

## Food hoses and applicable specifications

### Food sanitation law (Announcement No. 370 by the Ministry of Health and Welfare)

		Descriptions of tests	Specifications				
			PVC Elution conditions [Operating temperature 100°C or less]		Polyethylene (PE) and Polypropylene (PP) [Elution conditions Operating temperature 100°C or less]	Nylon (PA) [Elution conditions Operating temperature 100°C or less]	
			Announcement No.380	Announcement No.267 Utensils or container packages that contact fatty foods	Announcement No.380	Announcement No.380	
General specifications	Materials	Lead	100 µg/g or less	-	100 µg/g or less	100 µg/g or less	
		Cadmium	100 µg/g or less	-	100 µg/g or less	100 µg/g or less	
		Bis phthalate (2-ethylhexyl)	-	Do not use.(Less than 0.1%)	-	-	
Elution	Precious metals	1 µg/m or less	-	1 µg/m or less	1 µg/m or less		
	Potassium permanganate consumed	10 µg/m or less	-	10 µg/m or less	10 µg/m or less		
Individual specifications	Material test	Dibutyltin compound	50 µg/g or less	-	-	-	
		Cresol phosphoric acid ester	1000 µg/g or less	-	-	-	
		Polyvinyl chloride	1 µg/m or less	-	-	-	
	Material test	Evaporation residue	heptane	150 µg/m or less	-	150 µg/m or less	30 µg/m or less
			20% ethanol	30 µg/m or less	-	30 µg/m or less	
			Water		-		
	4% acetic acid	-	-				
	Caprolactam	20% ethanol	15 µg/m or less	-	-	15 µg/m or less	

### Outline of the specifications

	Announcement and name of the specifications	Descriptions	Target food products
Revised Food Sanitation Law Positive List System	Announcement No.380 by the Health, labour and Welfare Ministry in 2020	Utensils or container packages made of synthetic resin	Fatty foods, alcoholic beverages, and other food products
	Announcement No.196 by the Health, labour and Welfare Ministry in 2020	Self-imposed control of the food sanitation for vinyl chloride resin products	

### Food sanitation law (Announcement No. 380 by the Ministry of Health and Welfare)

Material test		
2-mercaptoimidazoline	Pb	Cd
2-mercaptoimidazoline	100 µg/g or less	100 µg/g or less

Our accepted products	Elution condition	Elution test						
Silicone hose	The test is conducted by soaking in an immersion solution of 2ml per 1cm <sup>2</sup> in 60°C for 30 minutes, and the resulted solution is studied (for the products to be used in the temperature of 100 degrees or more, they are soaked in 95°C for 30 minutes).	Phenol	Formic aldehyde	Zn	Precious metals (As Pb)	Evaporation residue		
		Water	Water	4% acetic acid	4% acetic acid	Water	4% acetic acid	20% ethanol
		5 µg/ml or less	Negative	15 µg/ml or less	1 µg/ml or less	Food and water exceeding PH5	Food of below PH5	Alcoholic beverages and fatty foods
		60 µg/ml or less						

### Our approved products and test menus

Foods Hose	Announcement and general application	Descriptions	Target foods	Specifications standard
Pure Foods Hose Pure Foods Spring Hose	Announcement No.380 (2020)	Utensils or container packages made of vinyl chloride resin	Fatty foods	The compounding agent "Bis phthalate (2-ethylhexyl)" is below the standard value. Content: 0.1% or less Elution amount: 1µg/ml or less (immersion condition: 25°C for one hour)
			Fatty foods	
Pure Foods Hose Pure Foods Spring Hose Heat-Resistant Eco Hose	Announcement No.380 (2020)	Utensils or container packages made of synthetic resin	Alcoholic beverages	In the specifications test, elution amount is 150 µg/ml or less in the condition where the heptane is used for the immersion solution in 25°C for an hour. In the specifications test, elution amount is 30 µg/ml or less in the condition where the 20% ethanol is used for the immersion solution in 25°C for 30 minutes. In the specifications test, elution amount is 30 µg/ml or less in the condition where the 4% acetic acid and water are used for the immersion solution in 60°C for 30 minutes.
			Other foods	
			Fatty foods	
Silicone Hose	Announcement No.380 (2020)	Utensils or container packages made of rubbers	Alcoholic beverages	In the specifications test, elution amount is 30 µg/ml or less in the condition where the 20% ethanol is used for the immersion solution in 60°C for 30 minutes. In the specifications test, elution amount is 30 µg/ml or less in the condition where the 20% ethanol is used for the immersion solution in 60°C for 30 minutes.
			Other foods	

The Food Sanitation Law applies only to "utensils or containers and packaging in direct contact with food or additives."

#### \*Ministry of Health, Labor and Welfare Notification No. 380

According to Notification No. 85 of the Ministry of Health, Labour and Welfare dated April 1, 1986.

The Ministry of Health, Labour and Welfare Notification No. 20 only regulated only infant formula feeding apparatus, and the new Notification No. 85 regulated all rubber products as follows.

In 2012, No. 595 was added as a result of partial revision of test methods, and in 2016, No. 245 was added as a result of the addition of polyethylene naphthalate as a main ingredient.

In 2016, No. 595 was added and No. 245 was stipulated, and the standard standards for containers and packaging for milk, etc., stipulated in the Ministerial Ordinance on Milk, etc., were transferred to the Standards and Standards Notification by No. 380 enforced on December 4, 2020, thereby unifying the standards.

This amendment is based on the following provisions. This revision is not accompanied by any changes in standard values or definitions of terms.