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.