

## List of Banned and Controlled Substances (Revised July/27/2023)

This list was prepared based on the IEC62474 DB substance list.

Classification	
Banned	Substances indicated in the Reportable Application(s) column are banned from being added intentionally. Content level must not exceed the threshold level, if indicated.
Controlled	Content levels that exceed the threshold level must be reported. Content levels below the threshold level are treated as no content.

### **[NOTE]**

1. Substances that exceed the threshold content level must be reported, regardless of classification. The definition of "molded parts" conforms to the definition in respective laws and regulations.
2. Due to the use of specific substances in special applications, do not ban or report a substance if specified accordingly on drawings or other documentation. However, their content is prohibited unless expressly permitted in drawings or other documentation.
3. There are applications of substances listed in REACH annex XVII that are allowed to use for a limited period. For such applications, Shimadzu permits usage up to one year prior to the indicated time limit.
4. Indications such as "Must comply with RoHS" and "Must satisfy RoHS standards" in Shimadzu drawings, specifications or other documentation mean that the content of substances banned by the RoHS Directive (indicated by "Banned under RoHS" in the remarks column below) must not exceed the specified threshold value.
5. Similarly, "Must not contain any banned substances per Shimadzu Green Procurement Standards" indicates that the content of banned substances must not exceed the threshold value. Applications exempt from the RoHS Directive are indicated in the attached RoHS Directive Exemptions - Table 1 (MT83-6029) and RoHS Directive Exemptions - Table 2 (MT83-6030).
6. The separate list indicated in the CAS No. column refers to the appendix Detailed Substance Lists (MT83-6015).

■ List of Substance group

No.	Classification	JGPSSI Classification No.	Substance Group	CAS No.	Reportable Application(s)	Threshold Level (Reporting level)	Key Legal and Regulatory or Industry Standard/Agreement Citation	Remarks
1	Banned	00010	Cadmium/cadmium compounds	See another list	All, except batteries	0.01% by weight (100 ppm) of homogeneous materials	ANNEX XVII of REACH Regulation (EC) No 1907/2006; Directive 2011/65/EU; China MII Methods; Korea RoHS; Japan J-MOSS; US/CA SB-20/50; Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 20.06.2013)	Banned under RoHS
	Banned	00011	Cadmium/cadmium compounds		Batteries	0.001% by weight (10 ppm) of cadmium in battery	Korean Quality Management and Safety Control of Industrial Products Act; EU Battery Directive 2006/66/EC; Chinese Standard GB 24427-2009 "Limitation of mercury, cadmium and lead contents for alkaline and non-alkaline zinc manganese dioxide batteries"	
2	Banned	00012	Chromium VI compounds	See another list	All	0.1% by weight (1 000 ppm) of chromium (VI) in homogeneous materials	Directive 2011/65/EU; China MII Methods; Korea RoHS; Japan J-MOSS; US/CA SB-20/50	Banned under RoHS
3	Banned	00021	Lead/lead compounds	See another list	All, except as noted below	0.1% by weight (1 000 ppm) of lead in homogeneous materials	Directive 2011/65/EU; ANNEX XVII of REACH Regulation (EC) No 1907/2006; China MII Methods; Korea RoHS; Japan J-MOSS; US/CA SB-20/50	Banned under RoHS
	Banned		Lead/lead compounds		Lead in PVC Articles	0.1% by weight (1 000 ppm)	ANNEX XVII of REACH Regulation (EC) No 1907/2006	
	Banned	00022	Lead/lead compounds		Consumer products designed or intended primarily for children 12 years of age or younger	0.01% by weight (100 ppm) of lead in the children's product	U.S. Consumer Product Safety Improvement Act as amended by HB 2715	
	Banned	00023	Lead/lead compounds		Paint and similar surface coatings of toys and other articles intended for use by children	0.009% by weight (90 ppm) of lead in surface coating	U.S. Consumer Product Safety Improvement Act	
	Banned	00024	Lead/lead compounds		Cables/cords with thermoset or thermoplastic coatings	0.03% by weight (300 ppm) of lead in surface coating	US/CA Proposition 65 Case law	
	Banned	00025	Lead/lead compounds		Batteries	0.004% by weight (40 ppm) of lead in battery	EU Battery Directive 2006/66/EC; Chinese Standard GB 24427-2009 "Limitation of mercury, cadmium and lead contents for alkaline and non-alkaline zinc manganese dioxide batteries"	
4	Banned	00029	Mercury/mercury compounds	See another list	All, except batteries	Intentionally added or 0.1% (1 000 ppm) of mercury in homogeneous material 8	Vermont act relating to comprehensive management of exposure to mercury; Rhode Island General Laws 23-24.9 and amendment of 2007; Louisiana Mercury Risk Reduction Act; ANNEX XVII of REACH Regulation (EC) No 1907/2006; Directive 2011/65/EU; China MII Methods; Korea RoHS; Japan J-MOSS; US/CA SB-20/50	Banned under RoHS
	Banned	00030	Mercury/mercury compounds		Batteries	Intentionally added or 0.0001% by weight (1 ppm) of mercury in the battery 8 (1ppm)	Rhode Island & Connecticut Mercury Reduction and Education Acts; New York Env Law § 27-0719 Battery Management and Disposal; Taiwan Restrictions on the Manufacture, Import, and Sale of Dry Cell Batteries; Korea: Law on quality management and control of safety of industrial products Battery regulation; EU Battery Directive 2006/66/EC; Chinese Standard GB 24427-2009 "Limitation of mercury, cadmium and lead contents for alkaline and non-alkaline zinc manganese dioxide batteries"	
5	Banned	00031	Nickel	7440-02-0	All, where prolonged skin contact is expected	Intentionally added	ANNEX XVII of REACH Regulation (EC) No 1907/2006	
6	Banned	00054	Tributyl Tin Oxide (TBTO)	56-35-9	All	Intentionally added or 0.1% by weight (1,000 ppm) of the product	Japan Law concerning the evaluation of chemical substances Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 28.10.2008)	
7	Banned	00055	Tri-substituted organostannic compounds	See another list	All	0.1% by weight (1,000 ppm) of tin in a material	ANNEX XVII of REACH Regulation (EC) No 1907/2006 and Commission Regulation (EU) No 276/2010; Japan Law concerning the evaluation of chemical substances Norwegian product regulation	

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8	Banned	00014	Dibutyltin (DBT) compounds	See another list	All	0.1% by weight (1,000 ppm) of tin in a material	ANNEX XVII of REACH Regulation (EC) No 1907/2006 and Commission Regulation (EU) No 276/2010	
9	Banned	00015	Diocetyl tin (DOT) compounds	See another list	(a) textile and leather articles intended to come into contact with the skin, (b) childcare articles (c) twocomponent room temperature vulcanisation moulding kits (RTV-2 moulding kits)	0.1% by weight (1,000 ppm) of tin in a material	ANNEX XVII of REACH Regulation (EC) No 1907/2006 and Commission Regulation (EU) No 276/2010	
10	Banned	00044	Polybrominated Biphenyls (PBBs)	See another list	All	0.1% by weight (1,000 ppm) in homogeneous material	Directive 2011/65/EU; China MII Methods; Korea RoHS; Japan J-MOSS	Banned under RoHS
11	Banned	00045	Polybrominated Diphenylethers (PBDEs)	See another list	All	0.1% by weight (1,000 ppm) in homogeneous material	Directive 2011/65/EU; China MII Methods; Korea RoHS; Japan J-MOSS, Japan Law concerning the evaluation of chemical substances	Banned under RoHS
12	Banned	00046	Polychlorinated Biphenyls (PCBs) and specific substitutes	See another list	All	Intentionally added	Japan Law concerning the evaluation of chemical substances; ANNEX XVII of REACH Regulation (EC) No 1907/2006; US TSCA.	
13	Banned	00047	Polychlorinated Terphenyls (PCTs)	See another list	All	0.005% by weight (50 ppm) in material	ANNEX XVII of REACH Regulation (EC) No 1907/2006;	
14	Banned	00048	Polychlorinated Naphthalenes (more than 3 chlorine atoms)	See another list	All	Intentionally added	Japan Law concerning the evaluation of chemical substances	
15	Banned	00033	Perchlorates	See another list	All	0.0000006% by weight (0.006 ppm) of the product	US/ California - Perchlorate Contamination Prevention Act of 2003	
16	Banned	00124	Perfluorooctane sulfonate (PFOS)	See another list	Textiles or other coated materials.	Intentionally added or 1 microgram/m <sup>2</sup> of coated material	Stockholm convention on Persistent Organic Pollutants; Commission Regulation (EU) No 757/2010; Canadian Environmental Protection Act SOR/ 2008-178; Japan Law concerning the evaluation of chemical substances	
16	Banned	00125	Perfluorooctane sulfonate (PFOS)	See another list	All except textiles or other coated materials.	Intentionally added or 0.1 mass% of the part (as the sum of PFOS)	Stockholm convention on Persistent Organic Pollutants; Commission Regulation (EU) No 757/2010; Canadian Environmental Protection Act SOR/ 2008-178; Japan Law concerning the evaluation of chemical substances	
17	Banned	00018	Fluorinated greenhouse gases (PFC, SF <sub>6</sub> , HFC)	See another list	All	Intentionally added	EU Reg. No. 517/2014	
18	Banned	00003	Asbestos	See another list	All	Intentionally added	ANNEX XVII of REACH Regulation (EC) No 1907/2006; US TSCA; Swiss Ordinance on Reduction of Risk from Chemical Products	
19	Banned	00004	Azocolourants and azodyes which form certain aromatic amines	See another list	Textiles and leather	0.003% by weight (30 ppm) of the finished textile/leather product 1	ANNEX XVII of REACH Regulation (EC) No 1907/2006;	
20	Banned	00032	Ozone Depleting Substances	See another list	All	Intentionally added	Montreal Protocol EU EC No. 2037/2000 EC 1005/2009 US Clean Air Act	
21	Banned	00049	Radioactive substances	See another list	All	Intentionally added	Radiation Protection Law Directive 2013/59/Euratom, Act on Regulation of Nuclear Source Materials, Nuclear Fuel Materials, and Reactors(Japan), Act on Regulation of Radioisotopes and Others(Japan), NRC Regulation Title 10 CFR Part 20(US)	
	Banned	00019	Formaldehyde		Textiles	0.0075% by weight (75 ppm) of textile product	Austria - BGB I 1990/194: Formaldehydverordnung, §2, 12/2/1990; Lithuanian Hygiene Norm HN 96:2000 (Hygiene standards and regulations)	

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22	Banned		Formaldehyde	See another list	Composite wood (plywood, particle board, medium density fiberboard) products or components	Intentionally added	US/CA CARB Rule US Federal Law 111-199/TSCA Section 601	
23	Banned	00035	Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)	3846-71-7	All	Intentionally added or 0.1% by weight (1,000 ppm) of the Article	Japan Law concerning the evaluation of chemical substances Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 17.12.2014)	
24	Banned	00036	Selected Phthalates Group 1 (BBP, DBP, DEHP)	See another list	Children's toy or child care article	0.1% by weight (1,000 ppm) in plasticized material	ANNEX XVII of REACH Regulation (EC) No 1907/2006; U.S. Consumer Product Safety Improvement Act	The threshold level is the sum of the phthalate concentrations
25	Banned	00037	Selected Phthalates Group 2 (DIDP, DINP, DNOP)	See another list	Children's toy or child care article that can be placed in a child's mouth	0.1% by weight (1,000 ppm) in plasticized material	ANNEX XVII of REACH Regulation (EC) No 1907/2006; U.S. Consumer Product Safety Improvement Act	The threshold level is the sum of the phthalate concentrations
26	Banned	00016	Dimethyl fumarate	624-49-7	All	0.00001% by weight (0.1 ppm) in a material	COMMISSION DECISION 2009/251/EC	
27	Banned	00001	Diarsenic Pentoxide	1303-28-2	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 28.10.2008)	ANNEX XIV of REACH Sunset date: 21.05.2015
28	Banned	00002	Diarsenic Trioxide	1327-53-3	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 28.10.2008)	ANNEX XIV of REACH Sunset date: 21.05.2015
29	Banned	00020	Hexabromocyclododecane(HBCDD) and all major diastereoisomers	See another list	All	Intentionally added or 0.01% by weight (100 ppm) of the Article	POPs: Persistent Organic Pollutants Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 28.10.2008)	ANNEX XIV of REACH Sunset date: 21.08.2015
30	Banned	00052	Shortchain Chlorinated Paraffins (C10 – C13)	See another list	All	Intentionally added or 0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 28.10.2008), Norway Product Regulations FOR-2004-06-01-922; Swiss Ordinance on Reduction of Risk from Chemical Products	
31	Banned	00056	Tris(2-chloroethyl) phosphate (TCEP)	115-96-8	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 13.01.2010)	ANNEX XIV of REACH Sunset date: 21.08.2015
32	Banned	00026	Lead chromate	7758-97-6	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 13.01.2010)	ANNEX XIV of REACH Sunset date: 21.05.2015
33	Banned	00027	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 13.01.2010)	ANNEX XIV of REACH Sunset date: 21.05.2015
34	Banned	00028	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 13.01.2010)	ANNEX XIV of REACH Sunset date: 21.05.2015
35	Banned	00053	Strontium chromate	7789-06-2	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	ANNEX XIV of REACH Sunset date: 22.01.2019
36	Banned	00061	Potassium hydroxyoctaoxodizincate dichromate	11103-86-9	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS ANNEX XIV of REACH Sunset date: 22.01.2019
37	Banned	00060	Pentazinc chromate octahydroxide	49663-84-5	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS ANNEX XIV of REACH Sunset date: 22.01.2019
38	Banned	00064	Decabromodiphenyl ether	1163-19-5	All	0.1% by weight of the Article(EU RoHS) Intentionally added(TSCA)	POPs: Persistent Organic Pollutants Toxic Substance Control Act (TSCA)	Banned under RoHS
39	Banned	00065	Sulfurous acid, lead salt, dibasic	62229-08-7	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS
40	Banned	00067	Trilead dioxide phosphonate	12141-20-7	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS

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41	Banned	00069	4-Aminoazobenzene	60-09-3	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	
42	Banned	00070	Tetralead trioxide sulfate	12202-17-4	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS
43	Banned	00071	Orange lead (lead tetroxide)	1314-41-6	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS
44	Banned	00072	Pyrochlore, antimony lead yellow	8012-00-8	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS
45	Banned	00073	Pentalead tetraoxide sulphate	12065-90-6	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS
46	Banned	00076	Dibutyltin dichloride (DBTC)	683-18-1	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	
47	Banned	00077	Lead cyanamidate	20837-86-9	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS
48	Banned	00079	Silicic acid (H <sub>2</sub> SiO <sub>5</sub> ), barium salt (1:1), lead-doped	68784-75-8	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS
49	Banned	00083	Lead titanium trioxide	12060-00-3	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS
50	Banned	00084	Lead titanium zirconium oxide	12626-81-2	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS
51	Banned	00085	Lead oxide sulfate	12036-76-9	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS
52	Banned	00086	[Phthalato(2-)]dioxotrilead	69011-06-9	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS
53	Banned	00087	Dioxobis(stearato)trilead	12578-12-0	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS
54	Banned	00088	Fatty acids, C16-18, lead salts	91031-62-8	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS
55	Banned	00089	Lead dinitrate	10099-74-8	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	Banned under RoHS
56	Banned		Specific Heavy Metals Cd/Cd Compounds; Pb/Pb Compounds; Hg/Hg Compounds; CrVI Compounds	—	Packaging, packaging component	Intentionally added or 0.01% by weight (100ppm) of the sum of Cd, Hg, Pb, Cr <sup>6+</sup> in the material	EU 94/62/EC Directive; US State Toxic in Packaging (TIP)	Packaging
57	Banned	00094	Cadmium oxide	1306-19-0	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 20.6.2013)	Banned under RoHS
58	Banned	00096 00097	Pentadecafluorooctanoic acid (PFOA) and its salts	See another list	All	0.1% by weight (1,000 ppm) of the Article	POPs: Persistent Organic Pollutants	
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60	Banned	00099	Cadmium sulphide	1306-23-6	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2013)	Banned under RoHS

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61	Banned	00038	Bis (2-ethylhexyl) phthalate (DEHP)	117-81-7	All	0.1% by weight (1,000 ppm) in homogeneous material	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 28.10.2008)	Banned under RoHS [Limit of substitution: 31.12.2018]; ANNEX XIV of REACH
62	Banned	00039	Dibutylphthalate (DBP)	84-74-2	All	0.1% by weight (1,000 ppm) in homogeneous material	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 28.10.2008)	Banned under RoHS [Limit of substitution: 31.12.2018]; ANNEX XIV of REACH
63	Banned	00040	Butyl benzyl phthalate (BBP)	85-68-7	All	0.1% by weight (1,000 ppm) in homogeneous material	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 28.10.2008)	Banned under RoHS [Limit of substitution: 31.12.2018]; ANNEX XIV of REACH
64	Banned	00041	Diisobutyl phthalate (DIBP)	84-69-5	All	0.1% by weight (1,000 ppm) in homogeneous material	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 28.10.2008)	Banned under RoHS [Limit of substitution: 31.12.2018]; ANNEX XIV of REACH
65	Banned	-	Polycyclic aromatic hydrocarbon (PAH)	See another list	Rubber or plastic parts that come into direct, prolonged or repetitive skin or oral cavity contact except those for toys or childcare articles	0.0001 mass% (1ppm) of the plastic or rubber part	ANNEX XVII of REACH Regulation (EC) No 1907/2006 and Commission Regulation (EU) No 1272/2013	
66	Banned	-	Polycyclic aromatic hydrocarbon (PAH)		Rubber or plastic parts of toys and childcare articles that come into direct, prolonged or repetitive skin or oral cavity contact	0.00005 mass% (0.5ppm) of the plastic or rubber part	ANNEX XVII of REACH Regulation (EC) No 1907/2006 and Commission Regulation (EU) No 1272/2013	
67	Controlled	00174	Phenol, Isopropylated Phosphate (3:1) (PIP (3:1))	68937-41-7	All	Intentionally added	US TSCA.	Banned from November/1/2022
68	Controlled	00005	Beryllium Oxide (BeO)	1304-56-9	All	0.1% by weight (1,000 ppm) of the Article	DIGITALEUROPE 2/CECED/ Aea 3/ EERA guidance	
69	Controlled	00009	Brominated flame retardants (other than PBBs, PBDEs, or HBCDD)	See another list	Plastic materials except printed wiring board laminates	0.1% total bromine content by weight (1,000 ppm) in the plastic material	JS709	
	Controlled	00008	Brominated flame retardants (other than PBBs, PBDEs, or HBCDD)		Printed wiring board laminate	0.09% total bromine content by weight (900 ppm) in the laminate	IPC-4101 and IEC 61249-2-21	
70	Controlled	00062	Chlorinated flame retardants	See another list	Plastic materials except printed wiring board laminates 4	0.1% total chlorine content by weight (1,000 ppm) in the plastic material	JS709	
	Controlled	00063	Chlorinated flame retardants		Printed wiring board laminate 4	0.09% total chlorine content by weight (900 ppm) in the laminate	IPC-4101 and IEC 61249-2-21	
71	Controlled	-	Polyvinyl Chloride (PVC) and PVC Copolymers	See another list	Plastic materials except printed wiring board laminates 4	0.1% total chlorine content by weight (1,000 ppm) in the plastic material	JS709	
72	Controlled	00090	Di-isodecyl phthalate (DIDP)	68515-49-1 26761-40-0	All	Intentionally added	US/CA Proposition65	
73	Controlled	00091	Di-n-hexyl Phthalate (DnHP)	84-75-3	All	Intentionally added or 0.1% by weight (1,000 ppm) of the Article	US/CA Proposition65; Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 16.12.2013)	
74	Controlled	00013	Cobalt dichloride (CoCl <sub>2</sub> )	7646-79-9	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 28.10.2008)	

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75	Controlled	00050	Refractory Ceramic Fibres, Aluminosilicate	-	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	
76	Controlled	00051	Refractory Ceramic Fibres, Zirconia Aluminosilicate	-	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	
77	Controlled	00007	Boric acid	10043-35-3 11113-50-1	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 18.06.2010)	
78	Controlled	00017	Disodium tetraborate, anhydrous	See another list	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 18.06.2010)	
79	Controlled	-	Tetraboron disodium heptaoxide, hydrate	12267-73-1	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 18.06.2010)	
80	Controlled	00042	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 20.06.2011)	
81	Controlled	00043	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 20.06.2011)	
82	Controlled	-	4-[4,4'-bis(dimethylamino) benzhydrylidene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 18.06.2010)	
83	Controlled	-	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	ANNEX XIV of REACH Sunset date: 22.11.2017
84	Controlled	00059	Bis(2-methoxyethyl) phthalate	117-82-8	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	
85	Controlled	00057	4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	140-66-9	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	
86	Controlled	00058	Bis(2-methoxyethyl) ether	111-96-6	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	ANNEX XIV of REACH Sunset date: 22.08.2017
87	Controlled	-	N,N-dimethylacetamide (DMAC)	127-19-5	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)	
88	Controlled	00066	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 18.06.2010)	
89	Controlled	00068	1,2-dimethoxyethane; ethyleneglycol dimethyl ether (EGDME)	110-71-4	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2012)	
90	Controlled	00074	1,2-Diethoxyethane	629-14-1	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2012)	
91	Controlled	00075	Diboron trioxide	1303-86-2	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 18.06.2012)	
92	Controlled	00078	N,N-dimethylformamide	68-12-2	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2012)	
93	Controlled	00080	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2012)	
94	Controlled	00081	Diisopentylphthalate (DIPP)	605-50-5	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2012)	
95	Controlled	00082	N-pentyl-isopentylphthalate	776297-69-9	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2012)	

No.	Classification	JGPSSI Classification No.	Substance Group	CAS No.	Reportable Application(s)	Threshold Level (Reporting level)	Key Legal and Regulatory or Industry Standard/Agreement Citation	Remarks
96	Controlled	-	Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	25550-51-0 19438-60-9 48122-14-1 57110-29-9	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2012)	
97	Controlled	00095	Dipentyl phthalate (DPP)	131-18-0	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 20.06.2013)	
98	Controlled	00098	4-Nonylphenol, branched and linear, ethoxylated	-	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 20.06.2013)	
99	Controlled	00100	Trixylyl phosphate	25155-23-1	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2013)	
100	Controlled	00102	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2013)	
101	Controlled	00105	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2013)	
102	Controlled	00106	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2013)	
103	Controlled	00107	Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	All	Intentionally added	California Proposition 65	
104	Controlled	00126	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2013)	
105	Controlled	-	Benzenamine, N-phenyl-, reaction products with styrene and 2,4,4-trimethylpentene (BNST)	68921-45-9	All	0.1% by weight (1,000 ppm) of the Article	Prohibition of Certain Toxic Substances Regulations, 2012, CANADA	
106	Controlled	00128	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 17.12.2014)	
107	Controlled	00128	reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)		All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 17.12.2014)	
108	Controlled	00130	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 17.12.2014)	
109	Controlled	00131	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)	68515-51-5 68648-93-1	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 15.6.2015)	
110	Controlled	-	Nitrobenzene	98-95-3	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 17.12.2015)	
111	Controlled	00134	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 17.12.2015)	



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112	Controlled	-	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 17.12.2015)	
113	Controlled	00133	1,3-propanesultone	1120-71-4	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 17.12.2015)	
114								
115	Banned		4,4'-Isopropylidenediphenol	80-05-7	Applications of thermal paper.	It is prohibited to market thermal paper containing a concentration of 0.02% or more by weight.	ANNEX XVII of REACH Regulation (EC) No 1907/2006	
	Controlled	00141	4,4'-Isopropylidenediphenol	80-05-7	All	Intentionally added or 0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 12.Jan.2017) ; US/CA Proposition65	
116	Banned	00140 00142	Perfluorocarboxylic acids (C9-C14 PFCAs) and their salts	See another list	All	0.0000025 mass% of the Article	ANNEX XVII of REACH Regulation (EC) No 1907/2006	
117	Banned	00143	Perfluorohexane-1-sulphonic acid and its salts	See another list	All	0.0000025 mass% of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 3.Sep.2017) Swiss Regulations on Risk Reduction from Chemical Products POPs: Persistent Organic Pollutants	
118	Controlled	00146	Cadmium hydroxide	21041-95-2	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 15.Jan.2018)	
119	Controlled	00147	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	See another list	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 15.Jan.2018)	
120	Controlled	00148	Benzo[ghi]perylene	191-24-2	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)	
121	Controlled	00149	Octamethylcyclotetrasiloxane	556-67-2	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)	
122	Controlled	00150	Decamethylcyclopentasiloxane	541-02-6	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)	
123	Controlled	00151	Dodecamethylcyclohexasiloxane	540-97-6	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)	
124	Controlled	00152	Disodium octaborate	12008-41-2	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)	
125	Controlled	00153	Terphenyl, hydrogenated	61788-32-7	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)	
127	Controlled	00139	Dicyclohexyl phthalate	84-61-7	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)	
128	Controlled	00155	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 15.Jan.2018)	

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129	Controlled	00156	Benzo[k]fluoranthene	207-08-9	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)	
130	Controlled	00158	Phenanthrene	85-01-8	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)	
131	Controlled	00157	Fluoranthene	206-44-0 93951-69-0	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 15.Jan.2018)	
132	Controlled	00159	Pyrene	129-00-0 1718-52-1	All	0.1% by weight (1,000 ppm) of the Article	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 15.Jan.2018)	
133	Banned	-	Pentachlorothiophenol (PCTP)	133-49-3	All	1% by weight of the Article	US TSCA.	
134	Banned	-	Hexachlorobutadiene (HCBd)	87-68-3	All	Intentionally added	POPs: Persistent Organic Pollutants Toxic Substance Control Act (TSCA)	
	Banned	-	Hexachlorobenzene	118-74-1	All	Intentionally added	POPs: Persistent Organic Pollutants Toxic Substance Control Act (TSCA)	
136	Banned	-	Mineral Oil Aromatic Hydrocarbons (MOAH) consisting of 1-7 aromatic rings	-	Packaging and printed materials	Intentionally added	French Mineral Oil Regulation	
137	Banned	-	Mineral Oil Saturated Hydrocarbons (MOSH) with carbon chain lengths of 16-35	-	Packaging and printed materials	Intentionally added	French Mineral Oil Regulation	
138	Banned	-	2,4,6-Tri-tert-butylphenol	-	Substances and mixtures	0.3% by weight (3,000 ppm)	Toxic Substance Control Act (TSCA)	