

Ministry of Public Health Notification

NO. 295 B.E.2548 (2005)

Title: Qualities or Standards of Containers made from Plastic  
(Unofficial Translation)

---

It is deemed appropriate to amend the Ministry of Public Health Notification entitled Qualities or Standards of Plastic Containers.

By virtue of the provision of Section 5 and 6(6) and (9) of the Food Act B.E. 2522 (1979), which restricts personal rights and liberties in conjunction with Section 29, 35, 39, 48 and 50 of the Constitution of the Kingdom of Thailand, the Minister of Public Health announced as follows:

**Clause 1.** The Ministry of Public Health Notification No. 111 B.E. 2531 (1988) entitled: “Qualities or Standards of Plastic Containers, Usage of Plastic Containers, and Prohibition of Usage of Articles as Food Containers” dated 22 January B.E. 2531 (1988) shall be repealed.

**Clause 2.** In this Notification, “container” means an article which can be used to contain food, irrespective of whether it be used by packing, or by wrapping the food or by any other methods, and it shall mean to include cover or stopper which is as a part of the container.

**Clause 3.** Containers made from plastic shall have the following qualities or standards:

- (1) clean;
- (2) not give out any substance to contaminate the food in a quantity that may be hazardous to health;
- (3) not have any pathogenic microorganisms
- (4) not give out color to contaminate the food.

**Clause 4.** Containers made from plastic shall have the qualities or standards stipulated in 3 and shall also be comply with the qualities or standards list in Annex 1 of this Notification.

**Clause 5.** The analysis of qualities or standards of migration limits of a plastic food container must be carried out using a methods prescribed by the Food and Drug Administration.

**Clause 6.** Containers made from plastic used to contain milk or milk products shall made from Polyethylene, Ethylene 1-Alkene Copolymerized resin, Polypropylene, Polystyrene or Polyethylene terephthalate.

For the purpose of paragraph one, “milk product” means fermented milk, infant formula milk, flavoured milk and cream, but excluding any of these in powder form or dry matter.

**Clause 7.** It is prohibited to use a coloured plastic containers to contain food, except the following cases:

- (1) Laminated plastic, specifically lamination of the layer that does not contact directly with food;
- (2) Plastic used to contain fruit of which the peel is not consumed; or
- (3) Where approval has been obtained from the Food and Drug Administration.

**Clause 8.** It is prohibited to use a plastic containers made from recycled plastic to contain food, except to contain fruit of which the peel is not consumed.

**Clause 9.** It is prohibited to use a plastic container has been that used to contain or wrap fertilizer, poisonous material or material that may be hazardous to health as a food container.

**Clause 10.** It is prohibited to use a plastic containers made for containing material other than food or a plastic containers with a picture, design or statement that could lead to mislead in the food actually contained in container.

This Notification shall come into force as from the day following date of its publication in the Government Gazette onwards.

Announced on 30<sup>th</sup> December B.E. 2548 (2005)

Signed Anutin Charnvirakul

(Mr. Anutin Charnvirakul)

Deputy Ministry of Ministry of Public Health on behalves of  
The Minister of Public Health

(Copy from the Royal Gazette, General edition no. 123, Special section 1 Ngor., 6 January B.E. 2549 (2006))

This English version of the notification is translated to meet the need of the non-Thai speaking people. In case of any discrepancy between the Thai original and the English translation, the former will take priority.

## Annex 1

## Attachment of Notification of the Ministry of Public Health (No. 295) B.E. 2548 (2005)

Table 1 Qualities and standard of plastic materials

Type of plastic*	Maximum level (mg/kg)											Plastic used for containing milk or milk product which type of plastic on the contact side are:			
	Polyvinylchloride	Poly ethylene Polypropylene	Polystyrene	Polyvinylidene chloride	Polyethylene terephthalate	Polycarbonate	Nylon (pa)	Polyvinyl alcohol	Polymethy methacrylate	Polymethyl pentene	Melamine	Polyethylene or Ethylene 1-alkene copolymerized resin	Poly propylene	Polystyrene	Polyethylene terephthalate
(1) Lead	100	100	100	100	100	100	100	100	100	100	100	-	-	-	1
(2) Heavy metal (calculated as lead)	-	-	-	-	-	-	-	-	-	-	-	20	20	20	-
(3) Barium	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-
(4) Dibutyltin compound	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(5) Cresyl phosphate	1,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(6) Vinyl chloride monomer	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(7) Volatile substance; toluene, ethylbenzene, isopropylbenzene, normal propylbenzene and styrene	-	-	5,000 2,000**	-	-	-	-	-	-	-	-	-	-	1,500	-
(8) Vinylidene choride	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-
(9) Asenic	-	-	-	-	-	-	-	-	-	-	-	2	2	2	-
(10) Extracted substance by normal hexane	-	-	-	-	-	-	-	-	-	-	-	26,000	55,00	-	-
(11) Substance dissolve in xylene	-	-	-	-	-	-	-	-	-	-	-	113,000	300,00	-	-
(12) Bisphenol a (included phenol and p-t-butylphenol)	-	-	-	-	-	500	-	-	-	-	-	-	-	-	-
(13) Diphenolcarbonate	-	-	-	-	-	500	-	-	-	-	-	-	-	-	-
(14) Amine (tri-ethalene and tri-butylamene)	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
(15) Cadmium	100	100	100	100	100	100	100	100	100	100	100	-	-	-	100

Remark : - do not analyze

\* Other types of plastic which not prescribe qualities or standard shall have qualities or standard according to food and drug administration

\*\* In case, the use at temperature higher than 100 °C but the quantity of styrene shall not exceed 1,000 mg/kg and ethyl benzene shall not exceed 1,000 mg/kg

Table 2 Qualities and standard of migration

Type of plastic*	Maximum level (mg/dm <sup>3</sup> of reagent)														
	Polyvinylchloride	Poly ethylene Polypropylene	Polystyrene	Polyvinylidene chloride	Polyethylene terephthalate	Polycarbonate	Nylon (pa)	Polyvinyl alcohol	Polymethy methacrylate	Polymethyl pentene	Melamine***	Plastic used for containing milk or milk product which type of plastic on the contact side are:			
												Polyethylene or Ethylene 1-alkene copolymerized resin	Poly propylene	Polystyrene	Polyethylene terevthalate
(1) Phenol	-	-	-	-	-	-	-	-	-	-	Not detect	-	-	-	-
(2) Formaldehyde	-	-	-	-	-	-	-	-	-	-	Not detect	-	-	-	-
(3) Antimony	-	-	-	-	0.05	-	-	-	-	-	-	-	-	-	0.025
(4) Germanium	-	-	-	-	0.1	-	-	-	-	-	-	-	-	-	0.05
(5) Heavy metal (calculated as lead)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
(6) Potassium permanganate used for reaction	10	10	10	10	10	10	10	10	10	10	10	5	5	5	5
(7) Residue substances which is evaporate in water (in case of food which pH exceed 5)	30	30	30	30	30	30	30	30	30	30	-	-	-	-	-
(8) Residue substances which is evaporate in 4% acetic acid (in case of food which pH less than 5)	30	30	30	30	30	30	30	30	30	30	30	15	15	15	15
(9) Residue substances which is evaporate in 20% alcohol (ethanol) (in case of alcoholic foods)	30	30	30	30	30	30	30	30	30	30	-	-	-	-	-

Table 2 Qualities and standard of migration (Con.)

Type of plastic*	Maximum level (mg/dm <sup>3</sup> of reagent)														
	Polyvinylchloride	Poly ethylene Polypropylene	Polystyrene	Polyvinylidene chloride	Polyethylene terephthalate	Polycarbonate	Nylon (pa)	Polyvinyl alcohol	Polymethy methacrylate	Polymethyl pentene	Melamine***	Plastic used for containing milk or milk product which type of plastic on the contact side are:			
												Polyethylene or Ethylene 1-alkene copolymerized resin	Poly propylene	Polystyrene	Polyethylene terevatalate
(10) Residue substance from volatile matters in normal heptane (in case of lipid oil and fatty food)	150	150 30**	240	30	30	30	30	30	30	120	-	75****	-	-	-
(11) Bisphenol a (phenol and p-t-butyl phenol) extracted by water (in case of food which pH exceed 5)	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	-
(12) Bisphenol a (phenol and p-t-butyl phenol) extracted by 4% acetic acid (in case of food which pH less than 5)	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	-
(13) Bisphenol a (phenol and p-t-butyl phenol) extracted by 20% ethanol (in case of alcoholic food)	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	-
(14) Bisphenol a (phenol and p-t-butyl phenol) extracted by normal heptane (in case of lipid oil and fatty food)	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	-
(15) Caprolactame	-	-	-	-	-	-	15	-	-	-	-	-	-	-	-
(16) Methacrylate	-	-	-	-	-	-	-	-	30	-	-	-	-	-	-

Remark : - do not analyze

\* Other types of plastic which not prescribe qualities or standard shall have qualities or standard according to food and drug administration

\*\* In case of the use at temperature higher than 100°C

\*\*\* In case of the use at temperature higher than 100 °C, analyze at temperature 95 °C for 30 minutes

\*\*\*\* For milk and creamy milk products