No. 11(1/64)

CERTIFICATE OF ACCREDITATION

Name of Laboratory : Korea Testing and Research Institute - Gimpo

Representative : CHO, KISUNG

Address of Headquarters : 88-2, Yeongdeungpo-dong 8-ga, Yeongdeungpo-gu, Seoul, Korea

Address of Laboratory : 7-6 Gomak-ri, Wolgot-myeon, Gimpo-si, Kyonggi-do, Korea

Duration : April 28, 2010 ~ April 27, 2014

Scope of Accreditation
(Scope of Accreditation is described in the accompanying Annex)

This testing laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025 : 2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated 8 January 2009).

August 26, 2011

Huh. Kyung

Administrator,
Korea Laboratory Accreditation Scheme(KOLAS)

No. 11(2/64)

1 Mechanical Test

1.019 Safety equipment

Test Method	Standard designation	Test range or Limits of detection
Safety inspection standard for Consumer products on self-regulation Annex 30	Personal protective equipments(goggle)	
	6.7. Refractive power	0.125

2 Chemical Test

2.001 Iron and Steel

Test Method	Standard designation	Test range or Limits of detection
ISO 439:1994	Steel and iron - Determination of total silicon content - Gravimetric method	(0.10 ~ 5.0) %
ISO 4935:1989	Steel and iron - Determination of sulfur content - Infrared absorption method after combustion in an induction furnace	(0.002 ~ 0.10) %
ISO 9556:1989	Steel and iron - Determination of total carbon content - Infrared absorption method after combustion in an induction furnace	(0.003 ~ 4.5) %
ISO 10138:1991	Steel and iron - Determination of chromium content - Flame atomic absorption spectrometric method	(0.002 ~ 2.0) %
ISO 10278:1995	Steel - Determination of manganese content - Inductively coupled plasma atomic emission spectrometric method	(0.002 ~ 1.5) %
ISO 10700:1994	Steel and iron - Determination of manganese content - Flame atomic absorption spectrometric method	(0.002 ~ 2.0) %
ISO 13898-1:1997	Steel and iron - Determination of nickel, copper and cobalt contents - Inductively coupled plasma atomic emission spectrometric method Part 1:General requirements of sample dissolution	Ni (0.001 ~ 0.30) % Cu (0.001 ~ 0.40) % Co (0.001 ~ 0.10) %

2.001 Iron and Steel

Test Method	Standard designation	Test range or Limits of detection
ISO 13898-2:1997	Steel and iron - Determination of nickel, copper and cobalt contents - Inductively coupled plasma atomic emission spectrometric method Part 2:Determination of nickel content	(0.001 ~ 0.30) %
ISO 13898-3:1997	Steel and iron - Determination of nickel, copper and cobalt contents - Inductively coupled plasma atomic emission spectrometric method Part 3:Determination of copper content	(0.001 ~ 0.40) %
ISO 13898-4:1997	Steel and iron - Determination of nickel, copper and cobalt contents - Inductively coupled plasma atomic emission spectrometric method Part 4:Determination of cobalt content	(0.001 ~ 0.10) %
ASTM E350:1995	Standard Test Methods for Chemical Analysis of Carbon Steel, Low-Alloy Steel, Silicon Electrical Steel, Ingot Iron, and Wrought Iron	
	Lead	(0.001 ~ 0.50) %
ASTM E351:1993	Standard Test Methods for Chemical Analysis of Cast Iron - All Types	
	Lead	(0.001 ~ 0.15) %
ASTM E352:1993	Standard Test Methods for Chemical Analysis of Tool Steels and Other Similar Medium- and High-Alloy Steels	
	Lead	(0.001 ~ 0.01) %
ASTM E1019:2003	Standard Test Methods for Determination of Carbon, Sulfur, Nitrogen, and Oxygen in Steel and in Iron, Nickel, and Cobalt Alloys	
	Carbon, Sulfur	C (0.001 ~ 4.50) % S (0.001 ~ 0.600) %
JIS G 1211:1995	Iron and steel−Methods for determination of carbon content	
	3.1(4) Infrared absorption method after combustion in an induction furnace	(0.001 ~ 5.0) %

No. 11(4/64)

2.001 Iron and Steel

Test Method	Standard designation	Test range or Limits of detection
JIS G 1215:1999	Iron and steel-Methods for determination of sulfur content	
	3.(5) Infrared absorption method after combustion in an induction furnace	(0.000 5 ~ 0.35) %
JIS G 1258-1:2007	Iron and steel - ICP atomic emission spectrometric method-Part 1: Determination of silicon, manganese, phosphorus, nickel, chromium, molybdenum, copper, vanadium, cobalt, titanium and aluminium contents-Dissolution in acids and fusion with potassium disulfate	Al (0.004 ~ 0.10) % Si (0.01 ~ 0.60) % P (0.003 ~ 0.10) % Ti (0.001 ~ 0.30) % V (0.002 ~ 0.50) % Cr (0.01 ~ 3.00) % Mn (0.01 ~ 2.00) % Co (0.003 ~ 0.20) % Ni (0.01 ~ 4.00) % Cu (0.01 ~ 0.50) % Mo (0.01 ~ 1.20) %
	Aluminium, Silicon, Phosphorous, Titanium, Vanadium, Chromium, Manganese, Cobalt, Nickel, Copper, Molybdenum.	
KS D 1673:2007	Methods for inductively coupled plasma emission spectrochemical analysis of steel	
	Al, Si, P, Ti, V, Cr, Mn, Co, Ni, Cu, Mo,	-
KS D 1802:2001	Methods for determination of phosphorus in iron and steel	(0.000 3 ~ 1.5) %
KS D 1803:2003	Methods for determination of sulfur in iron and steel	
	10. Infrared absorption method after combustion in an induction furnace	above 0.005 %
KS D 1804:2003	Determination of carbon in iron and steel	
	8. Infrared absorption method after combustion in an induction furnace	above 0.001 %
KS D 1805:2003	Determination of silicon in iron and steel	
	3.1 Gravimetric method	above 0.1 %
KS D 1806:2003	Determination of manganese in iron and steel	
	3.3 Titrimetric method	above 0.1 %
KS D 1807:2003	Determination of chromium in iron and steel	
	3.1 Titrimetric method	above 0.1 %
KS D 1808:2003	Determination of nickel in iron and steel	
	3.2 Gravimetric method	above 0.05 %
KS D 1809:2003	Determination of molybdenum in iron and steel	
	3.1 Gravimetric method	above 0.03 %

2.001 Iron and Steel

Test Method	Standard designation	Test range or Limits of detection
KS D 1662:2005	Surface in coating parts of an automobiles – Determination of hexavalent chromium	-
KS D 1659:2008	Methods for atomic absorption spectrophotometric analysis of iron and steel	
	8. Mn	(0.003 ~ 2.0) %
	9. Ni	(0.003 ~ 1.0) %
	12. Cu	(0.003 ~ 1.0) %
	14. Co	(0.01 ~ 0.5) %
	18. 1. Pb	(0.001 ~ 0.01) %
	19. Mg	(0.001 ~ 0.1) %
	21. 1. Zn	(0.005 ~ 0.025) %
	22. 2. Bi	(0.000 5 ~ 0.015) %
	23. 1. Sb	(0.005 ~ 0.05) %
KS D 1812:2003	Determination of tungsten in iron and steel	
	3.1. Gravimetric method	above 0.3 %
KS D 1904:2007	Methods for chemical analysis of ferrosilicon	
	3.1. Si	-
KS D 2056:2006	Method for Determination of Lead and Cadmium in Ferrite for Automobiles	Pb 10 mg/kg Cd 1 mg/kg

2.002 Nonferrous

Test Method	Standard designation	Test range or Limits of detection
ISO 797:1973	Aluminium and aluminium alloys - Determination of silicon - Gravimetric method	above 0.3 %
ISO 1553:1976	Unalloyed copper containing not less than 99,90 % of copper - Determination of copper content - Electrolytic method	above 99.90 %
ISO 1554:1976	Wrought and cast copper alloys - Determination of copper content - Electrolytic method	above 99.90 %
ISO 3256:1977	Aluminium and aluminium alloys - Determination of magnesium - Atomic absorption spectrophotometric method	(0.01 ~ 5) %
ISO 3980:1977	Aluminium and aluminium alloys - Determination of copper - Atomic absorption spectrophotometric method	(0.005 ~ 5) %

2.002 Nonferrous

Test Method	Standard designation	Test range or Limits of detection
ISO 3981:1977	Aluminium and aluminium alloys - Determination of nickel - Atomic absorption spectrophotometric method	(0.005 ~ 3) %
ISO 4192:1981	Aluminium and aluminium alloys - Determination of lead content - Flame atomic absorption spectrometric method	(0.01 ~ 5.0) %
ISO 4193:1981	Aluminium and aluminium alloys - Determination of chromium content - Flame atomic absorption spectrometric method	(0.003 ~ 0.6) %
ISO 4741:1984	Copper and copper alloys - Determination of phosphorus content - Molybdovanadate spectrometric method	(0.000 5 ~ 0.5) %
ISO 4744:1984	Copper and copper alloys - Determination of chromium content - Flame atomic absorption spectrometric method	(0.003 ~ 2.0) %
ISO 4749:1984	Copper alloys - Determination of lead content - Flame atomic absorption spectrometric method	(0.01 ~ 5.0) %
ISO 5194:1981	Aluminium and aluminium alloys - Determination of zinc content - Flame atomic absorption spectrometric method	(0.002 ~ 6.0) %
ISO 5960:1984	Copper alloys - Determination of cadmium content - Flame atomic absorption spectrometric method	(0.000 5 ~ 2.0) %
ASTM E 34:1994	Standard Test Methods for Chemical Analysis of Aluminum and Aluminum-Base Alloys	
	Cadmium	(0.001~ 0.5) %
ASTM E536:2008	Standard Test Methods for Chemical Analysis of Zinc and Zinc Alloys	
	Lead, Cadmium	Pb (0.001 ~ 1.6) % Cd (0.001 ~ 0.5) %
ASTM E1277:2008	Standard Test Method for Chemical Analysis of Zinc-5% Aluminum- Mischmetal Alloys by ICP Emission Spectrometry	
	Lead, Cadmium	Pb (0.002 ~ 0.026) % Cd (0.001 6 ~ 0.025) %
ASTM E1834:1996	Standard Test Method for Determination of Lead in Nickel Alloys by Electrothermal Atomic Absorption Spectrometric Method	(0.000 05 ~ 0.001) %

2.002 Nonferrous

Test Method	Standard designation	Test range or Limits of detection
ASTM E1941:2004	Standard Test Method for Determination of Carbon in Refractory and Reactive Metals and Their Alloys	(0.004 ~ 0.1) %
JIS H 1051:2005	Methods for determination of copper in copper and copper alloys	
	5. Electroplate gravimetry (sulfuric acid method)	above 99.90 %
	6. Electroplate gravimetry (hydrobromic acid method)	above 99.90 %
JIS H 1052:2003	Methods for determination of tin in copper and copper alloys	
	9. ICP	(0.02 ~ 15.0)%
JIS H 1053:2003	Methods for determination of lead in copper and copper alloys	
	7. AAS	(0.005 ~ 7.0) %
	10. ICP	(0.01 ~ 22) %
JIS H 1054:2002	Methods for determination of iron in copper and copper alloys	
	9. ICP	(0.01 ~ 6.0) %
JIS H 1055:2003	Methods for determination of manganese in copper and copper alloys	
	7. AAS	(0.01 ~ 5.0) %
	8. ICP	(0.01 ~ 15) %
JIS H 1056:2003	Methods for determination of nickel in copper and copper alloys	
	4. Nickel dimethylglyoxime gravimetry	(2 ~ 50) %
	8. ICP	(0.01 ~ 7.0) %
JIS H 1057:1999	Methods for determination of aluminium in copper and copper alloys	
	7. AAS	(0.10 ~ 3.0) %
	8. ICP	(0.002 ~ 12) %
JIS H 1060:2002	Methods for determination of cobalt in copper and copper alloys	
	6. AAS	(0.01 ~ 3.5) %

2.002 Nonferrous

Test Method	Standard designation	Test range or Limits of detection
JIS H 1061:2006	Methods for determination of silicon in copper and copper alloys	
	5. Gravimetric method	(0.1 ~ 5) %
	8. ICP	(0.002 ~ 5) %
JIS H 1062:2006	Methods for determination of zinc in copper and copper alloys	
	9. ICP	(0.01 ~ 20) %
JIS H 1063:2002	Methods for determination of beryllium in copper alloys	
	7. AAS	(0.1 ~ 2.0) %
JIS H 1066:1993	Methods for determination of mercury in copper	(0.000 01 ~ 0.000 1) %
JIS H 1071:1999	Methods for determination of chromium in copper and copper alloys	
	7. AAS	(0.01 ~ 0.2) %
	8. ICP	(0.01 ~ 2.0) %
JIS H 1352:2007	Methods for determination of silicon in aluminium and aluminium alloys	
	4. AAS	(0.01 ~ 0.2) %
JIS H 1353:1999	Methods for determination of iron in aluminium and aluminium alloys	
	5. Potassium permanganate titration method	(0.05 ~ 2.5) %
JIS H 1354:1999	Methods for determination of copper in aluminium and aluminium alloys	
	5. Electroplate gravimetry	above 0.5 %
JIS H 1355:1999	Methods for determination of manganese in aluminium and aluminium alloys	
	5. Sodium arsenide titration method	(0.005 ~ 1.5) %
JIS H 1356:1999	Method for determination of zinc in aluminium and aluminium alloys	
	5. Ion exchange EDTA titration method	(0.1 ~ 12) %

2.002 Nonferrous

Test Method	Standard designation	Test range or Limits of detection
JIS H 1357:1999	Methods for determination of magnesium in aluminium and aluminium alloys	
	5. EDTA titrimetric method	(0.1 ~ 12) %
JIS H 1358:1998	Methods for determination of chromium in aluminium and aluminium alloys	
	5. Potassium permanganate back-titration	(0.002 ~ 0.6) %
JIS H 1360:1997	Methods for determination of nickel in aluminium and aluminium alloys	
	4. Nickel dimethylglyoxime gravimetry	(0.001 ~ 3) %
JIS H 1363:2003	Method for determination of zirconium in aluminium and aluminium alloys	
	5. Zirconium phosphate gravimetry	(0.05 ~ 0.25) %
JIS H 1366:2002	Method for determination of lead in aluminium and aluminium alloys	
	3.2 EDTA titrimetric method	(0.1 ~ 1.0) %
JIS Z 3901:1988	Methods for chemical analysis of silver brazing filler metals	-
JIS Z 3903:1988	Methods for chemical analysis of copper phosphorus brazing filler metals	-
KS D 1678 : 2007	Methods for inductively coupled plasma emission spectrometric analysis of aluminum and alumnium alloys	Ti, Cr , Zr , Sn (0.01 ~ 0.5) % V, B (0.01 ~ 0.25) % Pb, Bi (0.01 ~ 1.0) % Cu (0.01 ~ 6.0) % Fe (0.02 ~ 1.5) % Mn (0.01 ~ 2.0) % Mg (0.01 ~ 12.0) % Zn (0.01 ~ 8.0) % Ni (0.01 ~ 3.0) %

2.002 Nonferrous

Test Method	Standard designation	Test range or Limits of detection
KS D 1863:2003	Methods for determination of vanadium in aluminium and aluminium alloys	
	4.1 Gravimetry	above 0.1 %
KS D 1869:2001	Determination of zinc in aluminium and aluminium alloys	
	4.1 Titrimetric method	above 0.01 %
KS D 1880:2003	Methods for determination of vanadium in aluminium and aluminium alloys	(0.001 ~ 0.20) %
KS D 1882:2003	Determination of lead in aluminium and aluminium alloy	
	3.1 Titrimetric method	(0.1 ~ 1.0) %
KS D 1886:1997	Methods for determination of cobalt in copper and copper alloys	
	4.2 AAS	(0.01 ~ 3.5) %
KS D 1889:2003	Methods for Determination of Aluminium in Copper and Copper Alloys	
	4. Titrimetric method	(0.5 ~ 12) %
	5. AAS	(0.002 ~ 12) %
KS D 1892:2003	Methods for determination of iron in copper and copper alloys	
	5. Titrimetric method	(0.3 ~ 7.5) %
	9. ICP	(0.01 ~ 6) %
KS D 1893:2003	Methods for determination of copper in copper and copper alloys	
	5. Electroplate gravimetry A	above 54 %
	6. Electroplate gravimetry B	(44 ~ 96) %
KS D 1894:2007	Methods for determination of tin in copper and copper alloys	
	7. AAS	(0.03 ~ 0.5) %
	9. ICP	(0.02 ~ 15) %
KS D 1895:2004	Methods for determination of lead in copper and copper alloys	
	8. AAS B법	(0.01 ~ 7.0) %
	10. ICP	(0.1 ~ 22) %
KS D 1896:2003	Methods for determination of manganese in copper and copper alloys	
	7. AAS	(0.01 ~ 5) %

2.002 Nonferrous

Test Method	Standard designation	Test range or Limits of detection
KS D 1897:2003	Methods for determination of nickel in copper and copper alloys	
	5. Gravimetric method	(2 ~ 50) %
	8. AAS	(0.01 ~ 7) %
KS D 1919:2007	Methods for determination of mercury in copper	(0.000 01 ~ 0.000 1) %
KS D 1966:2002	Determination of beryllium in copper alloys	
	7. ICP A Method	(0.1 ~ 2.0) %
KS D ISO 3613:2007	Chromate conversion coatings on zinc, cadmium, aluminium-zinc alloys	-

2.004 Mine and Ceramic Related Products

Test Method	Standard designation	Test range or Limits of detection
ASTM C114:2005	Standard test methods for chemical analysis of hydraulic cement	
	6. Silicon Dioxide	0.16 %
	8. Ferric oxide	0.10 %
	13. Calcium oxide	0.20 %
	14. Magnesium oxide	0.16 %
	15.1 Sulfur	0.01 %
	16. Loss on Ignition	0.10 %
ASTM D5142:2004	Standard Test Methods for Proximate Analysis of the Analysis Sample of Coal and Coke by Instrumental Procedures	Moisture (0.2 ~ 27.9) % Ash (1.0 ~ 50.8) % Volatile (6.0 ~ 19.6) %
EPA-600/R-93-116	Method for determination of Asbestos in bulk building Materials	0.25 %
EPA-600/M-82-020	Internal Method for the Determination Of Asbestos In Bulk Insulation Samples	0.25 %
JIS A 1481:2008	Determination of asbestos in building material products	0.1 %

2.004 Mine and Ceramic Related Products

Test Method	Standard designation	Test range or Limits of detection
JIS M 8852:1998	Methods for chemical analysis of high-silica raw materials for ceramics	
	7. Loss on ignition	0.04 %
	8. Silicon dioxide	0.4 %
	9. Aluminium oxide	0.02 %
	10.3 Ferric oxide	0.005 %
	11.3 Titanium oxide	0.002 %
	15.2,15.4 Sodium oxide	0.005 %
JIS M 8853:1998	Methods for chemical analysis of aluminosilicate raw materials for ceramics	
	7. Loss on ignition	0.1 %
	8. Silicon dioxide	0.3 %
	9. Aluminium oxide	0.2 %
	10. Ferric oxide	0.02 %
	11. Titanium oxide	0.002 %
	14. Calcium oxide	0.02 %
	15. Magnesium oxide	0.02 %
	16. Sodium oxide	0.02 %
	17. Potassium oxide	0.002 %
KS E 3005:2001	Manganese ores - Determination of manganese content	above 15 %
KS E 3013:2001	Methods for determination of total iron content in iron ores	(30 ~ 72) %
KS E 3014:1995	Methods for determination of sulfur content in iron ores	(0.002 ~ 1.0) %
KS E 3015:2001	Methods for determination of silicon dioxide in iron ores	(0.1 ~ 15) %
KS E 3019:2004	Methods for determination of calcium oxide in iron ores	above 0.001 %
KS E 3022:1999	Methods for determination of magnesium oxide in iron ores	(0.01 ~ 5) %
KS E 3025:2001	Methods for determination of iron in manganese ores	(1.0 ~ 10) %
KS E 3027:1996	Methods for determination of silicon in manganese ores	above 0.1 %

2.004 Mine and Ceramic Related Products

Test Method	Standard designation	Test range or Limits of detection
KS E 3066:1993	Methods for chemical analysis of silicastone	
	5. Loss on ignition	0.04 %
	6. Silicon dioxide	0.4 %
	7. Aluminium oxide	0.06 %
	8. Ferric oxide	0.006 %
	9. Titanium oxide	0.01 %
	10. Sodium oxide	0.01 %
	11. Potassium oxide	0.04 %
KS E 3071:1993	Methods for chemical analysis of limestone	
	6.1 Loss on ignition	0.10 %
	6.2 Silicon dioxide	0.10 %
	6.3 Aluminium oxide	0.10 %
	6.5 Ferric oxide	0.10 %
	6.8 Calcium oxide	0.10 %
	6.10 Magnesium oxide	0.10 %
KS E 3075:2002	Methods for X-ray fluorescence spectrometric analysis of limestone and dolomite	SiO_2 (0.10 ~ 15.0) % Al_2O_3 (0.05 ~ 5.00) % CaO (29.0 ~ 55.8) % MgO (0.10 ~ 22.0) % Fe_2O_3 (0.05 ~ 2.00) %
KS E ISO 10058:2003	Methods for chemical analysis of dolomite and magnesite	
	2. Silicon dioxide	-
	3. Aluminium oxide	-
	4. Ferric oxide	-
	8. Calcium oxide	-
	9. Magnesium oxide	-

2.004 Mine and Ceramic Related Products

Test Method	Standard designation	Test range or Limits of detection
KS E 3806:1993	Methods for chemical analysis of feldspar	
	6. Loss on ignition	0.08 %
	7. Silicon dioxide	0.3 %
	8. Aluminium oxide	0.15 %
	9. Ferric oxide	0.006 %
	10. Titanium oxide	0.003 %
	11. Sodium oxide	0.14 %
	12. Potassium oxide	0.25 %
KS E 3808:1993	Methods for chemical analysis of agalmatolits	
	6. Loss on ignition	0.2 %
	7. Silicon dioxide	0.3 %
	8. Aluminium oxide	0.3 %
	9. Ferric oxide	0.03 %
	10. Titanium oxide	0.02 %
	13. Sodium oxide	0.03 %
	14. Potassium oxide	0.05 %
KS E 3912:2004	Methods for determination of aluminium in manganese ores	(0.1 ~ 8.0) %
KS L 2404:2005	Methods for chemical analysis of crystal glass	
	7.3 Lead oxide	above 0.01 %
KS L 5120:2004	Methods for chemical analysis of portland cements	
	8. Loss on ignition	0.10 %
	10. Silica	0.20 %
	11. Aluminium oxide	0.20 %
	12. Ferric oxide	0.10 %
	13. Calcium oxide	0.25 %
	14. Magnesium oxide	0.15 %
	15. Sulfur	0.10 %
KS L 5405:2004	Fly ash	
	8.1 Silica	-
	8.2 Free Moisture	-
	8.3 Loss on Ignition	-

2.004 Mine and Ceramic Related Products

Test Method	Standard designation	Test range or Limits of detection
KS L 9003:2005	Methods for chemical analysis of gypsum	
	10. Aluminium oxide + Ferric oxide	0.01 %
	11. Ferric oxide	0.01 %
	12.2 Calcium oxide	0.10 %
	13.3 Magnesium oxide	0.01 %
	14. sulphor trioxide	0.10 %
	19. Phosphorus	0.01 %
KS L 9004:1992	Chemical analysis of limes	
	6.1 Loss on Ignition	0.10 %
	6.4 Silicon dioxide	0.10 %
	6.5 Aluminium oxide	0.10 %
	6.6 Ferric oxide	0.10 %
	6.7 Calcium oxide	0.10 %
	6.8 Magnesium oxide	0.10 %
	6.9 Sulfur trioxide	0.10 %
	6.12 Phosphorus	0.01 %

2.011 Other reagents

Test Method	Standard designation	Test range or Limits of detection
KS M 1104:2002	Soda ash	Alkali above 99 %
KS M 1108:2007	Bleaching powder and high test hypochlorite	Cl under 70 %
KS M 1112:2006	Hydrogen peroxide	above 35.0 %
KS M 1118:2005	Ferric chloride aq	Fe(III) under 0.20 % Fe(II) above 37 %
KS M 1201:2005	Testing method of sulfuric acid	above 27.45 %
KS M 1206:2005	Hydrochloric acid	above 35%
KS M 1207:2002	Nitric acid	above 50.0 %
KS M 1211:2002	Testing methods of caustic soda	-
KS M 1301:2002	Silver nitrate	above 99.8 %
KS M 1315:2002	Ferric oxide for perrite	above 98.5 %
KS M 1407:2005	Sodium phosphate	above 95 %

2.011 Other reagents

Test Method	Standard designation	Test range or Limits of detection
KS M 1411:2002	Aluminium sulfate	above 8 %
KS M 1415:2002	Sodium silicate liquid	SiO_2 above 23 %
KS M 1510:2002	Poly aluminium chloride	above 10 %
KS M 1610:2006	Copper sulfate for industrial use	above 98.5 %
KS M 1611:2002	Phosphoric acid	above 75.0 %
KS M 8037:2005	Calcium chloride dihydrate	above 99.0 %
KS M 8044:2006	Chromium trioxide	above 98.0 %
KS M 8165:2004	Antimony trioxide	above 98.0 %
JIS K 1200-1:2000	Sodidum hydroxide for industrial use -Part1: Specific gravity or density	
	4. Pycnometer method	-
	5. Hydrometer method	-
JIS K 1200-2:2000	Sodium hydroxide for industrial use -Part2 : Determination of total alkalinity, sodium hydroxide and sodium carbonate	-
JIS K 1200-3-1:2000	Sodium hydroxide for industrial use -Part3: Determination of chlorides content-Section1: Mercury(Ⅱ)thiocyanate photometry	(0.000 3 ~ 0.008 2) %
JIS K 1200-3-2:2000	Sodium hydroxide for industrial use -Part3: Determination of chlorides -Section2:Modified Volhard method, Ion chromatographic analysis	-
JIS K 1200-4:2000	Sodium hydroxide for industrial use -Part4: Determination of sodium sulfate content	-
JIS K 1200-5:2000	Sodium hydroxide for industrial use -Part5: Determination of silicon content-Inductived coupled plasma atomic emission spectrochemical analysis	-
JIS K 1200-6:2000	Sodium hydroxide for industrial use -Part6: Determination of iron content-Atomic absorption spectrometry and inductively coupled plasma atomic emssion spectrophotometry	-

2.011 Other reagents

Test Method	Standard designation	Test range or Limits of detection
JIS K 1200-7:2000	Sodium hydroxide for industrial use -Part7: Determination of aluminum content	-
JIS K 1200-8-1:2000	Sodium hydroxide for industrial use -Part8: Determination of calcium content-Section1:Flame atomic absorption spectrometry	2.5 mg/kg
JIS K 1200-8-2:2000	Sodium hydroxide for industrial use -Part8: Determination of calcium content-Section2: Inductively coupled plasma atomic emission spectrometry	5 mg/kg
JIS K 1200-9-1:2000	Sodium hydroxide for industrial use -Part9: Determination of magnesium content-Section1:Flame atomic absorption spectrometry	0.5 mg/kg
JIS K 1200-9-2:2000	Sodium hydroxide for industrial use -Part9: Determination of magnesium content-Seciton2: Inductively Coupled Plasma atomic emission spectrometry	5 mg/kg
JIS K 1200-10:2000	Sodium hydroxide for industrial use -Part9: Determination of manganese content	-
JIS K 1310-1-1:2000	Hydrochloric acid for industrial use -Part1: Determination of total acidity-Section1:Titrimetric method	-
JIS K 1310-2:2000	Hydrochloric acid for industrial use -Part2: Evaluation of hydrochloric acid concentration by measurement of density	-
JIS K 1310-3:2000	Hydrochloric acid for industrial use -Part3: Determination of iron content-1,10-Phenanthroline molecular absrption spectrometry, Electrothermal type atomic absorption spectrometry, Inductively coupled plasma atomic emission spectrometry	(0.001 ~ 0.005) %
JIS K 1310-4:2000	Hydrochloric acid for industrial use -Part4:Determination of ignition resiude method	-
JIS K 1321:1994	Sulfuric acid	above 15 %

2.011 Other reagents

Test Method	Standard designation	Test range or Limits of detection
JIS K 1408:1966	Sodium Silicate	SiO_2 (19 ~ 38) %
JIS K 1423:1970	Aluminum Sulfate	Al_2O_3 (8 ~ 17) %
JIS K 1425:1959	Bleaching Powder and High Test Hypochlorite	under 70 %
JIS K 1447:1956	Ferric Chloride	-
JIS K 1449:1978	Phosphoric Acid	above 75 %
JIS K 1475:1996	Poly aluminium chloride for water works	Al_2O_3 (10 ~ 11) %
JIS K 8001:1998	General rule for test methods of reagents	
	5.2 Dissolution condition	-
	5.7 chlorides(Cl)	
	5.7 (1) Turbidimetric method	-
	5.7 (2) Turbidimetric method(colored sample)	-
	5.8 chlorine compound (as Cl)	-
	5.9 chlorine compound and bromide compound(as Cl) (in lodine or iodine compounds)	-
	5.10 nitrates(NO_3)	
	(1)Indigo carmine method	-
	(4) distillation- indophenol method	-
	(5) UV spectrometer method	-
	5.11 Ammonium(NH_4)	
	(4) indophenol method	-
	(5) Reduced Pressure distillation-indophenol method	-
	(6) distillation- indophenol method	-
	5.12 nitrates(N)	
	(4) distillation- indophenol method	-
	5.13 Phosphate(PO_4)	
	(1) Colorimetric method	-
	(2) Extraction Colorimetric method	-
JIS K 8001:1998	5.14 silicate(SiO_2)	
	(1) Colorimetric method	-

2.011 Other reagents

Test Method	Standard designation	Test range or Limits of detection
	5.15 sulphates(SO_4)	
	(1) Turbidimetric method	-
	(2) Turbidimetric method(at extracted sample)	-
	5.16 sulphates(as SO_4)	-
	5.17 sulphates(S)	-
	5.19 As	
	(3) AgDDTC method	-
	5.20 Ba	
	(2) Barium chromate method	-
	5.22 Fe	
	(2) 1,10-Phenanthroline spectrophotometric method	-
	5.24 Heavy metal(as Pb)	
	(1) Sodium sulfide method	-
	(2) Separation Sodium sulfide method	-
	(3) Sodium sulfide method for Magnesium nitrate treatment	-
	5.26 Ccolour matter after treatment with sulfuric acid	-
	5.27 Reducing constituents of $KMnO_4$	
	(1) Direct method	-
	5.32 Gas chromatographic analysis	-
	5.34 HPLC analysis	-
JIS K 8122:1994	calcium chloride dihydrate	above 85.0 %
JIS K 8407:1994	Antimony (III) oxide	above 98.0 %
JIS K 8432:2006	Magnesium oxide	above 98.0 %
JIS K 8983:2006	Copper(Ⅱ) sulfate pentahydrate	above 99.5 %
ISO 3195:1975	Sodium hydroxide for industrial use -- Sampling -- Test Sample -- Preparation of the main solution for carrying out certain determinations	-
ISO 3423:1975	Sulphuric acid oleums for industrial use-Determination of sulphur dioxide content-Iodometric method	(2 ~ 50) mg/kg

2.011 Other reagents

Test Method	Standard designation	Test range or Limits of detection
ISO 5993:1979	Sodium hydroxide for industrial use-Determination of mercury content-Flameless atomic absorption spectrometric method	above 0.02 mg/kg
The Ministry of Environment Notice No. 2008 - 69	Standard specification for water treatment reagents.	
	Poly Aluminum Chloride	Al_2O_3 (10 ~ 18) %
	Aluminum Sulfate	Al_2O_3 above 8 %
	Poly Aluminum Sulfate Silicate	Al_2O_3 above 8 %
	Poly Aluminum Hydroxy Chloro Silicate	Al_2O_3 (10 ~ 18) %
	Ferric Sulfate	Fe(III) above 18 % Fe(II) above 3 %
	Liquid Ferric Chloride	Fe (9.6 ~ 16.2) %
	Polyamines	-
	Poly Aluminum Hydroxy Chloro Sulfate	Al_2O_3 (10 ~ 13) %
	High Test Hypochlorite	Cl above 60 %
	Sodium Hypochlorite	Cl above 5 %
	Chlorine Dioxide	under 1.0 mg/L
	Corrosion inhibitor	P_2O_5 above 11 % SiO_2 above 13 % P_2O_5+SiO_2 above 12 %
	Calcium Hydroxide(Slaked Lime)	above 10 %
	Stabilized chlorine dioxide	-

No. 11(21/64)

2.014 Paints

Test Method	Standard designation	Test range or Limits of detection
KS M ISO 3856-1:2007	Paints and varnishes—Determination of "soluble" metal content—Part 1 : Determination of lead content—Flame atomic absorption spectrometric method and dithizone spectrophotometric method	5 mg/kg
KS M ISO 3856-2:2007	Paints and varnishes—Determination of "soluble" metal content—Part 2 : Determination of antimony content—Flame atomic absorption spectrometric method and Rhodamine B spectrophotometric method	5 mg/kg
KS M ISO 3856-3:2007	Paints and varnishes—Determination of "soluble" metal content—Part 3 : Determination of barium content—Flame atomic emission spectrometric method	1 mg/kg
KS M ISO 3856-4:2007	Paints and varnishes—Determination of "soluble" metal content—Part 4 : Determination of cadmium content—Flame atomic absorption spectrometric method and polarographic method	1 mg/kg
KS M ISO 3856-5:2007	Paints and varnishes—Determination of "soluble" metal content—Part 5 : Determination of hexavalent chromium content of the pigment portion of the liquid paint or the paint in powder form—Diphenylcarbazide spectrophotometric method	5 mg/kg
KS M ISO 3856-6:2007	Paints and varnishes—Determination of "soluble" metal content—Part 6 : Determination of total chromium content of the liquid portion of the paint—Flame atomic absorption spectrometric method	5 mg/kg
KS M ISO 3856-7:2007	Paints and varnishes—Determination of "soluble" metal content—Part 7 : Determination of mercury content of the pigment portion of the paint and of the liquid of water-dilutable paints—Flameless atomic absorption spectrometric method	1 mg/kg
JIS K 5601-4-1:2003	Testing methods for paint components - Part 4 : Analysis for components emitted from film - Section 1 : Formaldehyde	

No. 11(22/64)

2.014 Paints

Test Method	Standard designation	Test range or Limits of detection
	3. HPLC	-
ISO 11890-1:2007	Paints and varnishes -- Determination of volatile organic compound (VOC) content -- Part 1: Difference method	0.01 g/L
ISO 11890-2:2007	Paints and varnishes -- Determination of volatile organic compound (VOC) content -- Part 2: Gas-chromatographic method	0.01 g/L
KS M ISO 6503:2007	Paints and varnishes－Determination of total lead－Flame atomic absorption spectrometric method	5 mg/kg
KS M ISO 7252:2007	Paints and varnishes－Determination of total mercury－Flameless atomic absorption spectrometric method	1 mg/kg
ASTM D3335:2005	Standard Test Method for Low Concentrations of Lead, Cadmium, and Cobalt in Paint by Atomic Absorption Spectroscopy	Pb 5 mg/kg Cd 1 mg/kg Co 5 mg/kg
ASTM D3624:2005	Standard Test Method for Low Concentrations of Mercury in Paint by Atomic Absorption Spectroscopy	1 mg/kg
ASTM D3960:2005	Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings	-
ASTM D5185:2005	Determination of Additive Elements, Wear Metals, and Contaminants in Used Lubricating Oil and Determination of Selected Elements in Base Oils by ICP-AES	-
KS M 5985:2003	Standard test method for low concentrations of lead, cadmium and cobalt in paint by atomic absorption spectroscopy	Pb 5 mg/kg Cd 1 mg/kg Co 5 mg/kg
US CPSC 16 CFR 1303	Ban of Lead-Containing Paint and Certain Consumer Products Bearing Lead Containing Paint	5 mg/kg
AOAC Official Method 974.02	Lead in Paint, Atomic Absorption Spectrophotometric Method (Final Action 1976)	5 mg/kg
ASTM E1613:2003	Standard Test Method for Determination of Lead by Inductively Coupled Plasma Atomic Emission Spectrometry(ICP-AES),	5 mg/kg

2.014 Paints

Test Method	Standard designation	Test range or Limits of detection
	Flame Atomic Absorption Spectrometry(FAAS), or Graphite Furnace Atomic Absorption Spectrometry(GFAAS) Techniques	
ASTM E1645:2001	Standard Practice for Preparation of Dried Paint Samples by Hotplate of Microwave Digestion for Subsequent Lead Analysis	5 mg/kg
ASTM F963:2003	Standard Consumer Safety Specification for Toy Safety	
	4.3.5 Paint and Similar Surface-Coating Materials	-
	8.3 Method to Dissolve Soluble Matter	-

2.015 Rubber

Test Method	Standard designation	Test range or Limits of detection
ISO 6101-2:1997	Rubber – Determination of metal content by atomic absorption spectrometry – Part 2: Determination of lead content	5 mg/kg
KS M ISO 6101-2:2007	Rubber–Determination of metal content by atomic absorption spectrometry–Part 2 : Determination of lead content	5 mg/kg
ASTM D4004:2006	Standard Test Methods for Rubber Determination of Metal Content by Flame Atomic Absorption (AAS) Analysis	Pb 5 mg/kg Zn 1 mg/kg Cu 1 mg/kg Mn 1 mg/kg
KS M 6584:2003	Standard test method for rubber–Determination of metalcontent by Flame Atomic Absorption(AAS) analysis	Pb 5 mg/kg Zn 1 mg/kg Cu 1 mg/kg Mn 1 mg/kg
KS R 1301:2006	Method for determination of lead and cadmium inrubber for automobiles	Pb 5 mg/kg Cd 1 mg/kg

No. 11(24/64)

2.016 Petroleum based products

Test Method	Standard designation	Test range or Limits of detection
KS M 1991:2008	Determination of phthalates content in plastic materials	
	DEP(Diethyl phthalate)	5 mg/kg
	DBP(Dibutyl phthalate)	5 mg/kg
	DEHP(Di(2-ethylhexyl)phthalate)	5 mg/kg
	DnOP(Di-*n*-octyl phthalate)	5 mg/kg
KS M 3210:2003	Plastic – Determination of cadmium – Wet decomposition method	-
KS M 3100-1:2003	Determination of the biodegradability of plastic matrials under composition conditions-method by chemical analysis	5 %
KPS M 1005:2008	Calcium carbonate contents(PE) bag for garbage separation	
	7.9 Calcium carbonate	-
KPS M 1011:2003	Biodisintegrable aliphatic polyester/PE film for garbage bag	
	7.8 aliphatic polyester	-
KPS M 1010:2008	Biodisintegrable aliphatic polyester/starch/PE film for garbage bag	
	7.8 aliphatic polyester(AP)/starch	-
US EPA 8061A : 1996	phthalate esters by gas chromatography with electron capture detection (GC/ECD)	
	DBP(Dibutyl phthalate)	5 mg/kg
	DMP(Dimethyl phthalate)	5 mg/kg
	BBP(Benzyl *n*-butyl phthalate)	5 mg/kg
	DEP(Diethyl phthalate)	5 mg/kg
	DnOP(Di-*n*-octyl phthalate)	5 mg/kg
	DEHP(Di(2-ethylhexyl)phthalate)	5 mg/kg
ASTM D5258:2007	Standard Practice for Acid-Extraction of Elements from Sediments Using Closed Vessel Microwave Heating	
	Cadmium	1 mg/kg

No. 11(25/64)

2.016 Petroleum based products

Test Method	Standard designation	Test range or Limits of detection
EPA 8315A : 1996	Determination of Carbonyl Compounds by High Performance Liquid Chromatography	
	Formaldehyde	5 mg/kg
ASTM D5257:2003	Standard Test Method for Dissolved Hexa valent Chromium in Water by Ion Chrom atography	
	Hexavalent Chromium	5 mg/kg
ASTM D4252:2003	Standard Test Methods for Chemical Anal ysis of Alcohol Ethoxylates and Alkylphen ol Ethoxylates	
	Fe	-
ASTM D5524:2001	Standard Test Method for Determination o f Phenolic Antioxidants in High Density P olyethylene Using Liquid Chromatography	
	BHT	5 mg/kg
ASTM D1996:2003	Standard Test Method for Determination o f Phenolic Antioxidants and Erucamide Sli p Additives in Low Density Polyethylene Using Liquid Chromatography (LC)	
	BHT	5 mg/kg
ASTM D7151:2005	Standard Test Method for Determination of Ele ments in Insulating Oils by Inductively Coupled Plasma Atomic Emission Spectrometry(ICP-AES)	
	Cd : 0.01	1 mg/kg
ASTM D 4419 : 1990	Standard Test Method for Curing Properties of Pultrusion Resins by Thermal Analysis	-
ASTM D 4591 : 2007	Standard Test Method for Determining Temperatures and Heats of Transitions of Fluoropolymers by Differential Scanning Calorimetryy	-
ASTM D 5028 : 2009	Standard Test Method for Curing Properties of Pultrusion Resins by Thermal Analysis	-

No. 11(26/64)

2.016 Petroleum based products

Test Method	Standard designation	Test range or Limits of detection
ASTM D 5296 : 2005	Standard Test Method for Molecular Weight Averages and Molecular Weight Distribution of Polystyrene by High Performance Size-Exclusion Chromatography	-
ASTM D 6474 : 1999	Standard Test Method for Determining Molecular Weight Distribution and Molecular Weight Averages of Polyolefins by High Temperature Gel Permeation Chromatography	-
ASTM D 6579 : 2006	Standard Practice for Molecular Weight Averages and Molecular Weight Distribution of Hydrocarbon and Terpene Resins by Size-Exclusion Chromatography	-
ASTM E 1131 : 2008	Standard Test Method for Compositional Analysis by Thermogravimetry	-
ASTM E 1269 : 2005	Standard Test Method for Determining Specific Heat Capacity by Differential Scanning Calorimetry	-
ASTM E 1641 : 2007	Standard Test Method for Decomposition Kinetics by Thermogravimetry	-
US EPA 8100 : 1986	Polynuclear Aromatic Hydrocarbons	
	Benzo(a)pyrene	0.5 mg/kg
US EPA 8270C:2007	Semivolatile Organic Compounds By Gas Chromatography/Mass Spectrometry (GC/MS)	
	DEHP	5 mg/kg
KS M 3717:2005	Determination of lead and cadmium in ad hesives for automobiles	Pb 5 mg/kg Cd 1 mg/kg
KS M 3719:2005	Determination of mercury in adhesives for automobiles	1 mg/kg
KS M 3211:2005	Determination of lead in plastics	5 mg/kg

No. 11(27/64)

2.017 FOOD

Test Method	Standard designation	Test range or Limits of detection
The official code of Food : 2009	7-2-1-1. Polyvinylchloride	
	Lead and Cadmium	1 mg/kg
	Vinylchloride monomer	0.1 mg/kg
	Dibutyl succinate	5 mg/kg
	DBP	0.15 mg/kg
	BBP	3.0 mg/kg
	DNOP	0.5 mg/kg
	DIDP	0.9 mg/kg
	DINP	0.9 mg/kg
	DEHP	0.75 mg/kg
	DEHA	1.8 mg/kg
	Cresolphosphate ester	10 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-2. Polyethylene, polypropylene	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-3. Polystyrene	
	Lead and Cadmium	1 mg/kg
	Volatile material	50 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-4. Polychlorovinylidene	
	Lead and Cadmium	1 mg/kg
	Vinyl chloride	0.6 mg/kg
	Barium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-5. Polyethyleneterephthalate	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L

2.017 FOOD

Test Method	Standard designation	Test range or Limits of detection
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	Antimony	0.02 mg/L
	Terephthalic acid	0.75 mg/L
	Isophthalic acid	0.5 mg/L
	Germanium	0.01 mg/L
	7-2-1-6. Phenol formaldehyde	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	3 mg/L
	Residue of evaporation	0.5 mg/L
	Formaldehyde	0.4 mg/L
	7-2-1-7. Melamine formaldehyde	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Residue of evaporation	3 mg/L
	Formaldehyde	0.4 mg/L
	Phenol	0.5 mg/L
	Melamin	3 mg/L
	7-2-1-8. Urea formaldehyde	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Residue of evaporation	3 mg/L
	Phenol	0.5 mg/L
	Formaldehyde	0.4 mg/L
	7-2-1-9. Polyacetal, Polyoxymethylene(POM), polyformaldehyde	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Residue of evaporation	3 mg/L
	Formaldehyde	0.4 mg/L
	7-2-1-10. Acryl resins	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	Methylmetacrylate	0.6 mg/L

2.017 FOOD

Test Method	Standard designation	Test range or Limits of detection
	7-2-1-11. Ploy amide/Nylon	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	4,4'-methylene dianiline	0.005 mg/L
	Caprolactam	1.5 mg/L
	7-2-1-12. Polymethylpenten	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-13. Polycarbonate	
	Lead and Cadmium	1 mg/kg
	Bisphenol A(Phenol,p-tert butyl phenol)	50 mg/kg
	Diphenylcarbonate	50 mg/kg
	Amines	0.1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	(Leaching)Bisphenol A(Phenol,p-tert butyl phenol)	-
	7-2-1-14. Polyvinylalcohol	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-15. Polyurethane	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	Isocyanate	0.05 mg/L
	7-2-1-16. Polybutene	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L

2.017 FOOD

Test Method	Standard designation	Test range or Limits of detection
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-17. Butadien resins	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-18. Acrylonitrile-butadiene, Acrylonitrile-stylene	
	Lead and Cadmium	1 mg/kg
	Volatile material	50 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	Acrylonitrile	0.01 mg/L
	7-2-1-19. Polymethacrylstyrene	
	Lead and Cadmium	1 mg/kg
	Volatile material	50 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	Methylmetacylate	0.6 mg/L
	7-2-1-20. Polybutyleneterephthalate	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-21. Polyarylsulfon	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-22. Polyarylate	
	Lead and Cadmium	1 mg/kg

2.017 FOOD

Test Method	Standard designation	Test range or Limits of detection
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-23. Hydroxybutyl polyester	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-24. Polyacrylonitrile	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	Acrylonitrile	0.01 mg/L
	7-2-1-25. Fluoro resins	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-26. Polyphenylene ether	
	Lead and Cadmium	1 mg/kg
	Volatile material	50 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-27. Isomonomer	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-28. Ethylenevinylacetate	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-29.	

No. 11(32/64)

2.017 FOOD

Test Method	Standard designation	Test range or Limits of detection
	Methylmethacrylate-acrylonitril-butadiene-styrene	
	Lead and Cadmium	1 mg/kg
	Volatile material	50 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	Methylmetacylate	-
	Acrilonitrile	-
	7-2-1-30. Polyethylenenaphthalate	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-31. Silicone resins	
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Rresidue of evaporation	3 mg/L
	7-2-1-32. Epoxy resins	
	Lead and Cadmium	1 mg/kg
	Amines	0.1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	Bisphenol A(Phenol,p-tert butyl phenol)	0.1 mg/L
	Bisphenol F Diglycidyl ether	0.1 mg/L
	Bisphenol A Diglycidyl ether	0.1 mg/L
	7-2-1-33. Polyetherimide	
	Lead and Cadmium	1 mg/kg
	Bisphenol A(Phenol,p-tert butyl phenol)	50 mg/L
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L

2.017 FOOD

Test Method	Standard designation	Test range or Limits of detection
	Residue of evaporation	3 mg/L
	(Leaching)Bisphenol A(Phenol,p-tert butyl phenol)	0.1 mg/L
	7-2-1-34. Polyphenylene sulfide	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-35. Polyethersulfone	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-36. Polycyclohexane-1,4-dimethylene terephthalate	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	Antimony	0.025 mg/L
	7-2-1-37. Ethylenevinylalcohol	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-38. polyimide	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-39. polyetheretherketone	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L

2.017 FOOD

Test Method	Standard designation	Test range or Limits of detection
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-40 polylactide, polylactic acid	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-1-41 polybutylenesuccinate-co-adipate	
	Lead and Cadmium	1 mg/kg
	Heavy metal	0.1 mg/L
	Consumption of KMnO4	1 mg/L
	Residue of evaporation	3 mg/L
	7-2-2. Cellophane : Regenerated Cellulose film	
	Arsenic	0.05 mg/L
	Heavy metal	0.1 mg/L
	Residue of evaporation	3 mg/L
	7-2-3. Rubber	
	Lead and Cadmium	1 mg/kg
	2-mercaptoimidazolin	0.1 mg/L
	Phenol	0.5 mg/L
	Formaldehyde	0.4 mg/L
	Zinc	1 mg/L
	Heavy metal	0.1 mg/L
	Residue of evaporation	3 mg/L
	7-2-4. Paper or processed paper	
	PCBs	0.5 mg/kg
	Arsenic	0.05 mg/L
	Heavy metal	0.1 mg/L
	Residue of evaporation	3 mg/L
	Formaldehyde	0.4 mg/L
	Fluorsence Whitening agent	-
	7-2-5. Metal	
	(Leaching)Lead	0.1 mg/L
	Cadmium	0.05 mg/L
	Arsenic	0.1 mg/L

2.017 FOOD

Test Method	Standard designation	Test range or Limits of detection
	Nickel	0.05 mg/L
	Chrom	0.05 mg/L
	Residue of evaporation	3 mg/L
	Formaldehyde	0.4 mg/L
	Vinylchloride	0.025 mg/L
	Epichlorohydrin	0.25 mg/L
	Bisphenol A Diglycidyl ether	0.1 mg/L
	Bisphenol F Diglycidyl ether	0.1 mg/L
	7-2-6. Wood	
	Arsenic	0.05 mg/L
	Heavy metal	0.1 mg/L
	Sulfur dioxide	1.28 mg/L
	o-Phenylphenol	0.73 mg/L
	Thiabendazole	0.18 mg/L
	Biphenyl	0.09 mg/L
	Imazaryl	0.06 mg/L
	7-2-7. Glass, Porcelain, Enameled ironware, Pottery	
	Lead	0.25 mg/L
	Cadmium	0.025 mg/L
	Arsenic	0.025 mg/L
	7-2-8. Starch	
	Lead and Cadmium	1 mg/kg
	Arsenic	0.05 mg/L
	Heavy metal	0.1 mg/L
	Formaldehyde	0.4 mg/L
	Fluorsence Whitening agent	-
	Consumption of KMnO4	1 mg/L
	7-3-1. general testing method	
	Lead and Antimon	1 mg/kg

2.018 Cosmetic

Test Method	Standard designation	Test range or Limits of detection
Notice of Korea Food and Drug Administration No. 2009 - 8	Cosmetic standards and testing method	
	Creams	
	(1) Content	-
	(2) pH	-
	(5) Mercury	0.05 mg/kg
	(6) Methanol(excepting products of 4% and less alcohol content))	0.025 %
	Eye makeup	
	(1) Content	-
	(2) pH	-
	(3) Lead	2 mg/kg
	(4) Arsenic	1 mg/kg
	(6) Methanol(excepting products of 4% and less alcohol content)	0.025 %
	Liquids(contain foundations)	
	(1) Content	-
	(2) pH	-
	(6) Methanol(excepting products of 4% and less alcohol content)	0.025 %
	Lipsticks	
	(1) Content	-
	(2) pH	-
	(3) Lead	2 mg/kg
	(4) Arsenic	1 mg/kg
	(6) Methanol(excepting products of 4% and less alcohol content)	0.025 %
	Makeup	
	(1) Content	-
	(2) pH	-
	(3) Lead	2 mg/kg
	(4) Arsenic	1 mg/kg
	(6) Methanol(excepting products of 4% and less alcohol content)	0.025 %
	Shampoo, Rince & Hair sprays	
	(1) Content	-

2.018 Cosmetic

Test Method	Standard designation	Test range or Limits of detection
	(2) pH	-
	(3) Lead	2 mg/kg
	(4) Arsenic	1 mg/kg
	(6) Methanol(excepting products of 4% and less alcohol content)	0.025 %

2.021 Water Quality

Test Method	Standard designation	Test range or Limits of detection
KS B 6224:2005	Testing methods for boiler feed water and boiler water	-
KS I 3206:2008	Testing method for industrial water	
	Except : 7 Temperature	-
	Except : 8 Appearance	-
	Except : 22 Total Oxygen Demand(TOD)	-
	Except : 30 Chlorin demand	-
	Except : 66 Biological test	-
Standard method:2005	Standard Methods for the Examination of Water and Wastewater	
	2120 Color	1도 이상
	2130 Turbidity	0.02 NTU
	2150 Odor	-
	2160 Taste	-
	2310 Acidity	-
	2320 Alkalinity	1 mg/L
	2340 Hardness	0.1 mg/L
	2510 Conductivity	1 μS/cm
	2540 Solids	5 mg/L
	3500-Al Aluminum(Al)	1 μg/L
	3500-Sb Antimony(Sb)	1 μg/L
	3500-As Arsenic(As)	1 μg/L
	3500-Ba Barium	1 μg/L
	3500-Be Beryllium	1 ug/L
	3500-Bi Bismuth	1 μg/L

No. 11(38/64)

2.021 Water Quality

Test Method	Standard designation	Test range or Limits of detection
	3500-Cd Cadmium(Cd)	1 μg/L
	3500-Ca Calcium(Ca)	10 μg/L
	3500-Cr Chromium(Cr)	1 μg/L
	3500-Co Cobalt	1 μg/L
	3500-Cu Copper(Cu)	1 μg/L
	3500-Ga Gallium	1 μg/L
	3500-Ge Germanium	1 μg/L
	3500-In Indium	1 μg/L
	3500-Fe Iron(Fe)	1 μg/L
	3500-Pb Lead(Pb)	1 μg/L
	3500-Li Lithium	1 μg/L
	3500-Mg Magnesium(Mg)	10 μg/L
	3500-Mn Manganese(Mn)	1 μg/L
	3500-Hg Mercury(Hg)	1 μg/L
	3500-Mo Molybdenum	1 μg/L
	3500-Ni Nickel(Ni)	1 μg/L
	3500-K Potassium(K)	10 μg/L
	3500-Se Selenium(Se)	1 μg/L
	3500-Ag Silver	1 μg/L
	3500-Na Sodium(Na)	10 μg/L
	3500-Sr Strontium	1 μg/L
	3500-Tl Thallium	1 μg/L
	3500-Sn Tin(Sn)	1 μg/L
	3500-Ti Titanium	1 μg/L
	3500-U Uranium	1 ug/L
	3500-V Vanadium(V)	1 ug/L
	3500-Zn Zinc(Zn)	1 ug/L
	4110 Determination of anions by ion chromatography	0.1 mg/L
	4500-B Boron(B)	1 μg/L
	4500-Br^- Bromide(Br^-) (Except : D. Flow Injection Analysis)	0.1 mg/L
	4500-CO_2 Carbon dioxide(CO_2)	1 mg/L

2.021 Water Quality

Test Method	Standard designation	Test range or Limits of detection
	4500-CN^- Cyanide(CN^-)	1 μg
	(Except : N. Total cyanide after distillation, by flow injection analysis)	-
	(Except : O. Total cyanide and weak acid dissociable cyanide by flow injection analysis)	-
	4500-Cl Chlorine(Residual)	0.05 mg/L
	(Except : I. Iodometric electrode technique)	-
	4500-Cl^- Chloride(Cl^-)	0.05 mg/L
	(Except : E. Automated ferricyanide method)	-
	(Except : G. Mercuric thiocyanate flow injection analysis)	-
	4500-F^- Fluoride(F^-)	0.05 mg/L
	(Except : E. Complexone method)	-
	(Except : G. Ion-selective electrode flow injection analysis)	-
	4500-H^+ pH value	1.7
	4500-I Iodine(I)	0.1 mg/L
	4500-N Nitrogen	0.2 mg/L
	(Except : B. In-line UV/Persulfate digestion and oxidation with flow injection analysis)	-
	(Except : C. Persulfate method)	-
	4500-NH_3 Nitrogen(Ammonia)	0.1 mg/L
	(Except : G. Automated Phenate method)	-
	(Except : H. Flow injection analysis)	-
	4500-NO_2^- Nitrogen(Nitrite)	0.01 mg/L
	4500-NO_3^- Nitrogen(Nitrate)	0.01 mg/L
	(Except : E. Cadmium Reduction method)	-
	(Except : F. Automated cadmium reduction method)	-
	(Except : H. Automated hydrazine reduction method)	-
	(Except : I. Cadmium reduction flow	-

No. 11(40/64)

2.021 Water Quality

Test Method	Standard designation	Test range or Limits of detection
	injection method)	
	4500-N org Nitrogen(Organic) (Except : D. Block digestion and flow injection method)	0.1 mg/L -
	4500-O Oxygen(Dissolved) (Except : B. Iodometric method) (Except : G. Membrane electrode method)	0.1 mg/L - -
	4500-SiO_2 Silica(SiO_2) (Except : E. Automated method for molybdate reactive Silica) (Except : F. Flow injection analysis for molybdate reactive silicate)	0.4 mg/L - -
	4500-P Phosphorus(P) (Except : F. Automated ascorbic acid reduction method)	0.2 mg/L -
	(Except : G. Flow injection analysis for Orthophosphate) (Except : H. Manual digestion and flow injection analysis for total phosphate) (Except : I. In-line UV/Persulfate digestion and flow injection analysis for total Phosphorus)	- - -
	4500-S^{2-} Sulfide(S^{2-}) (Except : E. Gas dialysis, automated methylene blue method) (Except : I. Distillation, methylene blue flow injection analysis)	1 mg/L - -
	4500-SO_3^{2-} Sulfite(SO_3^{2-}) (Except : C. Phenanthroline method)	2 mg/L -
	4500-SO_4^{2-} Sulfate(SO_4^{2-}) (Except : F. Automated methylthymol blue method) (Except : G. Methylthymol blue flow injection analysis)	0.1 mg/L - -
	5210 BOD	1 mg/L
	5220 COD	1 mg/L

2.021 Water Quality

Test Method	Standard designation	Test range or Limits of detection
	5530 Phenols	0.01 mg/L
	5540 Surfactants	0.01 mg/L
	6040 Constituent concentration by gas extraction	0.5 μg/L
	(1,1,1-Trichloroethane, Tetrachloroethylene, Trichloroethylene)	0.5 μg/L
	6200 Volatile organic compounds	0.5 μg/L
	(Dichloromethane, Benzene, Toluene, Ethylbenzene, Xylene, 1,1-Dichloroethylene)	0.5 μg/L
	6232 Trihalomethanes and chlorinated organic solvents	-
	(Carbon tetrachloride, Trihalomethanes)	0.5 μg/L
	6431 Polychlorinated biphenyls(PCBs)	0.001 mg/L
	6610 Carbamate pesticides	0.001 mg/L
	(carbaryl)	0.001 mg/L
	6630 Organochlorine pesticides	-
	(Malathion, Parathion, Fenitrothion, Diazinon)	0.001 mg/L
	9213 Recreational waters	-
	B. Swimming Pools	-
	C. Whirlpools	-
	E. Membrane Filter Technique for Pseudomonas aeruginosa	-
KS M ISO 17294-2:2005	Water quality – Application of inductively coupled plasma massspectrometry(ICP–MS) – Part 2 : Determination of 62 elements	0.001 mg/L
ASTM D3557:2002	Standard Test Method for Cadmium in Water	0.01 mg/L
ASTM D3559:2003	Standard Test Method for Lead in Water	0.01 mg/L
ASTM D5790:1995	Standard Test Method for Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectrometry	0.001 mg/L
ASTM D4327:2003	Standard Test Method for Anions in Water by Chemically Suppressed Ion Chromatography	0.01 mg/L
US EPA 9056A:2007	Determination of inorganic anions by ion chromatography	0.01 mg/L

2.021 Water Quality

Test Method	Standard designation	Test range or Limits of detection
The Ministry of Environment Notice No. 2009 - 233	Standard methods for the examination of environmental pollution(drinking water)	
	Hardness-EDTA titration method(ES 05301.1)	0.1 mg/L
	Consumption of $KMnO_4$(ES 05302.1)	0.3 mg/L
	Odor(ES 05303.1)	-
	Taste(ES 05304.1)	-
	Color-Colorimetry(ES 05305.1)	1도
	pH-Glass electrode method(ES 05306.1)	0.1
	Total solids(ES 05307.1)	5 mg/L
	Turbidity(ES 05308.1)	0.02 NTU
	ABS(ES 05309.1)	0.1 mg/L
	Residual chlorine-OT method(ES 05310.1)	0.01 mg/L
	Residual chlorine-DPDT method(ES 05310.2)	0.05 mg/L
	Free carbonate(ES 05311.1)	-
	Phenol-UV/VIS Spectrophotometry(ES 05312.1)	0.005 mg/L
	F(ES 05351.1)	0.02 mg/L
	CN(ES 05352.1)	0.01 mg/L
	NH_3-N(ES 05353.1)	0.01 mg/L
	NO_3-N(ES 05354.1)	0.1 mg/L
	Cl^-(ES 05355.1)	0.4 mg/L
	SO_4^{-2}(ES 05356.1)	0.1
	F, NO_3-N, Cl^-, SO_4^{-2}(ES 05357.1)	(0.02 ~ 0.1) mg/L
	Metals(ES 0400)	-
	Metals-AAS (ES 05400.1)	-
	Metals-ICP-AES(ES 05400.2)	-
	Metals-ICP/MS(ES 05400.3)	-
	Cu(ES 05401)	0.000 45 mg/L

2.021 Water Quality

Test Method	Standard designation	Test range or Limits of detection
	Pb(ES 05402)	0.000 37 mg/L
	Mn(ES 05403)	0.000 15 mg/L
	B(ES 05404)	0.002 mg/L
	As(ES 05405)	0.002 87 mg/L
	Se(ES 05406)	0.000 49 mg/L
	Hg(ES 05407)	0.000 5 mg/L
	Zn(ES 05408)	0.000 23 mg/L
	Sb(ES 05409)	0.001 mg/L
	Al(ES 05410)	0.001 82 mg/L
	Fe(ES 05411)	0.013 76 mg/L
	Cd(ES 05412)	0.000 36 mg/L
	Cr(ES 05413)	0.001 35 mg/L
	Organophosphorus pesticide(ES 05501.1)	-
	Carbaryl-GC(ES 05502.1)	0.000 5 mg/L
	Carbaryl-LC(ES 05502.2)	0.005 mg/L
	Chlorin disinfection byproduct(ES 05501)	
	Chlorin disinfection byproduct -GC/MS (ES 05501.1)	0.000 5 mg/L
	Chlorin disinfection byproduct-GC(ES 05501.2)	0.000 5 mg/L
	Haloacetic acid-GC(ES 05502.1)	0.001 mg/L
	Haloacetic acid-GC/MS(ES 05502.2)	0.001 mg/L
	VOCs(ES 05601)	-
	VOCs-Purge · Trap/GC/MS(ES 05601.1)	0.001 mg/L

No. 11(44/64)

2.022 Wastewater and Waste matter

Test Method	Standard designation	Test range or Limits of detection
KS I 3217:2008	Testing methods for industrial wastewater	
	Except 6 : Temperature	-
	Except 7 : Appearance	-
	Except 8 : Visual clarity of see	-
	Except 9 : Odor & Odor strength(TON)	-
	Except 22 : Total oxygen demand(TOD)	-
	Except 24 : CCl_4 extraction	-
	Except 25 : Hydrocarbon & lipid	-
	Except 30 : Pesticide	-
	Except 70 : Acute toxicity test in fish	-
	Except 72 : Chlorophyll-a	-
US EPA 3031:1996	Acid Digestion of Oils for Metals Analysis by Atomic Absorption or ICP Spectrometry	0.01 mg/L
US EPA 3050B:1996	Acid Digestion of Sediments, Sludges, and Soils	-
US EPA 3051:1994	Microwave Assisted Acid Digestion of Sediments, Sludges, Soils, and Oils	-
US EPA 3052:1996	Microwave Assisted Acid Digestion of Siliceous and Organically Based Matrices	-
US EPA 3060A:1996	Alkaline Digestion for Hexavalent Chromium	-
US EPA 8260B:1996	Volatile Organic Compounds(VOCs) by Gas Chromatography Mass Spectrometry (GC/MS)	0.001 mg/L
The Ministry of Environment Notice No. 2007 - 201	Test Method for Quality test and Analysis in Refuse fuel (RDF, RPF)	-
ISO 11423-1:1997	Water quality -- Determination of benzene and some derivatives -- Part 1: Head-space gas chromatographic method	0.01 mg/L
ISO 16221:2001	Water quality -- Guidance for determination of biodegradability in the marine environment	-
ISO 11732:2005	Water quality -- Determination of ammonium nitrogen -- Method by flow analysis (CFA and FIA) and spectrometric detection	0.01 mg/L

2.022 Wastewater and Waste matter

Test Method	Standard designation	Test range or Limits of detection
ISO 13395:1996	Water quality -- Determination of nitrite nitrogen and nitrate nitrogen and the sum of both by flow analysis (CFA and FIA) and spectrometric detection	0.01 mg/L
ISO 14402:1999	Water quality -- Determination of phenol index by flow analysis (FIA and CFA)	0.01 mg/L
ISO 14403:2002	Water quality -- Determination of total cyanide and free cyanide by continuous flow analysis	0.01 mg/L
ISO 15681-1:2003	Water quality -- Determination of orthophosphate and total phosphorus contents by flow analysis (FIA and CFA) -- Part 1: Method by flow injection analysis (FIA)	0.01 mg/L
ISO 15681-2:2003	Water quality -- Determination of orthophosphate and total phosphorus contents by flow analysis (FIA and CFA) -- Part 2: Method by continuous flow analysis (CFA)	0.01 mg/L
BS EN 1484:1997	Water analysis. Guidelines for the determination of total organic carbon (TOC) and dissolved organic carbon (DOC)	0.1 mg/L
ASTM D4839:2003	Standard Test Method for Total Carbon and Organic Carbon in Water by Ultraviolet, or Persulfate Oxidation, or Both, and Infrared Detection	0.1 mg/L
BS EN 13137:2001	Characterisation of waste. Determination of total organic carbon (TOC) in waste, sludges and sediments	0.1 mg/L
The Ministry of Environment Notice	Standard methods for the examination of environmental pollution(waste)	
No. 2008 - 96	Except : 4-17 Infectious microorganism	-
The Ministry of Environment Notice No. 2009 - 9	Standard methods for the examination of environmental pollution(water pollution)	
	4-1 Temperature	1 ℃
	4-2 Transmissivity	-
	4-3 pH	1.7
	4-4 DO	0.1 mg/L
	4-5 BOD	1 mg/L

2.022 Wastewater and Waste matter

Test Method	Standard designation	Test range or Limits of detection
	4-6 COD	1 mg/L
	4-7 Color	10 도
	4-8 Suspended Solid	5 mg 이상
	4-9 n-Hexane extract	2 mg
	4-10 Cl^-	0.7 mg/L
	4-11 NH_3-N	0.002 mg/L
	4-12 NO_2-N	0.000 2 mg/L
	4-13 NO_3-N	0.1 mg/L
	4-14 T-N	0.005 mg/L
	4-15 Dissolved T-N	0.005 mg
	4-16 PO_4-P	0.002 mg/L
	4-17 T-P	0.001 mg/L
	4-18 Dissolved T-P	0.001 mg/L
	4-19 Phenols	0.005 mg/L
	4-20 CN	0.01 mg/L
	4-21 F	0.15 mg/L
	4-22 Cr	0.01 mg/L
	4-23 Cr^{+6}	0.01 mg/L
	4-24 Zn	0.002 mg/L
	4-25 Cu	0.008 mg/L
	4-26 Cd	0.002 mg/L
	4-27 Pb	0.04 mg/L
	4-28 Mn	0.005 mg/L
	4-29 As	0.005 mg/L
	4-30 Ni	0.01 mg/L
	4-31 Fe	0.03 mg/L
	4-32 Se	0.005 mg/L
	4-33 Hg	0.000 5 mg/L
	4-34 R-Hg	0.000 5 mg/L
	4-35 Organic-P	0.000 5 mg/L
	4-36 PCBs	0.000 5 mg/L
	4-37 ABS	0.02 mg/L
	4-38 Volatile low class hydrocarbons	0.1 μg/L 이상

2.022 Wastewater and Waste matter

Test Method	Standard designation	Test range or Limits of detection
	4-39 Chlorophll a	-
	4-40 Conductivity	1 μS/cm
	4-42 (Total Organic Carbon-High Temperature Combust Method, Persulfate-Ultraviolet Oxidation Method)(ES 4358.1)	0.5 mg/L
	4-43 TPH	0.2 mg/L
	4-44 Phenols-Continuous Flow Analysis(ES 04301.2)	0.002 mg/L
	4-45 T-P automatic analysis Method(ES 04302.2)	0.001 mg/L
	4-46 T-N automatic analysis Method(ES 04303.4)	0.02 mg/L
	4-47 Cyanide-Continuous Flow Analysis(ES 04304.2)	0.005 mg/L
	4-48 Anionic surfactants-Continuous Flow Analysis(ES 04305.2)	0.03 mg/L
	4-56 Antimony - Inductive Coupled Plasma Atomic Emission Spectrometry(ES 04563.1)	0.008 mg/L
	4-57 Antimony - Inductive Coupled Plasma Mass Spectrometry(ES 04563.2)	0.000 4 mg/L
	4-58 Di-(2-ethylhexyl)phthalate - Gas Chromatography/Mass Spectrometry (ES 04708.1)	0.002 5 mg/L

2.023 Air Quality

Test Method	Standard designation	Test range or Limits of detection
The Ministry of Environment Notice No. 2007 - 145	Standard methods for the examiantion of environmental pollution(air pollution)	
	Dust of emission gases(ES 01201.1)	1 mg/m^3
	NH_3 of emission gases(ES 01303.1)	0.1 μmol/mol
	CO of emission gases(ES 01304.1)	1 μmol/mol
	HCl of emission gases(ES 01305.1)	0.1 μmol/mol
	SOx compound of emission gases(ES 01307.1)	1 μmol/mol
	NOx compound of emission gases(ES 01308.1)	1 μmol/mol

2.023 Air Quality

Test Method	Standard designation	Test range or Limits of detection
	CS_2 of emission gases(ES 01309.1)	0.1 μmol/mol
	H_2S of emission gases(ES 01310.1)	0.1 μmol/mol
	F compound of emission gases(ES 01311.1)	0.1 μmol/mol
	HCN of emission gases(ES 01312.1)	0.1 μmol/mol
	Smoke of emission gases(ES 01313.1)	1
	O_2 of emission gases(ES 01314.1)	1 %
	HCHO and aldehydes of emission gases(ES 01501.1)	0.1 μmol/mol
	Br compound of emission gases (ES 01502.1)	0.1 μmol/mol
	Benzene of emission gases (ES 01561.1)	0.1 μmol/mol
	Phenol compound of emission gases(ES 01503.1)	0.1 μmol/mol
	As compound of emission gases-Hydride-AAS(ES 01401.1)	0.01 μmol/mol
	Metal compound of emission gases-AAS(ES 01400.1)	0.01 mg/m^3
	Metal compound of emission gases-ICP-AES(ES 01400.2)	0.01 mg/m^3
	Hg compound of emission gases(ES 01408.1)	0.01 mg/m^3
	Velocity and flow rate measurement method of emission gases(ES 01114.1)	-
US EPA TO-17:1999	Determination of Volatile Organic Compounds in Ambient Air Using active sampling onto sorbent tube	0.01 μmol/mol
The National Institute of Environmental Research Notice No. 2007 - 17	Standard methods for the examination of environmental pollution(odor)	
	3 Air dilution olfactory method	dilution ratio : 3
	4 Instrumental analysis	
	4-1 Ammonia - Solution absorber Method	0.01 μmol/mol
	4-2 Methylmercaptan, hydrogen sulfide, dimethyl sulfide, dimethyl disulfide - Electron cooling by low temperature concentration- GC analysis of Capillary column Method	0.001 μmol/mol
	4-3 Trimethylammin - Headspace-GC of capillary column Method	0.001 μmol/mol

2.023 Air Quality

Test Method	Standard designation	Test range or Limits of detection
	4-4 Acetaldehyde, propionaldehyde, butylaldehyde, n-valeraldehyde, iso-valeraldehyde - DNPH derivatization Method(HPLC/UV)	0.01 μmol/mol
	4-5 Styrene - Low temperature concentration-GC Method	0.01 μmol/mol
	4-6 Toluene, xylene, MEK, MIBK, styrene, butyl acetate, i-butyl alcohol test Method	0.01 μmol/mol
	4-7. Propionic acid, n-butyric acid, n-valeric acid, I-valeric acid - Headspace Gas Chromatography Method	0.01 μmol/mol

2.024 Soil Quality

Test Method	Standard designation	Test range or Limits of detection
The Ministry of Environment Notice No. 2008 - 115	Standard methods for the examination of environmental pollution(soil pollution)	-

2.025 Indoor and Other Environment

Test Method	Standard designation	Test range or Limits of detection
US CPSC 16 CFR 1303	Ban of Lead-Containing Paint and Certain Consumer Products Bearing Lead Containing Paint	5 mg/kg
AOAC Official Method 974.02	Lead in Paint, Atomic Absorption Spectrophotometric Method (Final Action 1976)	5 mg/kg
ASTM E1613:2003	Standard Test Method for Determination of Lead by Inductively Coupled Plasma Atomic Emission Spectrometry(ICP-AES),	5 mg/kg

2.025 Indoor and Other Environment

Test Method	Standard designation	Test range or Limits of detection
	Flame Atomic Absorption Spectrometry(FAAS), or Graphite Furnace Atomic Absorption Spectrometry(GFAAS) Techniques	
ASTM E1645:2001	Standard Practice for Preparation of Dried Paint Samples by Hotplate of Microwave Digestion for Subsequent Lead Analysis	5 mg/kg
ASTM F963:2003	Standard Consumer Safety Specification for Toy Safety	
	4.3.5 Paint and Similar Surface-Coating Materials	-
	8.3 Method to Dissolve Soluble Matter	-
BS EN 1811 :1998	Reference test method for release of nickel from products intended to come into direct and prolonged contact with the skin	5 mg/kg
BS EN 12472 :2005	Method for the simulation of wear and corrosion for the detection of nickel release from coated items	5 mg/kg
IEC 62321 Ed.1	Electrotechnical products-Determination of levels of six regulated substances (lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls, polybrominated diphenyl ethers)	Pb 5 mg/kg Cd 1 mg/kg Hg 1 mg/kg Cr(VI) 5 mg/kg
The Ministry of Environment Notice No. 2008 - 73	Standard methods for the examination of environmental pollution(indoor air)-Remark only except	
	4-2-3 Fine particle	VOC, HCHO,
	Except : 2.3 β-Ray Method	Dust : 10 $\mu g/m^3$
	Except : 2.4 Light Scatterring Method	
	Except : 2.5 Light Transmission Method	Asbestos :
	4-2-4 Asbestos	0.01 fiber/mL
	Except : 2.3 Transmission Electron Microscope	CO :
	4-2-9 Radon	0.01 μmol/mol
	2.1 Continuous Monitors Method	CO_2 :
	Except : 3.2.1 Scintillation Cell	1 μmol/mol

No. 11(51/64)

2.025 Indoor and Other Environment

Test Method	Standard designation	Test range or Limits of detection
	Except : 3.2.2 Pulse ionization	O_3, NO_2 :
	Except : 2.2 Active carbon adsorption Method	0.001 μmol/mol
	Except : 2.3 Alpha Track Detector Method	Ra : 0.01 pCi/L
	4-2-10 Total bacteria count	Colony :
	Except : 2.2 Flushing Mrthod	1 CFU/m^3
KS I ISO 16000-1:2004	Indoor air−Part 1 : General aspects of sampling	-
KS I ISO 16000-3:2004	Indoor air−Part 3 : Determination of formaldehyde and other carbonyl compounds−Active sampling method	10 μg/m^3
KS I ISO 16000-6:2004	Indoor air−Part 6 : Determination of volatile organic compounds in indoor and test chamber air by active sampling on Tenax TA sorbent, thermal desorption and gas chromatography using MS/FID	0.005 mg/m^2·h
KS I ISO 16000-9:2004	Indoor air−Part 9 : Determination of the emission of volatile organic compounds−Emission test chamber method	0.005 mg/m^2·h
KS I ISO 16000-11:2004	Indoor air−Part 11 : Determination of the emission of volatile organic compounds−Sampling, storage of samples and preparation of test specimens	-
KS M 1998-4:2005	Determination of the formaldehyde emission of building interior products - Part 4 : Desiccator method	0.1 mg/L
KS M 7305:2006	Wall paper and wall coverings for decorative finish	-
	5.3.6 Determination of the formaldehyde emission	0.1 mg/L
KS F 3101:2006	Ordinary ploywood	-
	7.5 Determination of the formaldehyde emission	0.1 mg/L
KS F 3104:2006	Particle boards	-
	6.10 Determination of the formaldehyde emission	0.1 mg/L
KS F 3111:2008	Natural wood veneer flooring board	-
	7.12 Determination of the formaldehyde emission	0.1 mg/L

2.025 Indoor and Other Environment

Test Method	Standard designation	Test range or Limits of detection
KS F 3126:2008	Decoration wood-based flooring board	-
	8.13 Determination of the formaldehyde emission	0.1 mg/L
KS F 3200:2006	Fiberboards	-
	6.14 Determination of the formaldehyde emission	0.1 mg/L
KS F 3217:2006	Adhesives for wall paper and wall coverings for decorative finish	-
	6.4 Determination of the formaldehyde emission	0.1 mg/L
KS G 4203:2008	Office furniture－Desks and tables	-
	10.8 Determination of the formaldehyde emission	0.1 mg/L

2.032 Office supplies

Test Method	Standard designation	Test range or Limits of detection
Safety inspection standard for Consumer products on self-regulation Annex 44	school supplies	
	1. Crayon and Oil Pastel 5.1 Certain element	5 mg/kg

2.033 Household Goods

Test Method	Standard designation	Test range or Limits of detection
OECD 301:1992	OECD Guideline for Testing of Chemicals , Ready Biodegradability	
	301A. DOC-DieAway Test	1 %
	301C. Modified MITI Test(I)	1 %
KS M 2701:2007	Testing methods for soap	
	6.1.2 Moisture(Matter Volatile at 105℃(Oven Method))	-
	6.2 Soluble Material in Petroleum Ether	-
	6.4 Pure Soap Content	-
	6.5 Free Alkali	-
	6.7 Ethyl alcohol insoluble matter	-

No. 11(53/64)

2.033 Household Goods

Test Method	Standard designation	Test range or Limits of detection
KS M 2709:2006	Testing methods for synthetic detergent	
	6.7 Surface active agent	-
	6.10 Total phosphate	0.1 %
	6.16 Fluorescent agent	-
	6.17 As	-
	6.18 Heavy metal	-
	6.19 Methanol	0.05 mg/g
	7.3 pH	-
	7.4.2 Surface tension(Determination of surface tension by drawing up liquid films))	-
KS M 2714:2007	Testing method for biodegradability of synthetic detergent	
	6. Biodegradability test	-

2.033 Household Goods

Test Method	Standard designation		Test range or Limits of detection
Safety inspection standard for Consumer products on self-regulation Annex 7	Chemical Products		
	1. Organic surface-active agent	Appearance	-
		Weight(Volume)	-
		Hydrochloric acid, Sulfuric acid	-
		Sodium hydroxide, Potassium hydroxide	-
		Tetrachloroethylene	0.025 %
		Trichloroethylene	
		Bottle Hardness (Leaking test)	-
		Bottle Hardness (Dropping test)	-
	2. Room perfumery	Appearance	-
		Weight(Volume)	-
		Methyl alcohol	0.01 %
		Formaldehyde	5 mg/kg
		Bottle Hardness (Leaking test)	-
	3. Adhesives	Appearance	-
		Weight(Volume)	-
		Triphenyl tin compound	1 mg/kg
		Tributyl tin compound	
		Organomercury compound	
		Toluene	1 mg/kg
		Formaldehyde	5 mg/kg

2.033 Household Goods

Test Method	Standard designation		Test range or Limits of detection
Safety inspection standard for Consumer products on self-regulation Annex 7	4. Artficial waxes and prepared waxes	Appearance	-
		Weight(Volume)	-
		Triphenyltin compound	1 mg/kg
		Tributyltin compound	
		Organomercury compound	
	5. Deodorizing agent	Appearance	-
		Weight(Volume)	-
		Methyl alcohol	0.01 %
		Formaldehyde	5 mg/kg
	6. Synthetic detergents	pH	-
		Biodegradability	-
		Total phosphate	0.1 %
		Weight(Volume)	-
	7. Bleaching agent	Appearance	-
		Weight(Volume)	-
		Sodium hydroxide	-
		Total phosphate	0.1 %
	8. Fabric softening agent	Residual Anionic Surfactant	-
		Pb	5 mg/kg
		Cd	
		Hg	0.5 mg/kg
		As	
		Benzyl isothiazolinone	5 mg/kg
		Methyl isothiazolinone	
		Phenoxyethanol	15 mg/kg
		Phenol	
		Chloromethyl isothiazolinone	
		Formaldehyde	5 mg/kg
		Benzalkonium chloride	7.5 mg/kg
		Benzoic acid	20 mg/kg
		Benzyl alcohol	
		Fluorescent Whiten Agent	-
		Parabens	5 mg/kg
		Weight(Volume)	-

2.033 Household Goods

Test Method	Standard designation	Test range or Limits of detection
Safety inspection standard for Consumer products on certification Annex 3	Pressure cooker and pressure cook-pot for household	
	6.5.1 synthetic resin	-
	6.5.2 Rubber	-
	6.5.3 Metal	10 mg/kg
Safety inspection standard for Consumer products on self-regulation Annex 28	Keeping container for warming	
	6.7.2 Leaching	-
	Keeping container for cooling	
	6.4 Sanitation	-

2.034 Children's Products

Test Method	Standard designation	Test range or Limits of detection
BS EN 71-3:1995	Safety of toys.	
	Part 3 : Specification for migration of certain elements	5 mg/kg
KS G ISO 8124-3: 2002	Safety of toys	
	Part 3 : Migration of certain elements	5 mg/kg
Safety inspection standard for Consumer products on self-regulation Annex 36	Toy 4 - Extraction of harmful elementary	5 mg/kg
	Toy 5 - Indoor swing for children	
	5.2.3 Synthetic resin products and Parts painted by synthetic resin(certain element)	5 mg/kg
	5.2.5 Detection of formaldehyde	20 mg/kg
	Toy 7,8,9 - Organic Chemical Compounds	
	- Formaldehyde	20 mg/kg
	- Flame Retardants	5 mg/kg
	- Primary Aromatic amines	2 mg/kg
	- Monomers and Solvents	-
	- Wood preservatives	-
	- Preservatives	5 mg/kg
	- Plasticisers	0.03 mg/L

Safety inspection standard for Consumer products on self-regulation Annex 4	Textile Products	-
Safety inspection standard for Consumer products on self-regulation Annex 14	Care articles for young children(excepting apparatuses, containers and packing for food)	-

2.035 Other Commodities

Test Method	Standard designation	Test range or Limits of detection
Safety inspection standard for Consumer products on self-regulation Annex 41	Disposable diapers	-
Safety inspection standard for Consumer products on certification Annex 1	False eyelashes	-
Safety inspection standard for Consumer products on certification Annex 8	Moist tissues	-

3 Electric & Electonic Test

3.004 Electric material Test

Test Method	Standard designation	Test range or Limits of detection
Safety inspection standard for Consumer products on self-regulation Annex 5	Battery(including Rechargeable Battery)	Open circuit voltage 0.001 V Pb 5 mg/kg Cd, Hg 1 mg/kg

No. 11(58/64)

9 Biological Test

9.002 Microbiological Test

Test Method	Standard designation	Test range or Limits of detection
The official code of Food : 2009	5-1. Cakes	
	(6) Standard plate counts	10 CFU/g
	(7) Coliforms	10 CFU/g
	(8) Lactic acid bacteria counts	10 CFU/g
	5-2. Baked products and rice cakes	
	(5) Staphylococcus aureus	-
	(6) Salmonella spp.	-
	5-3. Cocoa products and chocolates	
	(5) Standard plate counts	10 CFU/g
	(6) Lactic acid bacteria counts	10 CFU/g
	5-11. Meet and Egg products	
	(4) Standard plate counts	10 CFU/g
	(5) Coliforms	10 CFU/g
	(6) Salmonella spp.	-
	5-12. Fish products	
	(3) Coliforms	-
	(4) Standard plate counts	10 CFU/g
	5-13. Soybean curd products and Mooks	
	(2) Coliforms	10 CFU/g
	5-15. Noodles	
	(3) Standard plate counts	10 CFU/g
	(4) E.coli	-
	(5) Coliforms	-
	5-16. Teas	
	(4) Standard plate count	10 CFU/g
	(5) Coliforms	-
	5-17. Coffees	
	(4) Standard plate count	10 CFU/g
	(5) Coliforms	10 CFU/g
	5-18-1. Fruit and vegetable beverage	
	(4) Standard plate count	10 CFU/g
	(5) Coliforms	-

9.002 Microbiological Test

Test Method	Standard designation	Test range or Limits of detection
	5-18-2. Carbonated beverages	
	(5) Standard plate count	10 CFU/g
	(6) Coliforms	-
	5-18-3. Soybean Milks	
	(1) Standard plate count	10 CFU/g
	(2) Coliforms	10 CFU/g
	5-18-4. Ferment beverages	
	(1) Lactic acid bacteria (counts) or yeast count	10 CFU/g
	(2) Standard plate count	10 CFU/g
	(3) Coliforms	10 CFU/g
	5-18-5. Powdered beverages	
	(5) Standard plate count	10 CFU/g
	(6) Coliforms	-
	5-18-6. Other beverages	
	(5) Standard plate count	10 CFU/g
	(6) Coliforms	-
	(7) Lactic acid bacteria (counts)	10 CFU/g
	5-19-1. Formulated foods for infants	
	(32) Standard plate count	10 CFU/g
	(33) Coliforms	-
	(35) Bacillus cereus	10 CFU/g
	5-19-2. Formulated foods for infants and young children	
	(29) Standard plate count	10 CFU/g
	(30) Coliforms	-
	(31) Bacillus cereus	10 CFU/g
	5-19-3. Formulated grain foods for infants and young children	
	(13) Coliforms	-
	(15) Bacillus cereus	10 CFU/g
	5-19-4. Other foods for infants and young children	
	(7) Coliforms	-
	(8) Standard plate count	10 CFU/g
	(10) Bacillus cereus	10 CFU/g
	5-19-5. Medical foods	

9.002 Microbiological Test

Test Method	Standard designation	Test range or Limits of detection
	(9) Coliforms	-
	(10) Standard plate count	10 CFU/g
	5-19-6. Meal replacement food	
	(5) Coliforms	-
	(6) Bacillus cereus	10 CFU/g
	5-19-7. Foods for pregnant and nursing women	
	(4) Coliforms	-
	(5) Standard plate count	10 CFU/g
	5-20. Mixed Jang	
	(4) Coliforms	-
	5-21-2. Sauces	
	(1) Coliforms	-
	(2) Standard plate count	10 CFU/g
	5-21-3. Tomato ketchup	
	(2) Coliforms	-
	5-21-4. Curry	
	(2) Standard plate count	10 CFU/g
	(3) Coliforms	-
	5-21-6. Spice products	
	(3) Coliforms	-
	(4) E. coli	-
	5-21-7. Complex seasoned food	
	(3) E. coli	-
	5-22. Dressing	
	(2) Coliforms	-
	5-23. Kimchi	
	(4) Coliforms	-
	5-24. Salted sea foods	
	(2) Coliforms	-
	5-25. Preserved products	
	(1) Standard plate count	10 CFU/g
	(2) Coliforms	-
	5-26. Hard-boiled foods	
	(1) Standard plate count	10 CFU/g

9.002 Microbiological Test

Test Method	Standard designation	Test range or Limits of detection
	(2) Coliforms	-
	5-27-1. Takju	
	(4) Yeast and mold count	10 CFU/g
	5-27-2. Yakju	
	(4) Yeast and mold count	10 CFU/g
	5-28. Dried shellfish and fish fillet	
	(2) E. coli	-
	(3) Staphylococcus aureus	10 CFU/g
	5-29-4. Processed fruit/vegetable processed products	
	(2) E. coli	-
	5-29-8. Imitation cheese	
	(1) Coliforms	-
	5-29-9. Vegetable cream	
	(2) Coliforms	-
	5-29-10. Extracted foods	
	(2) Standard plate count	10 CFU/g
	(3) Coliforms	-
	(4) E. coli	-
	5-29-15. uncooked foods	
	(3) Bacillus cereus	10 CFU/g
	(4) E. coli	-
	5-29-16. cereals	
	(3) Coliforms	-
	5-29-17. Ice	
	(8) Standard plate count	10 CFU/g
	(9) Coliforms	-
	5-29-18. instant foods	
	(1) E. coli	-
	(2) Standard plate count	10 CFU/g
	(3)Staphylococcus aureus	10 CFU/g
	(4) Salmonella spp	-
	(5) Vibrio parahaemolyticus	-

9.002 Microbiological Test

Test Method	Standard designation	Test range or Limits of detection
	(6) Bacillus cereus	10 CFU/g
	6. Aquatic products	
	1)-(2) Standard plate count	10 CFU/g
	1)-(3) Coliforms	10 CFU/g
	1)-(4) Vibrio parahaemolyticus, Salmonella spp, Staphylococcus aureus, Listeria monocytogenes	-
	8-2-1. Naengmyeon gravy	
	(2) Salmonella spp	-
	8-2-2. Drinking Water(for customer), aquarium water, cooking utensils etc.	
	(1)-① E. coli	-
	(1)-② Salmonella spp	-
	(2)-① Standard plate count	10 CFU/g
	(2)-② Coliforms	10 CFU/g
	(3)-① E. coli	-
	(4)-① Salmonella spp	-
	(4)-② E. coli	-
ISO 22196:2007	Plastics - Measurement of antibacterial activity on plastics surfaces	-
KS I ISO 11731 : 2004	Detection and enumeration of Legionella	-
KS I ISO 11731-2 : 2005	Detection and enumeration of Legionella-Part 2: Direct membrane filtration method for waters with low bacterial counts	-
Standard method:2005	Standard Methods for the Examination of Water and wastewater	
	9213 Recreational waters	-
	9215 Heterotrophic plate count	1 CFU/g
	9221 Multiple-tube fermentation technique for members of the coliform group	-
	9222 Membrane filter technique for members of the coliform group	-
	9230 Fecal streptococcus and enterococcus groups	-
	9260 Detection of pathogenic bacteria (Except : C. Immunofluorescence identification procedure for Salmonella)	-

9.002 Microbiological Test

Test Method	Standard designation	Test range or Limits of detection
	(Except : D. Quantitative Salmonella procedure)	-
	(Except : F. Pathogenic Escherichia coli)	-
	(Except : G. Campylobacter jejuni)	-
	(Except : H. Vibrio cholerae)	-
	(Except : I. Leptospira)	-
	(Except : J. Legionella)	-
	(Except : K. Yersinia enterocolitica)	-
	(Except : L. Aeromonas)	-
	(Except : M. Mycobacterium)	-
KS I 3206:2008	Testing Methods for Industrial Water	
	65 Microbiological test(Standard plate count, Coliforms, E. coli)	1 CFU/g 1 CFU/kg
KS I 3217:2008	Industrial wastewater test method	
	71 Microbiological test (Standard plate count, E. coli)	1 CFU/g
KS J 4206:2008	Testing methods for antibacterial activity of antibacterial functional products - Part 1 : Shake flask method	-
JIS Z 2801:2006	Antimicrobial products - Test for antimicrobial activity and efficacy	-
The Ministry of Environment Notice No. 2007 - 146	Test Method of Drinking Water "The Ministry of Environment"	
	ES 05701.1 Psychrophilic bacteria	1 CFU/g
	ES 05702.1 Mesophilic Bacteria(tap water)	1 CFU/g
	ES 05702.2 Mesophilic Bacteria(spring water)	-
	ES 05703.1 Total Coliforms-test tube method (tap water)	-
	ES 05703.2 Total Coliforms-test tube method (spring water)	-
	ES 05703.3 Total Coliforms-Membrane filter method	-
	ES 05703.4 Total Coliforms-enzyme colorimetric method	-
	ES 05704.1 Fecal coliforms	-

9.002 Microbiological Test

Test Method	Standard designation	Test range or Limits of detection
	ES 05705.1 E. coli-test tube method	-
	ES 05705.2 E. coli-Membrane filter method	-
	ES 05705.3 E. coli-enzyme colorimetric method	-
	ES 05706.1 Fecal streptococcus	-
	ES 05707.1 Pseudomonas aeruginosa	-
	ES 05708.1 Spore Forming Sulfite Reducing Anaerobes	-
	ES 05709.1 Salmonella-test tube method	-
	ES 05709.2 Salmonella-Membrane filter method	-
	ES 05710.1 Shigella-test tube method	-
	ES 05710.2 Shigella-Membrane filter method	-
	ES 05711.1 Yersina	-
The Ministry of Environment Notice No. 2009 - 9	Standard methods for the examination of environmental pollution(water pollution)	
	4-39 Chlorophll a	-
	4-50 Total coliform-Membrane filtration method (ES 04701.01)	-
	4-51 Total coliform-Multiple tube fermentation method (ES 04701.02)	-
	4-52 Total coliform-Pour plate method (ES 04701.03)	1 CFU/g
	4-53 Fecal coliform -Membrane filtration method (ES 04702.01)	-
	4-54 Fecal coliform-Multiple tube fermentation method (ES 04702.02)	-
	4-55 E. coli-Quantitative enzyme substrate method (ES 04703.01)	-
Safety inspection standard for Consumer products on certification Annex 8	Moist tissues	
	5.2 Plate count of bacteria, Plate count of Yeast & Mold	10 CFU/g
KP 9	Test Method	
	9. Sterility Tests	-
USP 31	Microbiological Tests	
	<71> Sterility Tests	-

End.