

Appendix : SOSHIN ELECTRIC Group List of Substances with Environmental Controls

(1) Substances prohibited for use (chemical substances prohibited from inclusion in products/packaging materials delivered to the SOSHIN ELECTRIC Group (substances used for packaging Company products *excluding packing materials when delivering to the Company)

No.	Applicable chemical substances/substance groups	Application	Threshold	Main laws and regulations referenced	Notes
1	Cadmium/cadmium compound	All products excluding batteries	0.01% in weight of homogeneous medium (100 ppm)	EU RoHS Directive/ELV regulations, and others	Exemptions applicable when substances exceed threshold levels shall conform to Annexes III and IV of the EU RoHS Directive
		Batteries	20 ppm in total battery weight	EU Battery Regulation	
		Packaging materials	0.01% in weight (100 ppm)	EU Packaging and Packaging Waste Regulation	
2	Lead/lead compounds	All products excluding batteries	0.1% in weight of homogeneous medium (1000 ppm)	EU RoHS Directive/ELV regulations, and others	Exemptions applicable when substances exceed threshold levels shall conform to Annexes III and IV of the EU RoHS Directive
		Batteries	100 ppm in total battery weight	EU Battery Regulation	
		Packaging materials	0.01% in weight (100 ppm)	EU Packaging and Packaging Waste Regulation	
3	Mercury/mercury compounds	All products excluding batteries	0.1% in weight of homogeneous medium (1000 ppm)	EU RoHS Directive/ELV regulations, and others	Exemptions applicable when substances exceed threshold levels shall conform to Annexes III and IV of the EU RoHS Directive
		Batteries	5 ppm in total battery weight	EU Battery Regulation	
		Packaging materials	0.01% in weight (100 ppm)	EU Packaging and Packaging Waste Regulation	
4	Chromium(VI) compounds	All products	0.1% in weight of homogeneous medium (1000 ppm)	EU RoHS Directive/ELV regulations, and others	Exemptions applicable when substances exceed threshold levels shall conform to Annexes III and IV of the EU RoHS Directive
		Packaging materials	0.01% in weight (100 ppm)	EU Packaging and Packaging Waste Regulation	
5	Polybrominated biphenyls (PBBs)	All products	0.1% in weight of homogeneous medium (1000 ppm)	EU RoHS Directive, and others	
6	Polybrominated diphenyl ethers (PBDEs)	All products	0.1% in weight of homogeneous medium (1000 ppm)	EU RoHS Directive, and others	
7	Bis 2-ethylhexyl phthalate (DEHP)	All products	0.1% in weight of homogeneous medium (1000 ppm)	EU RoHS Directive	
8	Dibutyl phthalate (DBP)	All products	0.1% in weight of homogeneous medium (1000 ppm)	EU RoHS Directive	
9	Butyl benzyl phthalate (BBP)	All products	0.1% in weight of homogeneous medium (1000 ppm)	EU RoHS Directive	
10	Diisobutyl phthalate (DIBP)	All products	0.1% in weight of homogeneous medium (1000 ppm)	EU RoHS Directive	
11	Group 1 phthalate esters (BBP, DBP, DEHP, DIBP)	Packaging materials	0.1% in weight of plasticized materials as the total of phthalate esters (1000 ppm)	Annex XVII to the REACH Regulation (restricted substances)	
12	Dechlorane Plus	All products	Added intentionally (prohibited for use)	EU POPs Regulation, Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
13	UV-328	All products	Added intentionally (prohibited for use)	EU POPs Regulation, Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
14	Perfluorohexanesulfonic acid (PFHS) and its salts	All products	25 ppb in molded items either intentionally added, or the combined total of PFHS and its salts	EU POPs Regulation, Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
15	PFHS-related substances	All products	1000 ppb in molded items either intentionally added, or PFHS-related substances, or a combination of such	EU POPs Regulation	
16	Medium-chain chlorinated paraffins (MCCPs) with degree of chlorination > 45% by weight with a carbon number in the range 14 to 17	All products	Added intentionally (prohibited for use)	POPs Regulation, Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
17	Polychlorinated biphenyls (PCBs) and specified substitute substances	All products	Added intentionally (prohibited for use)	Annex XVII to the REACH Regulation (restricted substances), Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
18	Polychlorinated terphenyls (PCTs)	All products	Added intentionally (prohibited for use)	Annex XVII to the REACH Regulation (restricted substances)	
19	Polychlorinated naphthalenes (PCNs)	All products	Added intentionally (prohibited for use)	EU POPs Regulation, Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
20	Tributyltin oxide (TBTO)	All products	Added intentionally (prohibited for use)	Annex XVII to the REACH Regulation (restricted substances), Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
21	Tri-substituted organostannic compounds	All products	0.1% by weight (1000 ppm) of tin element, either intentionally added, or relative to the weight of the molded item (part)	Annex XVII to the REACH Regulation (restricted substances), Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
22	Dibutyltin compounds (DBT)	All products	0.1% by weight (1000 ppm) of tin element relative to the weight of the molded item (part)	Annex XVII to the REACH Regulation (restricted substances), Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
23	Diocetyl compounds (DOT)	(1) Textile/leather products intended to come into contact with the skin (2) Child care products (3) Two-component molding kit for curing at room temperature (RTV-2 sealant molding kit)	0.1% by weight (1000 ppm) of tin element relative to the weight of the molded item (part)	Annex XVII to the REACH Regulation (restricted substances)	
24	Short chain chlorinated paraffins (C10-C13)	All products	0.1% by weight (1000 ppm), either intentionally added, or for the molded product	EU POPs Regulation, Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
25	Perfluorooctane sulfonic acid (PFOS) and its salts	All products	25 ppb in molded items and mixtures either intentionally added, or the combined total of PFOS and its salts	EU POPs Regulation, Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
26	PFOS-related substances	All products	1000 ppb in molded items and mixtures either intentionally added, or PFOS-related substances, or a combination of such	EU POPs Regulation, Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
27	Perfluorooctanoic acid (PFOA) and its salts	All products	25 ppb in molded items and mixtures either intentionally added, or the combined total of PFOA and its salts	EU POPs Regulation, Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
28	PFOA-related substances	All products	1000 ppb in molded items and mixtures either intentionally added, or PFOA-related substances, or a combination of such	EU POPs Regulation, Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
29	C9-C14 PFCA and their salts	All products	- 25 ppb of C9-C14 PFCA and their salts in total in molded items and mixtures	Annex XVII to the REACH Regulation (restricted substances)	
30	C9-C14 PFCA-related substances	All products	- 260 ppb of C9-C14 PFCA-related substances, in total, in molded items and mixtures	Annex XVII to the REACH Regulation (restricted substances)	
31	Fluorinated greenhouse gases (PFC, SF6, HFC)	All products	Added intentionally (prohibited for use)	EU F-Gas Regulation	Exclusions apply to delivered products independently defined by the Company
32	Asbestos	All products	Added intentionally (prohibited for use)	Annex XVII to the REACH Regulation (restricted substances), Industrial Safety and Health Act	
33	Ozone depleting substances (CFC, Halon, HBFC, HCFC, etc.)	All products	Added intentionally (prohibited for use)	Montreal Protocol, Act on the Protection of the Ozone Layer Through the Control of Specified Substances and Other Measures	
34	2-(2H-1,2,3-benzotriazol-2-yl)-4,6-di-tert-butylphenol	All products	Added intentionally (prohibited for use)	Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
35	Dimethyl fumarate	All products	0.1 ppm in parts	Annex XVII to the REACH Regulation (restricted substances)	
36	Hexabromocyclododecane	All products	75 ppm, either intentionally added, or for the molded product	EU POPs Regulation, Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
37	Polycyclic aromatic hydrocarbon (PAH)	All products	1 ppm in plastic or rubber components	Annex XVII to the REACH Regulation (restricted substances)	
38	Decabromodiphenyl ether (DecaBDE)	All products	Added intentionally (prohibited for use)	EU POPs Regulation, Act on the Regulation of Manufacture and Evaluation of Chemical Substances, Toxic Substances Control Act (TSCA) in the U.S.	
39	Tris (4-isopropylphenyl) phosphate (PIP (3:1))	All products	Added intentionally (prohibited for use)	Toxic Substances Control Act (TSCA) in the U.S.	
40	2,4,6-tri-tert-butylphenol	All products	Added intentionally (prohibited for use)	Toxic Substances Control Act (TSCA) in the U.S.	
41	Hexachlorobutadiene (HCBBD)	All products	Added intentionally (prohibited for use)	Toxic Substances Control Act (TSCA) in the U.S.	
42	Pentachlorothiophenol	All products	Added intentionally (prohibited for use)	Toxic Substances Control Act (TSCA) in the U.S.	
43	Pentachlorothiophenol, and its salts and esters	All products	5 ppm of intentionally added PCBs (including their salts and esters), or contained in molded items and mixtures	EU POPs Regulation, Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
44	Red phosphorus (not treated with a moisture-proof coating)	All products	Added intentionally (prohibited for use)	Customer requirements, etc.	
45	Hexachlorobenzene (HCB)	All products	Added intentionally (prohibited for use)	EU POPs Regulation, Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
46	Long-chain perfluorocarboxylic acids (PFCA) and their salts and related substances (PFCA) (C15 to C21)	All products	Added intentionally (prohibited for use)	POPs Regulation, Act on the Regulation of Manufacture and Evaluation of Chemical Substances	
47	Arsenic compound	Packaging materials (wood preservative)	Added intentionally (prohibited for use)	Annex XVII to the REACH Regulation (restricted substances)	
48	Cobalt chloride	Packaging materials (desiccant)	Added intentionally (prohibited for use)	Annex XVII to the REACH Regulation (restricted substances)	
49	Mineral oil aromatic hydrocarbons (MOAHs) containing 1-7 aromatic rings	Packaging materials, printed materials	0.1% by weight (1000 ppm) in inks	French Anti-Waste Law for a Circular Economy	
50	Mineral oil aromatic hydrocarbons (MOAHs) containing 3-7 aromatic rings	Packaging materials, printed materials	0.1% by weight (1000 ppm) in inks	French Anti-Waste Law for a Circular Economy	
51	Mineral oil saturated hydrocarbons (MOAHs) containing 16-35 carbon atoms	Packaging materials, printed materials	0.1% by weight (1000 ppm) in inks	French Anti-Waste Law for a Circular Economy	

(2) Controlled substances in products (chemical substances requiring disclosure as to their inclusion in products delivered to the SOSHIN ELECTRIC Group, quantity, location of use, and intended application)

1	Polyvinylchloride (PVC) and PVC compounds	All products	0.1% in weight (1000 ppm) of the total amount of chlorine in the material	Customer requirements, etc.
2	Azo dye and pigment producing certain aromatic amines	All products	Added intentionally	Annex XVII to the REACH Regulation (restricted substances)
3	Diisononyl phthalate (DINP)	All products	0.1% in weight of homogeneous medium (1000 ppm)	Annex XVII to the REACH Regulation (restricted substances)
4	Diisodecyl phthalate (DIDP)	All products	0.1% in weight of homogeneous medium (1000 ppm)	Annex XVII to the REACH Regulation (restricted substances)
5	Di-n-octyl phthalate (DNOP)	All products	0.1% in weight of homogeneous medium (1000 ppm)	Annex XVII to the REACH Regulation (restricted substances)
6	Di-n-hexyl phthalate (DnHP)	All products	0.1% in weight of homogeneous medium (1000 ppm)	Annex XVII to the REACH Regulation (restricted substances)
7	Decabromodiphenyl ethane (DBDPE)	All products	Added intentionally	Canadian Prohibition of Certain Toxic Substances Regulations, 2012
8	Perfluorohexanoic acid (PFHxA), its salts and related substances	All products	Added intentionally	REACH Regulation, customer requirements
9	Chlorinated flame retardants (CFR)	(1) Plastic materials, excluding laminated printed wiring boards (2) Laminated printed wiring board	(1) 0.1% in weight (1000 ppm) of chlorine in the plastic materials (2) 0.09% in weight (900 ppm) of the total amount of chlorine in the laminated printed wiring board	IEC61249-2-21, etc.
10	Brominated flame retardants (excluding PBBs, PBDEs, and HBCDDs)	(1) Plastic materials, excluding laminated printed wiring boards (2) Laminated printed wiring board	(1) 0.1% in weight (1000 ppm) of chlorine in the plastic materials (2) 0.09% in weight (900 ppm) of the total amount of chlorine in the laminated printed wiring board	IEC61249-2-21, etc.
11	Low-molecular-weight cyclic siloxane (D4 to D6)	All products	Added intentionally	Customer requirements, etc.
12	Beryllium oxide	All products	Added intentionally	Customer requirements, etc.
13	Nickel and its compounds	All products	Added intentionally	Customer requirements, etc.
14	4,4'-Isopropylidenediphenol (bisphenol A)	All products	0.1% in weight (1000 ppm) of the product in its intended use or in its molded form	Candidate List Substances, etc. in the REACH Regulation
15	Substances of Very High Concern (SVHC) in the REACH Regulation	All products	0.1% by weight (1000 ppm) for molded product	Candidate List Substances, etc. in the REACH Regulation
16	Formaldehyde	All products	Added intentionally (75 ppm in the materials)	Annex XVII to the REACH Regulation (restricted substances)
17	Perchlorate	All products	0.006 ppm of product	Customer requirements, etc.
18	Radioactive substances	All products	Added intentionally	Customer requirements, etc.
19	Per- and Polyfluoroalkyl Substances (PFAS)	All products	Added intentionally	PFAS Reporting and Regulation Rule in the Toxic Substances Control Act (TSCA) in the U.S., etc.

* Substances not included in this list that are prohibited by product content laws in different countries and industry standards must also comply with this standard.

Date revised	Main changes
April 1, 2016	(1) The following five substances were revised from controlled substances to banned substances Hexabromocyclododecane (HBCDD), bis phthalate (DEHP), dibutyl phthalate (DBP), butyl benzyl phthalate (BBP), diisobutyl phthalate (DIBP) (2) Removed the exclusion for dibutyltin compounds (DBT) (3) Removed prohibited substances for battery use
September 1, 2018	(1) Reviewed threshold levels to match IEC62474 and chemSHERPA (2) Added phthalates (DEHP, DBP, BBP, DIBP) to prohibited substances for use as packaging materials
October 30, 2021	(1) Added substances No. 31–39 to the list of prohibited substances (2) Standardized the threshold level for prohibited use as an expression in ppm (3) Changed the regulatory content concerning the threshold for prohibited use from “intentionally added” to “prohibited for use” (4) Corrected the link destination for No. 20 ozone-depleting substances (5) Added “tin equivalent” to the threshold level for prohibited use for No. 6–8 (6) Added 6 (b) to the excluded items in accordance with the RoHS Directive (7) Moved the Revision History to the beginning of the text (8) Changed prohibited from intentionally adding for use to prohibited for use
December 17, 2021	(1) Prohibited substance No. 37 D3 was deleted from the low molecular weight cyclic siloxane and changed to D4, D5, D6. (2) Deleted 107-45-0 error in prohibited substance No. 37 CAS.
April 1, 2023	(1) Added the following four substances to the list of prohibited substances: 1) 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" TM) 2) 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)phenol UV-328 3) Perfluorohexanesulfonic acid 4) Perfluorocarboxylic acids (C9-C14 PFCAs), and their salts and related substances 5) Added request for use of the chemSHERPA tool to confirm compliance with the laws and regulations in each country 6) Appendix (1)-1: Added a link to the revised List of RoHS Exemption Codes. (2) Added the following six substances to the list of controlled substances: 1) Medium-chain chlorinated paraffins (MCCPs) with degree of chlorination > 45% by weight in the range C14 to C17 2) 1,2,5,6-Tetrabromocyclooctane 3) Tetrachloroethylene 4) Pigment violet 29 (PV29), 3,4,9,10-perylene tetracarboxylic diimide 5) Methylene chloride (dichloromethane) 6) Added the REACH SVHC address (3) Added the following one substance to the list of prohibited substances for packaging materials 1) Mineral oil aromatic hydrocarbons (MOAHs) containing 1–7 aromatic rings
January 1, 2026	Revised the whole document to change PDF format to Excel format (1) Added reference laws and regulations (2) Added the following to the list of prohibited substances Medium-chain chlorinated paraffins (MCCPs) with degree of chlorination > 45% by weight in the range C14 to C17 Long-chain perfluorocarboxylic acids (C15–C21 LC-PFCAs) and their salts and related substances Mineral oil aromatic hydrocarbons (MOAHs) containing 1–7 aromatic rings; mass concentration exceeding 0.1% in ink Mineral oil aromatic hydrocarbons (MOAHs) forming 3–7 aromatic rings; mass concentration exceeding 0.0001% in ink Mineral oil saturated hydrocarbons (MOSH) with 16-35 aromatic rings; mass concentration exceeding 0.1% in ink