

Table 1 : List of the Declarable Substances

(13th Edition)

(1) Prohibited Substances

*Intentional addition is prohibited, excluding exempt items

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	Examples of Use
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 20 ppm in batteries including storage batteries	EU Battery Directive 2006/66/EC, 2013/56/EU	
		Homogenous packaging materials containing cadmium with gross concentration of cadmium, mercury, hexavalent chromium, and lead exceeding 100 ppm and that contain cadmium	EU Directive 94/62/EC	
		[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
		Homogenous packaging material containing hexavalent chromium with gross concentration of cadmium, mercury, hexavalent chromium, and lead exceeding 100 ppm	EU Directive 94/62/EC	
		[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		
		Homogenous packaging material containing lead with gross concentration of cadmium, mercury, hexavalent chromium, and lead exceeding 100 ppm	EU Directive 94/62/EC		
		[Exemption] The exemptions listed in the EU Directive 2011/65/EC. Lead in batteries (EU Battery Directive 2006/66/EC, 2013/56/EU)			
			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	
		Homogenous packaging material containing mercury with gross concentration of cadmium, mercury, hexavalent chromium, and lead exceeding 100 ppm	EU Directive 94/62/EC		
		Content exceeding 5 ppm in batteries/storage batteries Content exceeding 20,000 ppm in button cells	EU Battery Directive 2006/66/EC, 2013/56/EU		
		[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
Hexachlorodifluoropropane (CFC 212)	3182-26-1
Pentachlorotrifluoropropane (CFC 213)	2354-06-5
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
Bromoheptafluoropropane	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
	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
	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						
8	Polybrominated diphenylethers (PBDEs)	Content exceeding 1,000 ppm in homogenous material	- EU RoHS Directive 2011/65/EC - China RoHS	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			
			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) - REACH Regulation (EC) No 1907/2006 - EU06 850-2004-EU (POPs) ANNEX I PART A	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						
Polychlorinated terphenyls (all isomers and congeners)	61788-33-8						
10	Polychlorinated naphthalenes (more than 3 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
		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 homogenous material (in terms of tin weight ratio)	- 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	Certain tributyl tin (TBT) and triphenyl tin (TPT) compounds	Content exceeding 1,000 ppm in homogenous material (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
				18380-71-7 18380-72-8 47672-31-1 94850-90-5
			Triphenyltin fattyacid ((C9-11) salt)	
			Triphenyltinchloroacetate	7094-94-2
			Tributyltinmethacrylate	2155-70-6
			Bis (tributyltin) fumarate	6454-35-9
			Tributyltinfluoride	
			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
	1461-22-9 7342-38-3			
Tributyltin chloride				
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 EC No.:200-268-0

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use	
15	Perfluorooctane sulfonate (PFOS)	Content exceeding 50 ppm in grease, oil, and other prescriptions; 1µg/m ² when used in surface treatment, plating, and fiber materials; and 1,000 ppm in other applications (excluding exempt items)	- "Class I Specified Chemical Substances" defined in Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture (Japan) - POPs Regulation (EC) No. 757/2010 ANNEX I PART A	Waterproof agent, plating pretreatment, fire-fighting foam, photosensitizer	
		[Exemption]			
		*Photoresists or anti reflective coatings for photolithography processes			
		*Photographic coatings applied to films, papers, or printing plates			
			Detailed Chemical List	CAS No.	
			Perfluorooctane sulfonates (PFOS) C8F17SO2X, 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 homogenous material	- 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			
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 homogenous material, for use described below	- REACH Regulation (EC) No 1907/2006	Stabilizer for vinyl chloride resin	
		- Two-component room temperature vulcanisation molding kits (RTV-2 molding kits)			
			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 tinbis (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 homogenous material	- REACH Regulation (EC) No 1907/2006	Anti-fungal agent Bactericides	
			Detailed Chemical List	CAS No.	
		Dimethylfumarate (dimethyl fumarate (DMF))	624-49-7		

*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	
19	Perfluorooctanoic acid (PFOA) and individual salts and esters of PFOA	Concentration equal to or above 25 ppb of PFOA or 1000 ppb of PFOA-related substances in another substance, a mixture or an article	- REACH Regulation (EC) No 2017/1000	Additives, Leveling agent of the paint, Fire-fighting foam, Surfactant, Semiconductor regist film, Fluoropolymers (PFA, PTFE, PVDF, .etc), Fluoroelastomers (FEP, FFP, 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 methyl	376-27-2				
perfluorooctanoic acid ethyl	3108-24-5				
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use	
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	3194-55-6			
	alpha-Hexabromocyclododecane	134237-50-6			
	beta-Hexabromocyclododecane	134237-51-7			
	gamma-Hexabromocyclododecane	134237-52-8			
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use	
21	Benzenamine, N-phenyl-reaction products with styrene and 2,4,4-trimethylpentene (BNS)	- Application as other than the following - No Threshold Level	Prohibition of Certain Toxic substances Regulations 2012, Canada (SOR/2012-285)	lubricant additives	
				[Exemption]	
				*Rubber additives except for tires	
	Detailed Chemical List	CAS No.			
	Benzenamine, N-phenyl, reaction Products with styrene and 2,4,4-trimethylpentene	68921-45-9			
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use	
22	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
No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use	
23	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

"Scope and Threshold Level" are applied from February 25, 2020

Prohibited from September 1, 2018

Prohibited from September 1, 2018

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
24	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
25	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

Prohibited from September 1, 2018

Prohibited from September 1, 2018

* Substances whose use is prohibited in manufacturing process

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use	
26	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	
			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
27	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				

* Substances whose use is prohibited in desiccating agent

No.	Substance Category/ Name	Scope and Threshold Level	Key Regulations	Examples of Use
28	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

* 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		
29	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	- REACH Regulation (EC) No 1907/2006	Pigment, dyes, colorants		
					Detailed Chemical List	CAS No.
					Biphenyl-4-ylamine	92-67-1
					Benidine	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					
30	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)	- 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
					31	Diocetyl tin (DOT) compound
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					
Dibutyl tin dichloride	3542-36-7					

*Intentional addition is prohibited, excluding exempt items

(2) Restricted Substances

None.

(3) Substances Subject to Monitoring

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 (Greenhouse gases of the Kyoto Protocol are included in IEC 62474)

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".