 30 ppm. Bisphenol A (except feeding bottle): Not more than 0.6 ppm.	
		4% Acetic acid	60℃ for 30 min	Heavy metals: Not more than 1 ppm (as Pb); Residues after evaporation: Not more than 30 ppm. Bisphenol A (except feeding bottle): Not more than 0.6 ppm.	
Polyphenyl sulfone [PPSU]-feeding bottle	Lead: Not more than 100 ppm. Cadmium: Not more than 100 ppm.	Water	95℃ for 30 min	Consumption of potassium permanganate: Not more than 10 ppm. Residues after evaporation: Not more than 30 ppm.	
		4% Acetic acid	60℃ for 30 min	Heavy metals: Not more than 1 ppm (as Pb); Residues after evaporation: Not more than 30 ppm.	
Polyethersulfone [PES]-feeding bottle	Lead: Not more than 100 ppm. Cadmium: Not more than 100 ppm.	Water	95℃ for 30 min	Consumption of potassium permanganate: Not more than 10 ppm. Residues after evaporation: Not more than 30 ppm.	

		4% Acetic acid	60℃ for 30 min	Heavy metals: Not more than 1 ppm (as Pb); Residues after evaporation: Not more than 30 ppm.	
Polylactic acid [PLA]	Lead: Not more than 100 ppm. Cadmium: Not more than 100 ppm.	Water	50℃ for 4 hr (60℃ for 30 min for those products which are heated to higher than 50℃ during food processing or cooking, or use the composite material of PLA.)	Consumption of potassium permanganate: Not more than 10 ppm. Residues after evaporation: Not more than 30 ppm. Total of lactic acid: Not more than 30 ppm.	Food utensils, containers and packages made of polylactic acid are not used for high temperature sterilization during food processing or cooking and are not suitable for filling foods at a temperature higher than 100℃.
		4% Acetic acid		Heavy metals: Not more than 1 ppm (as Pb); Residues after evaporation: Not more than 30 ppm.	
		20 % Ethanol		Residues after evaporation: Not more than 30 ppm.	
		n-Heptane	25℃ for 1 hour	Residues after evaporation: Not more than 30 ppm.	

(1) The simulation objects of each solvent are described as follow:
a. Water: simulate the contact with foods containing PH>5.
b. 4% Acetic acid: simulate the contact with foods containing PH≦5.
c. n-Heptane: simulate the contact with foods containing surface oils or oils and fatty foods.
d. 20% Ethanol: simulate contact foods containing alcohol.

(2) The products which are heated to higher than 100℃ during food processing or cooking, the migration condition shall set 95℃ for 30 min.

(3) Abbreviation table of plasticizers:

Abbreviations	English name
DEHP	Di(2-ethylhexyl) phthalate
DBP	Dibutyl phthalate
BBP	Benzyl butyl phthalate
DIDP	Di-isodecyl phthalate
DINP	Di-isononyl phthalate
DMP	Dimethyl phthalate
DNOP	Di-n-octyl phthalate
DEP	Diethyl phthalate

Appendix table 3. Materials requirements for dairy products

Item and raw materials	Material test item and passing standard	Migration teat			Passing standard for special tests
		Solvent	Migration condition	Item and passing standard	
Containers and packages made of polyethylene or polyethylene-processed paper for dairy products (1, exclude cream and butter) (2)	n-Hexane extract: Not more than 2.6%. Xylene soluble: Not more than 11.3%. Arsenic: Not more than 2 ppm (as As_2O_3) Heavy metals: Not more than 20 ppm (as Pb)	Water	60℃ for 30 min	Consumption of potassium permanganate: Not more than 5 ppm.	Breaking force test: Not lower than 2.0 kgf/cm^2 for those containing not more than 300 mL food contents. (Not lower than 4.0 kgf/cm^2 for those which can be preserved under room temperature.) Not lower than 5.0 kgf/cm^2 for those containing more than 300 mL (including 300 mL) food contents. (Not lower than 8.0 kgf/cm^2 for those which can be preserved under room temperature.) Sealing strength test: Shall not have damage or gas leakage. Pin-hole test: No methyl blue spot shall be found on the filter paper. Materials for the containers or packages of products which can be preserved under room temperature, shall be impermeable to both light and gas.
		4% Acetic acid	60℃ for 30 min	Residues after evaporation: Not more than 15 ppm. Heavy metals: Not more than 1 ppm (as Pb)	
Containers and packages made of polyethylene or polyethylene-processed paper for cream and butter (2)	n-Hexane extract: Not more than 2.6%. Xylene soluble: Not more than 11.3%. Arsenic: Not more than 2 ppm (as As_2O_3) Heavy metals: Not more than 20 ppm (as Pb)	Water	60℃ for 30 min	Consumption of potassium permanganate: Not more than 5 ppm.	Breaking force test: The same as those for dairy products. Sealing strength test: The same as those for dairy products. Pin-hole test: The same as those for dairy products.
		4% Acetic acid	60℃ for 30 min	Heavy metals: Not more than 1 ppm (as Pb)	
		n-Heptane	25℃ for 1 hour	Residues after evaporation: Not more than 15 ppm.	
Glass bottles for dairy products (1)	Shall meet the requirements for glass bottles under the category of Appendix table 1 as described above, and shall be transparent.				

Metal cans for dairy products (1)	The surface in direct contact with food is plastic: Arsenic: Not more than 2 ppm (as As_2O_3) Cadmium: Not more than 100 ppm. Lead: Not more than 100 ppm. If the surface in direct contact with food is polyvinyl chloride, it shall additionally meet the following requirements: Dibutyltin: Not more than 50 ppm (as dibutyltin dichloride) Cresyl phosphate: Not more than 1000 ppm. Vinyl chloride monomer: Not more than 1 ppm.	Water	60℃ for 30 min	The surface in direct contact with food is plastic: Consumption of potassium permanganate: Not more than 5 ppm. Phenol: Negative. Formaldehyde: Negative.	
		4% Acetic acid	60℃ for 30 min	Arsenic: Not more than 0.1 ppm (as As_2O_3) Heavy metals: Not more than 1 ppm (as Pb) The surface in direct contact with food is plastic: Residues after evaporation: not more than 15 ppm.	
Containers and packages made of polyethylene-processed paper for fermented milk, lactic acid bacteria beverages, and milk-containing beverages（sealed with plastic-processed aluminum foil）.	Shall meet the same requirements as those for containers and packages made of polyethylene for dairy products.				Sealing strength test: The same as those for dairy products. Pin-hole test: The same as those for dairy products. Breaking force test: Not lower than 5.0 kgf/cm^2.

Containers and packages made of polystyrene for fermented milk, lactic acid bacteria beverages, and milk-containing beverages （sealed with plastic-processed aluminum foil）.	Volatile compounds (the sum of styrene, toluene, ethyl benzene, isopropyl-benzene, and n-propyl benzene): Not more than 1500 ppm. Arsenic: Not more than 2 ppm (As_2O_3) Heavy metals: Not more than 20 ppm (as Pb)	Water	60℃ for 30 min	Consumption of potassium permanganate: Not more than 5 ppm.	Sealing strength test: The same as those for dairy products. Pin-hole test: The same as those for dairy products. Thrusting strength test: Not lower than 1.0 kgf/cm^2.
		4% Acetic acid	60℃ for 30 min	Residues after evaporation: Not more than 15 ppm. Heavy metals: Not more than 1 ppm (as Pb)	
Composite containers and packages for fermented milk, lactic acid bacteria beverages, and milk-containing beverages (3)	Metals parts shall meet the requirements as Appendix table 1 for “Metal alloy”. Synthetic resin, synthetic-resin-processed paper, and synthetic-resin-processed aluminum foil shall meet the requirements set for the respective materials as described before.				
Plastic processed aluminum foil as a part of the aluminum caps of containers and packages.	The surface in direct contact with food is plastic: Arsenic: Not more than 2 ppm (as As_2O_3 Cadmium: Not more than 100 ppm. Lead: Not more	Water	60℃ for 30 min	Consumption of potassium permanganate: Not more than 5 ppm. Phenol: Negatives. Formaldehyde: Negatives.	Breaking force test: Not lower than 2.0 kgf/cm^2.

	than 100 ppm. If the surface in direct contact with food is polyvinyl chloride, it shall additionally meet the following requirements: Dibutyltin: Not more than 50 ppm (as dibutyltin dichloride) Cresyl phosphate: Not more than 1000 ppm. Vinyl chloride monomer: Not more than 1 ppm.	4% Acetic acid	60℃ for 30 min	Residues after evaporation: Not more than 15 ppm. Heavy metals: Not more than 1 ppm (as Pb)	
Metals cans for milk powers (4)	1.The metal cans shall meet the requirements set for metal cans for dairy products. 2.Only polyethylene (PE) or poly (ethylene terephthalate) (PET) synthetic resins are permitted for use at sealing portion. These two synthetic resins shall meet the respective requirements as stated above.				
Containers and packages made of multi-layer synthetic resin for milk powder (4) - For those using polyethylene as the material of the inner side which is in direct contact with food contents.	Same as the requirements for polyethylene containers and packages for dairy products.	Water	60℃ for 30 min	Consumption of potassium permanganate: Not more than 5 ppm.	Breaking force test: Not lower than 2.0 kgf/cm^2 for those containing less than 300 mL food contents, and not lower than 5.0 kgf/cm^2 for those containing more than 300 mL food contents. (In the latter case if there is outer package and the inner and the outer packages together have a breaking force of not lower than 10.0 kgf/cm^2, the breaking force of the inner package shall not be lower than 2.0 kgf/cm^2.) Sealing strength test: Shall not have damage or leakage.
		4% Acetic acid	60℃ for 30 min	Heavy metals: Not more than 1 ppm (as Pb)	
		n-Heptane	25% for 1 hour.	Residues after evaporation: Not more than 15 ppm.	
Containers and packages made of multi-layer synthetic resin for milk	Cadmium: Not more than 100 ppm. Lead: not more than 100 ppm.	Water	60℃ for 30 min	Consumption of potassium permanganate: Not more than 5 ppm.	Breaking force test: The same as above. Sealing strength test: The same as above.

powders [4]- For those using poly(ethylene-terephthalate) as the material of the inner side which is in direct contact with food contents.		4% Acetic acid	60℃ for 30 min	Heavy metals: Not more than 1 ppm (as Pb) Antimony: Not more than 0.025 ppm. Germanium: Not more than 0.05 ppm.	
		n-Heptane	25% for 1 hour.	Residues after evaporation: Not more than 15 ppm.	

(1) The dairy products include fresh milk, partially skimmed milk, skimmed milk, flavored milk, fermented milk, lactic acid bacteria beverages, milk-containing beverages, cream and butter.
(2) Containers and packages made of polyethylene-processed paper are referred only to those in which the portion directly in contact with food contents is polyethylene.
(3) Composite containers and packages are those made of two or more materials of synthetic resin, synthetic-resin-processed paper, synthetic-resin-processed aluminum foil or metals.
(4) The milk powders include whole fat milk powder, partially skimmed milk powder, skimmed milk powder, and formulated milk powder.
(5) Sweetened or unsweetened condensed whole fat milk and sweetened or unsweetened condensed skim milk for sale shall be packed in tightly sealable metal cans. Whole fat milk powder, skim milk powder, sweetened milk powder and formulated milk powder shall use packaging materials impervious to light, air and moisture or be filled in tightly sealable metal cans.