

Table 1 : List of the Declarable Substances

(17th Edition)

1. Prohibited Substances

*Intentional addition is prohibited, excluding exempt items

(1) Prohibited substances for purchased goods

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
1	Asbestos	Prohibited	- Substances prohibited to manufacture under the Industrial Safety and Health Act (Japan) - REACH Regulation (EC) No 1907/2006	Brake friction material, filler, adiabatic material
			Detailed Chemical List	CAS No.
			Asbestos	1332-21-4
			Actinolite	77536-66-4
			Amosite	12172-73-5
			Anthophyllite	77536-67-5
			Chrysotile	12001-29-5
			Crocidolite	12001-28-4
Tremolite	77536-68-6			
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	用途・使用例
2	Cadmium/cadmium compounds	Content exceeding 100 ppm in homogeneous material, excluding exempt items	- EU RoHS Directive 2011/65/EC - China RoHS	Pigment, electronic materials, plating, fluorescent bulb, electrode, batteries
		Content exceeding 10ppm in -Non-alkaline zinc-manganese dioxide batteries -Alkaline zinc-manganese dioxide batteries -Nickel hydride secondary batteries (excluding Button battery)	EU Battery Regulation (EU) 2023/1542 GB24427-2021 [Korea] Quality Management and Manufactured Product Safety Management Law (Battery Regulation)	
		In addition to above, Content exceeding 20 ppm in batteries including storage batteries		
		[Exemption] The exemptions listed in the EU Directive 2011/65/EC.		
		Detailed Chemical List	CAS No.	
		Cadmium	7440-43-9	
		Cadmium oxide	1306-19-0	
		Cadmium sulfide	1306-23-6	
Cadmium chloride	10108-64-2			
Cadmium sulfate	10124-36-4			
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
3	Chromium VI compounds	Content exceeding 1000 ppm in homogeneous material, excluding exempt items	- EU RoHS Directive 2011/65/EC - China RoHS	Pigment, catalyst, plating, dye, surface treatment
		[Exemption] The exemptions listed in the EU Directive 2011/65/EC.		
		Detailed Chemical List	CAS No.	
		Chromium (VI) oxide	1333-82-0	
		Barium chromate	10294-40-3	
		Calcium chromate	13765-19-0	
		Chromium trioxide	1333-82-0	
		Lead (II) chromate	7758-97-6	
		Sodium chromate	7775-11-3	
		Sodium dichromate	10588-01-9	
		Strontium chromate	7789-06-2	
		Potassium dichromate	7778-50-9	
		Potassium chromate	7789-00-6	
Zinc chromate	13530-65-9			
Chromium-hexavalent	18540-29-9			

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use	
4	Lead/lead compounds	Content exceeding 1,000 ppm in homogeneous material, excluding exempt items	- EU RoHS Directive 2011/65/EC - China RoHS	Pigment, paint, battery materials, optical materials, X-ray shielding, solder material, plating, metal alloy, resin additive, batteries	
		Content exceeding 300 ppm in polyvinyl chloride electric wire coating	US/CA Proposition 65 Case law		
		Content exceeding 40ppm in Alkaline zinc-manganese dioxide batteries	EU Battery Regulation (EU) 2023/1542 GB24427-2021 [Korea] Quality Management and Manufactured Product Safety Management Law (Battery Regulation)		
		In addition to above, Content exceeding 100 ppm in portable batteries			
		[Exemption] The exemptions listed in the EU Directive 2011/65/EC.			
			Detailed Chemical List		CAS No.
			Lead		7439-92-1
			Lead (II) sulfate		7446-14-2
			Lead (II) carbonate		598-63-0
			Lead hydrocarbonate		1319-46-6
			Lead acetate		301-04-2
			Lead (II) acetate, trihydrate		6080-56-4
			Lead phosphate		7446-27-7
			Lead selenide		12069-00-0
			Lead (IV) oxide		1309-60-0
			Lead (II,IV) oxide		1314-41-6
			Lead (II) sulfide		1314-87-0
			Lead (II) oxide		1317-36-8
			Lead (II) carbonate basic		1319-46-6
			Lead hydroxidcarbonate		1344-36-1
	Lead (II) phosphate	7446-27-7			
	Lead (II) chromate	7758-97-6			
	Lead (II) titanate	12060-00-3			
	Lead sulfate, sulphuric acid, lead salt	15739-80-7			
	Lead sulphate, tribasic	12202-17-4			
	Lead stearate	1072-35-1			
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use	
5	Mercury/mercury compounds	Content exceeding 1,000 ppm in homogenous material, excluding exempt items	- EU RoHS Directive 2011/65/EC - China RoHS	Fluorescent bulb, contact point material, pigment, antibacterial treatment, batteries	
		Content exceeding 1ppm in -Non-alkaline zinc-manganese dioxide batteries -Alkaline zinc-manganese dioxide batteries	EU Battery Regulation (EU) 2023/1542 GB24427-2021 [Korea] Quality Management and Manufactured Product Safety Management Law (Battery Regulation)		
		In addition to above, Content exceeding 5 ppm in batteries/storage batteries			
		[Exemption] The exemptions listed in the EU Directive 2011/65/EC.			
			Detailed Chemical List		CAS No.
			Mercury		7439-97-6
			Mercuric chloride		33631-63-9
			Mercury (II) chloride		7487-94-7
			Mercuric sulfate		7783-35-9
			Mercuric nitrate		10045-94-0
	Mercuric (II) oxide	21908-53-2			
	Mercuric sulfide	1344-48-5			

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
6	Ozone-depleting substances	Prohibited	Ozone Layer Protection Law Montreal Protocol Section 611 of the Clean Air Act (United States)	Refrigerant, foaming agent, extinguishant, solvent cleaner
			Detailed Chemical List	CAS No.
			Trichlorofluoromethane	75-69-4
			Dichlorodifluoromethane (CFC 12)	75-71-8
			Chlorotrifluoromethane (CFC 13)	75-72-9
			Pentachlorofluoroethane (CFC 111)	354-56-3
			Tetrachlorodifluoroethane (CFC 112)	76-12-0
			Trichlorotrifluoroethane (CFC 113)	354-58-5
			1,1,2 Trichloro-1,2,2 trifluoroethane	76-13-1
			Dichlorotetrafluoroethane (CFC 114)	76-14-2
			Monochloropentafluoroethane (CFC 115)	76-15-3
			Heptachlorofluoropropane (CFC 211)	422-78-6 135401-87-5
			Hexachlorodifluoropropane (CFC 212)	3182-26-1
			Pentachlorotrifluoropropane (CFC 213)	2354-06-5 134237-31-3
			Tetrachlorotetrafluoropropane (CFC 214)	29255-31-0
			1,1,1,3-Tetrachlorotetrafluoropropane	2268-46-4
			Trichloropentafluoropropane (CFC 215)	1599-41-3
			1,1,1-Trichloropentafluoropropane	4259-43-2
			1,2,3-Trichloropentafluoropropane	76-17-5
			Dichlorohexafluoropropane (CFC 216)	661-97-2
			Monochloroheptafluoropropane (CFC 217)	422-86-6
			Bromochlorodifluoromethane (Halon 1211)	353-59-3
			Bromotrifluoromethane (Halon 1301)	75-63-8
			Dibromotetrafluoroethane (Halon 2402)	124-73-2
			Carbon tetrachloride (Tetrachloromethane)	56-23-5
			1,1,1, - Trichloroethane (Methyl chloroform) and its isomers except 1,1,2-trichloroethane	71-55-6
			Bromomethane (Methyl bromide)	74-83-9
			Dibromofluoromethane	1868-53-7
			Bromodifluoromethane	1511-62-2
			Bromofluoromethane	373-52-4
			Tetrabromofluoroethane	306-80-9
			Tribromodifluoroethane	-
			Dibromotrifluoroethane	354-04-1
			Bromotetrafluoroethane	124-72-1
			Tribromofluoroethane	-
			Dibromodifluoroethane	75-82-1
			Bromotrifluoroethane	421-06-7
			Dibromofluoroethane	358-97-4
			Bromodifluoroethane	420-47-3
			Bromofluoroethane	762-49-2
			Hexabromofluoropropane	-
			Pentabromodifluoropropane	-
			Tetrabromotrifluoropropane	-
			Tribromotetrafluoropropane	-
			Dibromopentafluoropropane	431-78-7
			Bromohexafluoropropane	2252-78-0
			Pentabromofluoropropane	-
			Tetrabromodifluoropropane	-
			Tribromotrifluoropropane	-
			Dibromotetrafluoropropane	-
			Bromopentafluoropropane	460-88-8
			Tetrabromofluoropropane	-
			Tribromodifluoropropane	70192-80-2
			Dibromotrifluoropropane	431-21-0
			Bromotetrafluoropropane	679-84-5
			Tribromofluoropropane	75372-14-4
			Dibromodifluoropropane	460-25-3
			Bromotrifluoropropane	421-46-5
			Dibromofluoropropane	51584-26-0
			Bromodifluoropropane	-

	Bromofluoropropane	1871-72-3
	Bromochloromethane	74-97-5
	Dichlorofluoromethane (HCFC 21)	75-43-4
	Chlorodifluoromethane (HCFC 22)	75-45-6
	Chlorofluoromethane (HCFC 31)	593-70-4
	Tetrachlorofluoroethane (HCFC 121)	134237-32-4
	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a)	354-11-0
	1,1,2,2-Tetrachloro-1-fluoroethane	354-14-3
	Trichlorodifluoroethane (HCFC-122)	41834-16-6
	1,2,2-Trichloro-1,1-difluoroethane	354-21-2
	Dichlorotrifluoroethane (HCFC-123)	34077-87-7
	Dichloro-1,1,2-trifluoroethane	90454-18-5
	1,1-Dichloro-2,2,2-trifluoroethane	306-83-2
	1,2-Dichloro-1,1,2-trifluoroethane (HCFC-123a)	354-23-4
	1,1-Dichloro-1,2,2-trifluoroethane (HCFC-123b)	812-04-4
	Chlorotetrafluoroethane (HCFC-124)	63938-10-3
	2-Chloro-1,1,1,2-tetrafluoroethane	2837-89-0
	1-Chloro-1,1,2,2-tetrafluoroethane (HCFC 124a)	354-25-6
	Trichlorofluoroethane (HCFC 131)	27154-33-2; (134237-34-6)
	1-Fluoro-1,2,2-trichloroethane	359-28-4
	1,1,1-trichloro-2-fluoroethane (HCFC131b)	811-95-0
	1-Chloro-1-fluoroethane (HCFC-151)	1615-75-4
	Dichlorodifluoroethane (HCFC 132)	25915-78-0
	1,2-Dichloro-1,1-difluoroethane (HCFC 132b)	1649-08-7
	1,1-Dichloro-1,2-difluoroethane (HCFC 132c)	1842-05-3
	1,1-Dichloro-2,2-difluoroethane	471-43-2
	1,2-Dichloro-1,2-difluoroethane	431-06-1
	Chlorotrifluoroethane (HCFC-133)	1330-45-6
	1-Chloro-1,2,2-trifluoroethane	1330-45-6
	2-Chloro-1,1,1-trifluoroethane (HCFC-133a)	75-88-7
	Dichlorofluoroethane (HCFC-141)	1717-00-6 (25167-88-8)
	1,1-Dichloro-1-fluoroethane (HCFC-141b)	1717-00-6
	1,2-Dichloro-1-fluoroethane	430-57-9
	Chlorodifluoroethane (HCFC-142)	25497-29-4
	1-Chloro-1,1-difluoroethane (HCFC142b)	75-68-3
	1-Chloro-1,2-difluoroethane (HCFC142a)	25497-29-4
	Hexachlorofluoropropane (HCFC 221)	134237-35-7
	Pentachlorodifluoropropane (HCFC 222)	134237-36-8
	Tetrachlorotrifluoropropane (HCFC 223)	134237-37-9
	Trichlorotetrafluoropropane (HCFC 224)	134237-38-0
	Dichloropentafluoropropane (HCFC 225)	127564-92-5 (2713-09-9)
	2,2-Dichloro-1,1,1,3,3- pentafluoropropane (HCFC 225aa)	128903-21-9
	2,3-Dichloro-1,1,1,2,3- pentafluoropropane (HCFC 225ba)	422-48-0
	1,2-Dichloro-1,1,2,3,3- pentafluoropropane (HCFC 225bb)	422-44-6
	3,3-Dichloro-1,1,1,2,2- pentafluoropropane (HCFC 225ca)	422-56-0
	1,3-Dichloro-1,1,2,2,3- pentafluoropropane (HCFC 225cb)	507-55-1
	1,1-Dichloro-1,2,2,3,3- pentafluoropropane (HCFC 225cc)	13474-88-9
	1,2-Dichloro-1,1,3,3,3- pentafluoropropane (HCFC 225da)	431-86-7
	1,3-Dichloro-1,1,2,3,3- pentafluoropropane (HCFC 225ea)	136013-79-1
	1,1-Dichloro-1,2,3,3,3- pentafluoropropane (HCFC 225eb)	111512-56-2

Chlorohexafluoropropane (HCFC 226)	134308-72-8
Pentachlorofluoropropane (HCFC 231)	134190-48-0
Tetrachlorodifluoropropane (HCFC 232)	134237-39-1
Trichlorotrifluoropropane (HCFC 233)	134237-40-4
1,1,1-Trichloro-3,3,3-trifluoropropane	7125-83-9
Dichlorotetrafluoropropane (HCFC 234)	127564-83-4
Chloropentafluoropropane (HCFC 235)	134237-41-5
1-Chloro-1,1,3,3,3-pentafluoropropane	460-92-4
Tetrachlorofluoropropane (HCFC 241)	134190-49-1
Trichlorodifluoropropane (HCFC 242)	134237-42-6
Dichlorotrifluoropropane (HCFC 243)	134237-43-7
1,1-Dichloro-1,2,2-trifluoropropane	7125-99-7
2,3-Dichloro-1,1,1-trifluoropropane	338-75-0
3,3-Dichloro-1,1,1-trifluoropropane	460-69-5
Chlorotetrafluoropropane (HCFC-244)	134190-50-4
3-Chloro-1,1,2,2-tetrafluoropropane	679-85-6
Trichlorofluoropropane (HCFC-251)	134190-51-5
1,1,3-Trichloro-1-fluoropropane	818-99-5
Dichlorodifluoropropane (HCFC 252)	134190-52-6
Chlorotrifluoropropane (HCFC 253)	134237-44-8
3-Chloro-1,1,1-trifluoropropane (HCFC 253fb)	460-35-5
Dichlorofluoropropane (HCFC 261)	134237-45-9
1,1-Dichloro-1-fluoropropane	7799-56-6
Chlorodifluoropropane (HCFC-262)	134190-53-7
2-Chloro-1,3-difluoropropane	102738-79-4
Chlorofluoropropane (HCFC-271)	134190-54-8
2-Chloro-2-fluoropropane	420-44-0

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
7	Polybrominated biphenyls (PBBs)	Content exceeding 1,000 ppm in homogenous material	- EU RoHS Directive 2011/65/EC - China RoHS	Flame retardant
			Detailed Chemical List	CAS No.
			Polybrominated biphenyls	59536-65-1
			Dibromobiphenyl	92-86-4
			2-Bromobiphenyl	2052-07-5
			3-Bromobiphenyl	2113-57-7
			4-Bromobiphenyl	92-66-0
			Tribromobiphenyl	59080-34-1
			Tetrabromobiphenyl	40088-45-7
			Pentabromobiphenyl	56307-79-0
			Hexabromobiphenyl	59080-40-9
			Hexabromo-1,1-biphenyl	36355-01-8
			Firemaster FF-1	67774-32-7
			Heptabromobiphenyl	35194-78-6
Octabromobiphenyl	61288-13-9			
Nonabromobiphenyl	27753-52-2			
Decabromobiphenyl	13654-09-6			
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
8	Polybrominated diphenylethers (PBDEs)	Content exceeding 1,000 ppm in homogenous material	- EU RoHS Directive 2011/65/EC - China RoHS -(US) Toxic Substances Control Act (TSCA)	Flame retardant
			Detailed Chemical List	CAS No.
			Bromodiphenyl ether	101-55-3
			Dibromodiphenyl ether	2050-47-7
			Tribromodiphenyl ether	49690-94-0
			Tetrabromodiphenyl ether	40088-47-9
			Pentabromodiphenyl ether (Note: Commercially available PeBDPO is a complex reaction mixture containing a variety of brominated diphenyloxides)	32534-81-9
			Hexabromodiphenyl ether	36483-60-0
			Heptabromodiphenyl ether	68928-80-3
			Octabromodiphenyl ether	32536-52-0
			Nonabromodiphenyl ether	63936-56-1
Decabromodiphenyl ether	1163-19-5			
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
9	Polychlorinated Biphenyls (PCBs) and specific substitutes	Prohibited	- "Class I Specified Chemical Substances" defined in Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Japan) - EU06 850-2004-EU (POPs) ANNEX I PART A - REACH Regulation (EC) No 1907/2006	Insulation oil, electrical insulation medium, electrolytic solution, plasticizers
			Detailed Chemical List	CAS No.
			Polychlorinated biphenyls (all isomers and congeners)	1336-36-3
			Monomethyl-tetrachloro-diphenyl methane (Ugilec 141)	76253-60-6
			Monomethyl-dichloro-diphenyl methane (Ugilec 121, Ugilec 21)	81161-70-8
			Monomethyl-dibromo-diphenyl methane (DBBT)	99688-47-8

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulatory	Examples of Use
10	Polychlorinated naphthalenes (more than 1 chlorine atoms)	Prohibited	- "Class I Specified Chemical Substances" defined in Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Japan) - EU06 850-2004-EU (POPs) ANNEX I PART A	Lubricant, insulator, synthetic rubber material
			Detailed Chemical List	CAS No.
			Polychlorinated naphthalenes	70776-03-3
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
11	Radioactive substances	Prohibited	Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors (Japan)	Measuring devices, detector
			Detailed Chemical List	CAS No.
			Uranium-238	7440-61-1
			Radon	10043-92-2
			Americium-241	14596-10-2
			Thorium-232	7440-29-1
			Cesium (Radioactive isotopes only)	7440-46-2 (Cs-137 010045-97-3)
Strontium (Radioactive isotopes only)	(7440-24-6) (Sr-9010098-97-2)			
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
12	Short-chain chlorinated paraffins (C10-13)	Content exceeding 1,000 ppm in article	- REACH Regulation (EC) No 1907/2006 - EU06 850-2004-EU (POPs) ANNEX I PART A	Plasticizer, flame retardant
			Detailed Chemical List	CAS No.
			Chlorinated paraffins (C10-13)	85535-84-8

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
13	Tri-substituted organostannic compounds (Such as Tributyl tins(TBT) & triphenyl tins (TPT))	Content exceeding 1,000 ppm in article (tin conversion weight ratio)	- "Class I Specified Chemical Substances" defined in Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Japan) - REACH Regulation (EC) No 1907/2006	Antiseptic, anti-fungal agent, antifouling paints
			Detailed Chemical List	CAS No.
			Triphenyltin=N, N-dimethyldithiocarbamate	1803-12-9
			Triphenyltinfluoride	379-52-2
			Triphenyltinacetate	900-95-8
			Triphenyltinchloride	639-58-7
			Triphenyltinhydroxide	76-87-9
			Triphenyltin fattyacid ((C9-11) salt)	18380-71-7 18380-72-8 47672-31-1 94850-90-5
			Triphenyltinchloroacetate	7094-94-2
			Tributyltinmethacrylate	2155-70-6
			Bis (tributyltin) fumalate	6454-35-9
			Tributyltinfluoride	1983-10-4
			Bis (tributyltin) 2,3-dibromosuccinate	31732-71-5
			Tributyltinacetate	56-36-0
			Tributyltinlaurate	3090-36-6
			Bis (tributyltin) phthalate	4782-29-0
			Copolymer of alkyl (C8) acrylate, methyl methacrylate and tributyltin methacrylate	67772-01-4
Tributyltinsulfamate	6517-25-5			
Bis (tributyltin) maleate	14275-57-1			
Tributyltinchloride	1461-22-9 7342-38-3			
Tributyltin cyclopentane and their analogues	85409-17-2			
Tributyltin-1, 2,3,4,4a, 4b,5,6, 10,10a-decahydro-7-isopropyl-1, 4a-dimethyl-1-phenanthrene carboxylate and their analogues	26239-64-5			
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
14	Tributyl tin oxide (TBTO)	Prohibited	- "Class I Specified Chemical Substances" defined in Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Japan) - REACH Regulation (EC) No 1907/2006	Antiseptic, anti-fungal agent, antifouling paints
			Detailed Chemical List	CAS No.
			Bis(tri-n-butyltin) oxide	56-35-9

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
15	Perfluorooctane sulfonate and its salts (PFOS and PFOs)	1µg/m ² when used in surface treatment, plating, and fiber materials; and 1,000 ppm in homogenous material for other applications	- "Class I Specified Chemical Substances" defined in Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture (Japan) - POPs Regulation (EU) 2019/1021 ANNEX I PART A	Waterproof agent, plating pretreatment, fire-fighting foam, photosensitizer
			Detailed Chemical List	CAS No.
			Perfluorooctane sulfonates (PFOS) C ₈ F ₁₇ SO ₂ X, where X = OR, NR or other derivative	
			Perfluorooctanesulfonic acid	1763-23-1
			Perfluorooctanesulfonic acid(ammonium salt)	29081-56-9
			Perfluorooctanesulfonic acid(diethanol amine salt)	70225-14-8
			Perfluorooctanesulfonic acid(potassium salt)	2795-39-3
	Perfluorooctanesulfonic acid(litium salt)	29457-72-5		

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
16	Dibutyltin (DBT) compounds	Content exceeding 1,000 ppm (in terms of tin weight ratio) in article	- REACH Regulation (EC) No 1907/2006	Stabilizer for vinyl chloride resin Hardening catalyst for silion-based resin
			Detailed Chemical List	CAS No.
			Dibutyltin	1002-53-5
			Dibutyltin maleate	10192-92-4
			Bis[[[z)-4-methoxy-1,4-dioxo-2-butenyl]oxy]dibutylstannane	15546-11-9
			Bis(2-ethylhexanoic acid) dibutyltin	2781-10-4
			Dibutyltin dichloride;(DBTC)	683-18-1
	Dibutyltin oxide	818-08-6		

※ It is a prohibited substance with limited uses.

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
17	Diocetyl tin (DOT) compounds	Content exceeding 1,000 ppm (in terms of tin weight ratio) in article, for use described below <ul style="list-style-type: none"> · Two-component room temperature vulcanisation molding kits (RTV-2 molding kits) · Textile and leather articles intended to come into contact with the skin 	- REACH Regulation (EC) No 1907/2006	Stabilizer for vinyl chloride resin
			Detailed Chemical List	CAS No.
			Dialkyl(C=1~8)tin bis{alkyl(or alkenyl,C=6~18) thioglycollate)	15571-58-1
			Diocetyl tin maleate	16091-18-2
			Diocetyl tin	26401-97-8
			Diocetyl tin bis (Maleic acid monoalkyl(C=6~224) ester) salt	33568-99-9
	Dibutyltin dichloride	3542-36-7		

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
18	Dimethylfumarate (DMF)	Content exceeding 0.1 ppm in article	- REACH Regulation (EC) No 1907/2006	Anti-fungal agent Bactericides
			Detailed Chemical List	CAS No.
				Dimethylfumarate (dimethyl fumarate (DMF))

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use	
19	Perfluorooctanoic acid (PFOA) , its salts and PFOA-related substances	Concentration in article equal to or above : - Perfluorooctanoic acid (PFOA) and its salts 25ppb - Combination of one or multiple PFOA-related substances 1000ppb	- EU POPs (EU) No 2019/1021	Additives,Leveling agent of the paint,Fire-fighting foam,Surfactant,Semiconductor regist film, Fluoropolymers (PFA, PTFE, PVDF, .etc), Flouroelastomers (FEPM, FFPM/FFKM, .etc)	
				Detailed Chemical List	CAS No.
				Perfluorooctanoic acid	335-67-1
				Ammonium perfluorooctanoate	3825-26-1
				Sodium salt of perfluorooctanoic acid	335-95-5
				Potassium salt of perfluorooctanoic acid	2395-00-8
				Silver salt of perfluorooctanoic acid	335-93-3
				perfluorooctanoic acid fluoride	335-66-0
				perfluorooctanoic acid methl	376-27-2
perfluorooctanoic acid ethl	3108-24-5				
20	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified, i.e. alpha,beta and gamma-hexabromocyclododecane	Prohibited	- "Class I Specified Chemical Substances" defined in Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Japan) - REACH Regulation (EC) No 1907/2006 - EU06 850-2004-EU (POPs) ANNEX I PART A	Flame retardant, hardener	
				Detailed Chemical List	CAS No.
				Hexabromocyclododecane	25637-99-4
					4736-49-6
					65701-47-5
					138257-17-7
					138257-18-8
					138257-19-9
					169102-57-2
					678970-15-5
					678970-16-6
					678970-17-7
					1,2,5,6,9,10-Hexabromocyclododecane
	alpha-Hexabromocyclododecane	134237-50-6			
	beta-Hexabromocyclododecane	134237-51-7			
	gamma-Hexabromocyclododecane	134237-52-8			
21	Bis(2-ethylhexyl) phthalate(DEHP)	Content exceeding 1,000 ppm in homogenous material	- EU RoHS Directive 2011/65/EC - REACH Regulation (EC) No 1907/2006	Plasticizer	
				Detailed Chemical List	CAS No.
				Bis(2-ethylhexyl) phthalate	117-81-7
22	Benzyl butyl phthalate (BBP)	Content exceeding 1,000 ppm in homogenous material	- EU RoHS Directive 2011/65/EC - REACH Regulation (EC) No 1907/2006	Plasticizer	
				Detailed Chemical List	CAS No.
				Benzyl butyl phthalate	85-68-7
23	Dibutyl phthalate (DBP)	Content exceeding 1,000 ppm in homogenous material	- EU RoHS Directive 2011/65/EC - REACH Regulation (EC) No 1907/2006	Plasticizer	
				Detailed Chemical List	CAS No.
				Dibutyl phthalate	84-74-2
24	Diisobutyl phthalate (DIBP)	Content exceeding 1,000 ppm in homogenous material	- EU RoHS Directive 2011/65/EC - REACH Regulation (EC) No 1907/2006	Plasticizer	
				Detailed Chemical List	CAS No.
				Diisobutyl phthalate	84-69-5

*** Substances whose use is prohibited for items that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity**

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
25	Azocolorants and azodyes which form certain aromatic amines	Fabric and leather parts/products that can come into direct contact with human skin or the oral cavity for extended period of time, with content exceeding 300 ppm in homogenous material	- REACH Regulation (EC) No 1907/2006	Pigment, dyes, colorants
			Detailed Chemical List	CAS No.
			Biphenyl-4-ylamine	92-67-1
			Benzidine	92-87-5
			4-Chloro-o-toluidine	95-69-2
			2-Naphthylamine	91-59-8
			o-Aminoazotoluene	97-56-3
			5-Nitro-o-toluidine	99-55-8
			4-Chloroaniline	106-47-8
			4-Methoxy-m-phenylenediamine	615-05-4
			4,4'-Diaminodiphenylmethane (MDA) 4,4'-Methylenedianiline	101-77-9
			3,3'-Dichlorobenzidine	91-94-1
			3,3'-Dimethoxybenzidine	119-90-4
			3,3'-Dimethylbenzidine	119-93-7
4,4'-Methylenedi-o-toluidine	838-88-0			
6-Methoxy-m-toluidine	120-71-8			

*** Substances whose use is prohibited for items that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity**

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
26	PAH (polycyclic aromatic hydrocarbon)	Rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, with content exceeding 1 mg/kg (1 ppm) in homogenous material	- GS - REACH Regulation (EC) No 1907/2006 Annex XVII - ZEK01.4-08	antirust, release agent, pesticide, insect repellent, preservative, lubricant, extender
			Detailed Chemical List	CAS No.
			Acenaphthene	83-32-9
			Acenaphthylene	208-96-8
			Anthracene	120-12-7
			Benzo[a]anthracene	56-55-3
			Benzo[b]fluoranthene	205-99-2
			Benzo[j]fluoranthene	205-82-3
			Benzo[k]fluoranthene	207-08-9
			Benzo[g,h,i]perylene	191-24-2
			Benzo[a]pyrene (BaP)	50-32-8
			Benzo[e]pyrene	192-97-2
			Chrysene	218-01-9
			Dibenzo[a,h]anthracene	53-70-3
			Fluoranthene	206-44-0
			Fluorene	86-73-7
			Indeno[1,2,3-cd]pyrene	193-39-5
			Naphthalene	91-20-3
Phenanthrene	85-01-8			
Pyrene	129-00-0			

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
27	Pentachlorothiophenol (PCTP)	Content exceeding 10000 ppm in article	-(US) Toxic Substances Control Act (TSCA)	Peptizer
			Detailed Chemical List	CAS No.
			Pentachlorothiophenol (PCTP)	133-49-3

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
28	Hexachlorobutadiene (HCBD)	Prohibited	-(US) Toxic Substances Control Act (TSCA) - EU POPs (EU) 2019/1021 - "Class I Specified Chemical Substances" defined in Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture (Japan)	Byproduct during the production of trichloroethylene and carbon tetrachloride
			Detailed Chemical List	CAS No.
			Hexachlorobutadiene (HCBD)	87-68-3

※ Enclosure and stand of electronic displays with a screen area greater than 100 square centimetres

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
29	Halogenated Flame Retardants	Enclosure and stand of electronic displays with a screen area greater than 100 square centimetres, with content exceeding 1000 ppm in homogenous material	· (EU) 2019/2021	Flame retardants
			Detailed Chemical List (Substance group ID "SG058" in chem SHERPA)	CAS No.
			Dechlorane Plus™ Tris(1,3-dichloro-2-propyl)phosphate 1,2-Dichloronaphthalene	13560-89-9 13674-87-8 2050-69-3

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
30	Polychlorinated Terphenyls (PCTs)	Content exceeding 50 ppm in homogenous material	- REACH Regulation (EC) No 1907/2006 Annex XVII	Insulation oil, lubricant oil, electrical insulation medium, solvent, electrolytic solution, plasticizers, fire retardants, coatings for electrical wire and cable, dielectric sealants
			Detailed Chemical List	CAS No.
			Polychlorinated terphenyls (all isomers and congeners)	61788-33-8

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
31	Perfluorocarboxylic acids containing 9 to 14 carbon atoms in the chain (C9-C14 PFCAs), their salts and C9- C14 PFCA-related substances	Concentration in article equal to or above : C9-C14 PFCAs and their salts: 25ppb Combination of one or multiple C9-C14 PFCA-related substances : 260ppb	- REACH Regulation (EC) No 1907/2006 - REGULATION (EU) 2021/1297	Additives, Leveling agent of the paint, Fire-fighting foam, Surfactant, Semiconductor regist film, Fluoropolymers (PFA, PTFE, PVDF, . etc), Fluoroelastomers (FEP, FFPM/FFKM, .etc)
			Detailed Chemical List	CAS No.
			Pentacosafuorotridecanoic acid	72629-94-8
			Tricosafuorododecanoic acid	307-55-1
			Henicosafuoroundecanoic acid	2058-94-8
			Perfluorononan-1-oic acid	375-95-1
			Heptacosafuorotetradecanoic acid	376-06-7
Nonadecafluorodecanoic acid	335-76-2			

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
32	Phenol, Isopropylated Phosphate (3:1) (PIP (3:1))	Prohibited	-(US) Toxic Substances Control Act (TSCA)	Plasticizer, flame retardant
			Detailed Chemical List	CAS No.
			Phenol, Isopropylated Phosphate (3:1) (PIP 3:1)	68937-41-7

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
33	Perfluorohexane-1-sulphonic acid (PFHxS), its salts, and PFHxS-related substances	Concentration in article equal to or above : - PFHxS and its salts 25ppb - Combination of one or multiple PFHxS-related substances 1000ppb	- EU POPs (EU) No 2019/1021 - REGULATION (EU) 2023/1608	Surface treatment agents/protective agents, surfactants, foam fire extinguishing agents
			Detailed Chemical List	CAS No.
			Tridecafluorohexane-1-sulfonic acid	355-46-4
			ammonium perfluorohexane-1-sulphonate	68259-08-5
			potassium perfluorohexane-1-sulphonate	3871-99-6
		Phosphonium, triphenyl(phenylmethyl)-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1000597-52-3	
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
34	Dechlorane Plus™ (1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16.9.02,13.05,10]octadeca-7,15-diene)	Intentional use prohibited	Stockholm Convention	Flame retardant
			Detailed Chemical List	CAS No.
			1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16.9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus"™)	13560-89-9
			1,4:7,10-Dimethanodibenzo[a,e]cyclooctene, 1,2,3,4,7,8,9,10,13,13,14,14-dodecachloro-1,4,4a,5,6,6a,7,10,10a,11,12,12a-dodecahydro-, (1R,4S,4aS,6aR,7R,10S,10aS,12aR)-rel-	135821-03-3
		1,4:7,10-Dimethanodibenzo[a,e]cyclooctene, 1,2,3,4,7,8,9,10,13,13,14,14-dodecachloro-1,4,4a,5,6,6a,7,10,10a,11,12,12a-dodecahydro-, (1R,4S,4aS,6aR,7R,10S,10aS,12aR)-rel-	135821-74-8	
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
35	UV-328 (2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol)	Intentional use prohibited	Stockholm Convention	UV absorber
			Detailed Chemical List	CAS No.
			2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
36	Pentachlorophenol and its salts and esters	Content exceeding 5 ppm in article	· EU POPs (EU) No 2019/1021	Herbicide, insecticide, fungicide, algacide, disinfectant, antifouling paint, impurity in production of pigments
			Detailed Chemical List	CAS No.
			Carbonic acid, 1,1-dimethylethyl pentachlorophenyl ester	18942-25-1
			Acetic acid, 2,2,2-trichloro-, 2,3,4,5,6-pentachlorophenyl ester	2879-60-9
			Acetic acid, 2,2-dichloro-, 2,3,4,5,6-pentachlorophenyl ester	19745-69-8
			Pentachlorophenol	87-86-5
			Sodium pentachlorophenolate	131-52-2
			Zinc bis(pentachlorophenolate)	2917-32-0
		N2-benzyl pentachlorophenyl N2-carboxy-L-(2-aminoglutaramate)	13673-51-3	

(2) Prohibited substances for Package only

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use		
1	Four heavy metals : Cadmium and its compounds / Hexavalent chromium compounds / Lead and its compounds / Mercury and its compounds	Homogenous packaging material containing mercury with gross concentration of cadmium, mercury, hexavalent chromium, and lead exceeding 100 ppm	EU Directive 94/62/EC US Specified States Toxics in Packaging Regulation	Please refer to the Examples of Use, Prohibited Substances for purchased goods		
					Detailed Chemical List	CAS No.
					Please refer to the Detailed Chemical List of Prohibited Substances for purchased goods	
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use		
2	Cobalt chloride II	Prohibited in desiccating agent	- 67/548/EEC - 98/98/EC - PRTR Law (Japan) - REACH Regulation (EC) No 1907/2006	Humidity indicator		
					Detailed Chemical List	CAS No.
					Cobalt dichloride	7646-79-9
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use		
3	Polyvinyl chloride / polyvinylidene chloride	Prohibited in Package	- ACT ON THE PROMOTION OF SAVING AND RECYCLING OF RESOURCES (Korea)	Resin material, chemical resistant material		
					Detailed Chemical List	CAS No.
					Polyvinyl chloride	9002-86-2
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use		
4	Arsenic Compounds	Prohibited in Wood package	· REACH Regulation (EC) No 1907/2006	Wood preservative		
					Detailed Chemical List	CAS No.
					Trizinc diarsenide	12006-40-5

(3) Substances whose use is prohibited in manufacturing process

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
1	Ozone-depleting substances	Prohibited in manufacturing process (excluding use in refrigerant or fire extinguisher)	Montreal Protocol Fluorocarbons Recovery and Destruction Act	Detergent, refrigerant, fire extinguisher
		Substance Name	Montreal Protocol	Substance (Code name)
		Chlorofluorocarbon (CFC)	Annex A group I	CFC-11, 12, 113, 114, 115
		Chlorofluorocarbon (CFC)	Annex B group I	CFC-13, 111, 112, 211, 212, 213, 214, 215, 216, 217
	Alternate Fluorocarbon (HCFC)	Annex C group I	HCFC-21, 22, 31, 121, 122, 123, 124, 131, 132, 133, 141, 141b, 142, 142b, 151, 221, 222, 223, 224, 225, 25ca, 225cb, 226, 231, 232, 233, 234, 235, 241, 242, 243, 244, 251, 252, 253, 261, 262, 271	
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
2	Chlorine-based organic detergent	Prohibited in manufacturing process	Air Pollution Control Law Water Pollution Control Act Industrial Safety and Health Act	Detergent, solvent
			Detailed Chemical List	CAS No.
			Trichloroethylene	79-01-6
			Tetrachloroethylene	127-18-4
			Dichloromethane	75-09-2
			Tetrachloromethane	56-23-5
			1,2-Dichloroethane	107-06-2
			1,1-Dichloroethene	75-35-4
			cis-1,2-Dichloroethylene	156-59-2
			1,1,1-Trichloroethane	71-55-6
	1,1,2-Trichloroethane	79-00-5		
	1,3-Dichloropropene	542-75-6		

2. Restricted Substances

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use	Prohibited from
1	Medium-chain chlorinated paraffins (MCCP, C14-17)	Details will be set depending on the regulation to be promulgated hereafter.	Stockholm Convention	Metal working fluids, flame retardant	Details will be set depending on the regulation to be promulgated hereafter.
			Detailed Chemical List	CAS No.	
			Alkanes, C14-17, chloro	85535-85-9	
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use	Prohibited from
2	Perfluorocarboxylic acids containing 15 to 21 carbon atoms in the chain (C15-C21 PFCAs), their salts and C15-C21 PFCA-related substances	Details will be set depending on the regulation to be promulgated hereafter.	Stockholm Convention	the production of fluoropolymers, heat medium	Details will be set depending on the regulation to be promulgated hereafter.
			Detailed Chemical List	CAS No.	
			Perfluoropentadecanoic acid	141074-63-7	
			Perfluorohexadecanoic acid	67905-19-5	
			Perfluoroheptadecanoic acid	57475-95-3	
			Pentatriacontafluorostearic acid	16517-11-6	
			Heptatriacontafluorononadecanoic acid	133921-38-7	
Nonatriacontafluoricosanoic acid	68310-12-3				

3. Substances Subject to Monitoring

Substances whose use is monitored are included in the latest version of "The List of chemSHERPA Declarable Substances," which the Joint Article Management Promotion-consortium (JAMP) defines.

(Except 1. Prohibited substances and 2. Restricted substances.)

The monitoring of the following Declarable Substances is required.

*RoHS Directive

- REACH Regulation Annex XVII (17) (Substances subject to restrictions)
- REACH Regulation SVHC (Candidate list of substances for authorization)
- IEC 62474
- (JP) Chemical Substances Control Law : Class I Specified Chemical Substances
- (US) Toxic Substances Control Act (TSCA) : Section 6
- (EU) 2019/1021 (POPs) : Annex I
- (EU) Medical Devices Regulation (MDR) (EU)2017/745 : Annex I 10.4 Substances

Please refer to "The list of chemSHERPA Declarable Substances" for details.

<https://chemsherpa.net/chemSHERPA/english/tool/>

Please download the latest version.

Substance list is included in "chemSHERPA data entry support tool".