

Regulatory banned or restricted substances Ver.6r20

1. Level A

Chemical substances banned or restricted at the homogenous materials level

No.	Substances		CAS No.	Criteria / threshold level	Legal and Regulatory	Examples of Use
A001	Cadmium and Cadmium compounds	Cadmium	7440-43-9	Less or equal 0.01% by weight (100 ppm) of homogeneous materials.	-EU RoHS Directive -EU REACH Regulation Annex XVII	Pigments, anti-corrosion surface treatment, optical glass, stabilizer, plating, fluorescent, electrode, solder, electric contact, contact point, zinc plating
		Cadmium oxide	1306-19-0			
		Cadmium sulfide	1306-23-6			
		Cadmium chloride	10108-64-2			
		Cadmium sulfate	10124-36-4			
		Cadmium cyanide (Cd(CN)2)	542-83-6			
		Other cadmium compounds	-			
A002	Hexavalent chromium and Hexavalent chromium compounds	Chromium (VI) oxide	1333-82-0	Less or equal 0.1% by weight (1000 ppm) of homogeneous materials.	-EU RoHS Directive -EU REACH Regulation Annex XVII	Pigment, paint, ink, catalyst, plating, anti-corrosion surface treat-ment, dye
		Barium chromate	10294-40-3			
		Calcium chromate	13765-19-0			
		Lead (II) chromate	7758-97-6			
		Lead chromate molybdate sulphate red	12656-85-8			
		Lead sulfochromate yellow	1344-37-2			
		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			
		Pentazinc chromate octahydroxide	49663-84-5			
		Potassium hydroxyoctaoxodizincatedichromate(1-)	11103-86-9			
		Other chromium VI compounds	-			
A003	Lead and Lead compounds	Lead	7439-92-1	Less or equal 0.1% by weight (1000 ppm) of homogeneous materials.	-EU RoHS Directive -EU REACH Regulation Annex XVII	Rubber hardener, pigment, paint, lubricant, plastic stabilizer, free-machining alloy, free-cutting steels, optical materials, X-ray shield-ing in CRT glass, solder materials curing agent, vulcanizing agent, ferro-electrics, plating, metal alloy, Zinc carbon batter-ies, alkaline button cells.
		Lead (II) sulfate	7446-14-2			
		Lead (II) carbonate	598-63-0			
		Lead (II) chromate	7758-97-6			
		Lead chromate molybdate sulphate red	12656-85-8			
		Lead hydrocarbonate	1319-46-6			
		Lead acetate	301-04-2			
		Lead (II) acetate, trihydrate	6080-56-4			
		Lead phosphate/Lead (II) 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 sulfochromate yellow	1344-37-2			
		Lead (II) titanate	12060-00-3			
		Lead sulfate, sulphuric acide, lead salt	15739-80-7			
		Lead sulphate, tribasic	12202-17-4			
		Lead stearate	1072-35-1			
		Lead hydrogen arsenate	7784-40-9			
		Lead cyanide	592-05-2			
		Other lead compounds	-			
A004	Mercury and Mercury compounds	Mercury	7439-97-6	Less or equal 0.1% by weight (1000 ppm) of homogeneous materials.	-EU RoHS Directive	Fluorescent bulb, contact point material, pigment, anti-corrosion, switches, antibacterial treatment, Silver-Oxide button cell, alkaline batteries, zinc carbon batteries.
		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			
		Mercuric cyanide	592-04-1			
		Other mercury compounds	-			

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No.	Substances		CAS No.	Criteria / threshold level	Legal and Regulatory	Examples of Use
A005	Polybrominated Biphenyls (PBBs)	Polybrominated Biphenyls	59536-65-1	Lessor equal 0.1% by weight (1000 ppm) of homogeneous materials.	-EU RoHS Directive -EU REACH Regulation Annex XVII	Flame retardant
		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			
A006	Polybrominated diphenyl ethers (PBDEs)	Bromodiphenyl ether	101-55-3	Less or equal 0.1% by weight (1000 ppm) of homogeneous materials.	-EU RoHS Directive -EU REACH Regulation Annex XVII	Flame retardant
		Dibromodiphenyl ether	2050-47-7			
		Tribromodiphenyl ether	49690-94-0			
		Tetrabromodiphenyl ether	40088-47-9			
		Pentabromodidiphenyl ether	32534-81-9			
		Hexabromodiphenyl ether	36486-60-0			
		Heptabromodiphenyl ether	68928-80-3			
		Octabromodiphenyl ether	32536-52-0			
		Nonabromodiphenyl ether	63936-56-1			
		Decabromodiphenyl ether	1163-19-5			
A007	Bis (2-ethylhexyl)phthalate (DEHP)		117-81-7	Less or equal 0.1% by weight (1000 ppm) of homogeneous materials. -EU RoHS Directive	Less than 0.1% by weight (1000 ppm) in total of 4 substances - EU REACH Regulation Annex XVII	Plasticizer, Pigment, Paint, Ink, Adhesive
A008	Benzyl butyl phthalate (BBP)		85-68-7	Less or equal 0.1% by weight (1000 ppm) of homogeneous materials. -EU RoHS Directive		Plasticizer, Pigment, Paint, Ink, Adhesive
A009	Dibutyl phthalate (DBP)		84-74-2	Less or equal 0.1% by weight (1000 ppm) of homogeneous materials. -EU RoHS Directive		Plasticizer, Pigment, Paint, Ink, Adhesive
A010	Diisobutyl phthalate (DIBP)		84-69-5	Less or equal 0.1% by weight (1000 ppm) of homogeneous materials. -EU RoHS Directive		Plasticizer, Pigment, Paint, Ink, Adhesive

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Chemical substances banned or restricted at the article or material level

No.	Substances		CAS No.	Regulated Value	Legal and Regulatory	Examples of Use
B001	Asbestos	Asbestos	1332-21-4	Not intentionally added.	EU REACH Regulation Japan Industrial Safety and Health Act US TSCA.	Insulator, filler, pigment, paint, talc
		Actinolite	77536-66-4			
		Amosite (Grunerite)	12172-73-5			
		Anthophyllite	77536-67-5			
		Chrysotile	12001-29-5			
		Crocidolite	12001-28-4			
		Tremolite	77536-68-6			
B002	Ozone depleting substances (ODCs)	CFC	Defined in Appendix A group I of Montreal Protocol	Not intentionally added at production process	-Montreal Protocol -Japan Ozone Layer Protection Law -USA Clean Air Act of 1963	Refrigerant, foaming agent, extinguishant, solvent cleaner
		Halon	Defined in Appendix A group II of Montreal Protocol			
		CFC other than abobe	Defined in Appendix B group I of Montreal Protocol			
		Carbon tetrachloride	Defined in Appendix B group II of Montreal Protocol			
		1,1,1-Trichroloethane	Defined in Appendix B group III of Montreal Protocol			
		HCFC	Defined in Appendix C group I of Montreal Protocol			
		HBFC	Defined in Appendix C group II of Montreal Protocol			
		Bromochloromethane	Defined in Appendix C group III of Montreal Protocol			
		Methylbromide	Defined in Appendix E of Montreal Protocol			
B003	Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)	Phenol,2-(2H-benzotriazol-2- yl)-4,6-bis(1,1-dimethylethyl)	3846-71-7	Not intentionally added.	-Japan Law concerning the evaluation of chemical sub-stances.	Adhesives,paints, printing inks, plastics, inked ribbons, putty, caulking or sealing fillers.
B004	Fluorinated greenhouse gases (PFC, SF6, HFC)	Tetrafluoromethane (Carbon tetrafluoride, PFC-14)	75-73-0	Not intentionally added.	-EU F-Gas Regulation -Japan Act on Promotion of Global Warming Countermeasures	Refrigerants, blowing agents, extinguishing agents, cleaning agents, insulating media,
		Hexafluoroethane (PFC-116)	76-16-4			
		Octafluoropropane (PFC-218)	76-19-7			
		Decafluorobutane (PFC-31-10)	355-25-9			
		Dodecafluoropentane (PFC-41-12)	678-26-2			
		Tetradecafluorohexane (PFC-51-14)	355-42-0			
		Octafluorocyclobutane (PFC-c318)	115-25-3			
		Sulfur Hexafluoride (SF6)	2551-62-4			
		Trifluoromethane (HFC-23)	75-46-7			
		Difluoromethane (HFC-32)	75-10-5			
		Methyl fluoride (HFC-41)	593-53-3			
		2H,3H-Decafluoropentane (HFC-43-10mee)	138495-42-8			
		Pentafluoroethane (HFC-125)	354-33-6			
		1,1,2,2-Tetrafluoroethane (HFC-134)	359-35-3			
		1,1,1,2-Tetrafluoroethane (HFC-134a)	811-97-2			
		1,1-Difluoroethane (HFC-152a)	75-37-6			
		1,1,2-Trifluoroethane (HFC-143)	430-66-0			
		1,1,1-Trifluoroethane (HFC-143a)	420-46-2			
		2H-Heptafluoropropane (HFC-227ea)	431-89-0			
		1,1,1,2,2,3-Hexafluoro-propane (HFC-236cb)	677-56-5			
		1,1,1,2,3,3-Hexafluoropropane (HFC-236ea)	431-63-0			
		1,1,1,3,3,3-Hexafluoropropane (HFC-236fa)	690-39-1			
		1,1,2,2,3-Pentafluoropropane (HFC-245ca)	679-86-7			
		1,1,1,3,3-Pentafluoropropane (HFC-245fa)	460-73-1			
		1,1,1,3,3-Pentafluorobutane (HFC-365mfc)	406-58-6			
		Other Fluorinated Greenhouse Gases	-			

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Chemical substances banned or restricted at the article or material level

No.	Substances		CAS No.	Regulated Value	Legal and Regulatory	Examples of Use
B005	Radioactive Substances (Radioactive Isotope)	Uranium-238	7440-61-1	Not intentionally added.	-Japan Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors -Japan Act on Prevention of Radiation Hazards due to Radioisotopes, etc.	Optical properties (thorium), measuring devices, gauges, detector
		Radon	10043-92-2			
		Americium-241	14596-10-2			
		Thorium-232	7440-29-1			
		Cesium-137	10045-97-3			
		Strontium-90	10098-97-2			
		Other radioactive substances	-			
B006	Polychlorinated naphthalenes (more than 1 chlorine atoms)	Polychlorinated naphthalenes * Including the CAS No. of individual isomers	70776-03-3	Not intentionally added.	-Stockholm Convention -EU POPs Regulation Annex I -Japan Law concerning the evaluation of chemical sub-stances.	Lubricant, paint, stabilizer (electric charac-teristic, flame-resistant, water-resistant) insulator, flame retardant.
		Other polychlorinated Naphthalenes	—			
B007	Polychlorinated biphenyls (PCBs) and specific substitutes	Polychlorinated Biphenyls (all isomers and congeners)	1336-36-3	Not intentionally added and less than 0.1% (1,000ppm) by weight in a material.	-Stockholm Convention -EU POPs Regulation Annex I -Japan Law concerning the evaluation of chemical sub-stances.	Insulation oil, lubricant oil, electrical insulation medium, solvent, electrolytic solution ; plasticizers, flame retardants, dielectric sealants.
		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			
		Other PCB compounds	-			
B008	Perchlorate Compounds	Lithium perchlorate	7791-03-9	0.0000006% or less by weight of the articles/materials. (0.006ppm) (When the value over the standard value is detected, to indicate it with following the regulations.)	US/CA DTSC Rulemaking	Coin Cell batteries
		Other perchlorate compounds	-			
B009	Tri-substiituted organostannic compounds (TBT, TPT)	Triphenyltin-N, N-dimethyldithiocarbamate	1803-12-9	Not intentionally added or less than 0.1% (1,000ppm) by weight of tin in a material	-REACH Regulation ANNEX XVII -Japan Law concerning the evaluation of chemical sub-stances Norwegian Product Regulation.	Stabilizer, antioxidant, antibacterial and antifungal agents, antifoulant, antiseptic, paint, pigment, antistaining
		Triphenyltinfluoride	379-52-2			
		Triphenyltinacetate	900-95-8			
		Triphenyltinchloride	639-58-7			
		Triphenyltinhydroxide	76-84-9			
		Triphenyltin fattyacid((9-11)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(c=8) 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 carbonate = mixture	85409-17-2			
		Tributyltin-1,2,3,4,4a,4b,5,6,10,10a-decahydro-7-isoplopyl-1,4a-dimethyl-1-phenanthrenecarboxylatemix	26239-64-5			
		Other tri-substituted organostannic compounds	-			

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Chemical substances banned or restricted at the article or material level

No.	Substances		CAS No.	Regulated Value	Legal and Regulatory	Examples of Use
B010	Dibutyltin (DBT) compounds	Dibutyltin oxide	818-08-6	0.1% (1,000ppm) or less by weight of tin in a material.	-EU REACH Regulation ANNEX XVII	Stabilizer for PVC, curing catalyst for sili-cone resin and urethane resin.
		Dibutyltin diacetate	1067-33-0			
		Dibutyltin dilaurate	77-58-7			
		Dbutyltin maleate	78-04-6			
		Di-mu-oxo-di-n-butylstanniohydroxyborane/Dibutyltin hydrogen borate C8H19BO3Sn (DBB)	75113-37-0			
		Other dibutyltin compunds	-			
B011	Dimethyl fumarate (DMF)	Dimethyl fumarate (DMF)	624-49-7	0.00001% (0.1ppm) or less by weight in a material.	-EU COMMISSION DECISION 2009/251/EC	Biocide, mold treatment of electronic leather seats, including recliners, massage chairs.
B012	Shotchain chlorinated paraffins (C10-C13)	Alkanes, C10-13, chloro	85535-84-8	Not intentionally added and 0.1% (1,000ppm) or less by weight of the products. Note:Short chain type chlorinated paraffins (SCCP) which is a by-product of medium chain type chlorinated paraffins (MCCP) are also applicable.	-EU POPs Regulation Annex I	Plasticizer for PVC, flame retardant.
		Alkanes, C10-12, chloro	108171-26-2			
		Alkanes, C12-13, chloro	71011-12-6			
		Alkanes, chloro	61788-76-9			
		Other Short Chain Chlorinated Paraffins	-			
B013	Perfluorooctane sulfonate (PFOS)	Perfluorooctanesulfonic acid	1763-23-1	Not intentionally added or 0.1% (1,000ppm) or less by weight as impurity in material.	-Stockholm Convention -EU POPs Regulation Annex I -Japan Law concerning the evaluation of chemical sub-stances.	Antistatic agent for films and plastics.
		Perfluorooctanesulfonate amine	29081-56-9			
		Bis(2-hydroxyethyl) ammonium perfluorooctanesulfonate	70225-14-8			
		Potassium perfluorooctanesulfonate	2795-39-3			
		Lithium perfluorooctanesulfonate	29457-72-5			
		Other Perfluorooctane Sulfonates (PFOS) C8F17SO2X, where X = OR, NR or other derivative	-			
		Other Perfluorooctane Sulfonates (PFOS)	-			
B014	Polychlorinated terphenyls (PCTs) all isomers and congeners	Polychlorinated terphenyls (PCTs) all isomers and congeners	61788-33-8	0.005% (50ppm) or less by weight in materials.	-EU REACH Regulation ANNEX XVII	Insulation oil, lubricant oil, electrical insulation medium, solvent, electrolytic solution ; plasticizers, flame retardants, dielectric sealants.
B015	Azocolourants and azodyes which form certain aromatic amines.	Biphenyl-4-ylamine	92-67-1	0.003% (30ppm) or less by weight of the finished textile/leather prod-ucts.	-EU REACH Regulation ANNEX XVII	Pigment, dyes, colorants.
		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'-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			
		4,4'-methylene-bis(2-chloroaniline)	101-14-4			
		4,4'-oxydianiline	101-80-4			
		4,4'-thiodianiline	139-65-1			
		o-toluidine	95-53-4			
		4-methyl-m-phenylenediamine	95-80-7			
		2,4,5-trimethylaniline	137-17-7			
		o-anisidine	90-04-0			
		4-amino azobenzene	60-09-3			
		Other Aromatic Amines	-			

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Chemical substances banned or restricted at the article or material level

No.	Substances		CAS No.	Regulated Value	Legal and Regulatory	Examples of Use
B016	Diocetyl tin compounds (DOT)	Diocetyl tin oxide	870-08-6	textile and leather articles intended to come into contact with the human skin or two-component room temperature vulcanisation moulding kits (RTV-2 moulding kits) 0.1% (1,000ppm) or less by weight of tin in a material.	-EU REACH Regulation ANNEX XVII	Stabilizer for PVC, curing catalyst for silicone resin and urethane resin.
		Diocetyl tin dilaurate	3648-18-8			
		Other Diocetyl tin compounds	-			
B018	Formaldehyde (Composite wood products or articles and textiles)	Formaldehyde	50-00-0	Composite wood products: Not intentionally added Textiles: 0.0075% (75ppm) or less by weight of textile products.	-USA TSCA Title IV -Japan Act on Control of Household Products Containing Harmful Substances	Stereo cabinets, kiosk enclo-sures, Textiles.
		Other Formaldehyde compounds	-			
B019	Arsenic compounds (Packaging materials)	Arsenic	7440-38-2	Not intentionally added	-EU REACH Regulation ANNEX XVII	Wood preservative
		Chromated copper arsenate (CCA)	37337-13-6			
		Gallium arsenide	1303-00-0			
		Diarsenic pentoxide	1303-28-2			
		Diarsenic trioxide	1327-53-3			
		Lead hydrogen arsenate	7784-40-9			
		Triethyl arsenate	15606-95-8			
		Other arsenic compounds	-			
B020	Specific Heavy Metal Compounds (Packaging materials)	Cadmium compounds	Refer to A001	Total weight of Cd, CrVI, Pb and Hg = Not intentionally added and less or equal 0.01% (100ppm) by weight of the packaging material.	-EU Packaging and Packaging Waste Directive	Pigment, paint, stabilizer for PVC
		Chromium VI compounds	Refer to A002			
		Lead compounds	Refer to A003			
		Mercury compounds	Refer to A004			
B021	Hexabromocyclododecane (HBCDD)	Hexabromocyclododecane * Including the CAS No. of individual isomers	25637-99-4	Not intentionally added	-Stockholm Convention -EU POPs Regulation Annex I -Japan Law concerning the evaluation of chemical sub-stances.	Frame retardent
		1,2,5,6,9,10- Hexabromocyclododecane * Including the CAS No. of individual isomers	3194-55-6			
		α- Hexabromocyclododecane	134237-50-6			
		β- Hexabromocyclododecane	134237-51-7			
		γ- Hexabromocyclododecane	134237-52-8			
B023	Polycyclic Aromatic Hydrocarbons (PAHs)	Benzo (a) pyrene	50-32-8	Not intentionally added and less than 0.0001% (1ppm) by weight as impurity in material.	-EU REACH Regulation ANNEX XVII	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, under normal or reasonably foreseeable conditions of use. — Remote Control Unit — Front panel — Operation button
		Benzo (e) pyrene	192-97-2			
		Benzo (a) anthracene	56-55-3			
		Chrysene	218-01-9			
		Benzo (b) fluoranthene	205-99-2			
		Benzo (j) fluoranthene	205-82-3			
		Benzo (k) fluoranthene	207-08-9			
		Dibenzo (a,h) anthracene	53-70-3			
B024	Bis(tributyltin)oxide (TBTO)	Bis(tributyltin)oxide (TBTO)	56-35-9	Not intentionally added or less than 0.1% (1,000ppm) by weight as impurity in material.	-Japan Law concerning the evaluation of chemical sub-stances.	Antiseptic, antifungal agent, paint, pigment, antistaining, refrigerant, foaming agent, extinguishant, solvent cleaner
B025	Pentachlorophenol and its salts and esters	Pentachlorophenol(PCP)	87-86-5	Not intentionally added	-Stockholm Convention -Japan Law concerning the evaluation of chemical sub-stances.	Preservatives for wood and plywood
		Sodium pentachlorophenolate	131-52-2			
			27735-64-4			
		Pentachlorophenyl laurate	3772-94-9			
B026	Tris(1,3-dichloro-2-propyl) Phosphate(TDCPP)	Tris(1,3-dichloro-2-propyl) Phosphate(TDCPP)	13674-87-8	0.1% (1,000ppm) or less by weight as impurity in material.	-USA Vermont State law ACT85	Flame retardants
B027	Tris(2-chloroethyl) phosphate(TCEP)	Tris(2-chloroethyl) phosphate(TCEP)	115-96-8	0.1% (1,000ppm) or less by weight as impurity in material.	-USA Vermont State law ACT85	Flame retardants

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No.	Substances		CAS No.	Regulated Value	Legal and Regulatory	Examples of Use
B028	Perfluorooctanoic acid (PFOA) and individual salts and esters of PFOA	Pentadecafluorooctanoic acid (PFOA)	335-67-1	0.0000025% by weight (25 ppb) or less of articles	-EU REACH Regulation	Photolithography, photo-coating materials, hydraulic fluid, metal plating, cleaning materials, fire-fighting foams, and coating materials for paper, plastic stabilizers
		Ammonium pentadecafluorooctanoate (APFO)	3825-26-1			
		Sodium salt of Perfluorooctanoic acid	335-95-5			
		Potassium salt of Perfluorooctanoic acid	2395-00-8			
		Silver(1+) salt of Perfluorooctanoic acid	335-93-3			
		Perfluorooctanoyl fluoride	335-66-0			
		Methyl perfluorooctanoate	376-27-2			
		Ethyl perfluorooctanoate	3108-24-5			
B029	Phosphoric acid tris(2-chloro-1-methylethyl) ester(TCPP)	Phosphoric acid tris(2-chloro-1-methylethyl) ester	13674-84-5	0.1% (1,000ppm) or less by weight as impurity in material.	-USA Vermont State law ACT85	Flame retardants
B030	Phenol, Isopropylated Phosphate (3:1) (PIP (3:1))	Phenol, Isopropylated Phosphate (3:1) (PIP (3:1))	68937-41-7	banned except for exempted uses	-USA TSCA	Use as flame retardants, Use in lubricants and greases, coating products, adhesives and sealants, polymers, photo-chemicals and hydraulic fluids
B031	Pentachlorothiophenol (PCTP)	Pentachlorothiophenol (PCTP)	133-49-3	1% (10,000ppm) or less by weight in materials.	-USA TSCA	rubber peptizer
B032	Hexachlorobutadiene (HCBD)	Hexachlorobutadiene (HBCD)	87-68-3	banned except of the following •the byproduct during the production of chlorinated solvents •waste fuel	-USA TSCA	the byproduct during the manufacture of chlorinated hydrocarbons
B033	Per- and polyfluoroalkyl substances (PFAS)	Substances that include any member of the class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom	-	* Begining October 1srt, 2022 Submit the notification when PFASs are intentionally added * Beginning January 1st, 2029 Not intentionally added	-USA Maine State law An Act To Stop Perfluoroalkyl and Polyfluoroalkyl Substances Pollution	Use in many products such as water repellents, oil repellents, surface treatment agents, emulsifiers, firefighting foams, coating agents, refrigerants, resins, rubbers, paints, etc.
B034	C9-C14 PFCAs, their Salts and C9-C14 PFCA-related Substances	C9-PFCA (PFNA)	375-95-1	prohibit to use except the following; 1. Sum of C9-C14 PFCAs and their salts: ≤ 25 ppb 2. Sum of C9-C14 PFCAs -related substances: ≤ 260 ppb	-EU REACH Regulation Annex XVII	Use in many products such as water repellents, oil repellents, semiconductors, firefighting foams etc.
		C10-PFCA (PFDA)	335-76-2			
		C11-PFCA (PFUnDA)	2058-94-8			
		C12-PFCA (PFDoDA)	307-55-1			
		C13-PFCA (PFTriDA)	72629-94-8			
		C14-PFCA (PFTeDA)	376-06-7			
		Other C9-C14 PFCAs, their Salts and C9-C14 PFCA-related Substances	-			
B035	Halogenated flame retardants	Halogenated flame retardants	-	The enclosure or stand of the electronic display : * Beginning April 1st, 2022 Submit the annual report identifying all of the flame retardants used on the enclosure or stand of the electronic display * Beginning January 1st, 2023 Not intentionally added Halogenated flame retardants	-USA New York State law Environmental Conservation Law -EU Erp Directive lot 5	Flame retardant
B036	Perfluorohexane-1-sulphonic acid and its salts (PFHxS)	Perfluorohexane-1-sulphonic acid and its salts (PFHxS)	-	prohibit to use from Feb. 25, 2022 except the following: 1. Sum of PFHxS and their salts: ≤ 25 ppb 2. Sum of PFHxS -related substances: ≤ 1000 ppb	-Stockholm Convention	Metal Plating, Abrasives and Cleaning Agents, Coatings, Impregnation/Reinforcement, Manufacture of Electronic Devices and Semiconductors, etc.
B037	Dechlorane Plus	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.1.6,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus"™)	13560-89-9	Not intentionally added	-Stockholm Convention	Flame retardant
		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,6aS,7S,10R,10aR,12aR)-rel-	135821-74-8			
		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			
B038	UV-328	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	Not intentionally added	-Stockholm Convention	UV-stabilisers, UV protection agents,
B039	Heavy metals contained in batteries (Cadmium, Lead, Mercury)	Cadmium compounds	Refer to A001	.Threshold values are subject to legal regulations depending on the type of battery, etc.	-EU Battery Regulation (EU) 2023 / 1542	Battery
		Lead compounds	Refer to A003			
		Mercury compounds	Refer to A004			