# Shindengen Group Green Procurement Standard

Version 13.2

April 2024

Shindengen Electric Manufacturing Co.,Ltd.

# **Change Tracking**

Version	Revision Date	Main Revision
9	Oct. 2008	<ul> <li>Revised the list of Shindengen environment management materials: adding "PFOS and PFOS related chemical compound" and deleting Formaldehyde.</li> <li>Revised the list of Shindengen environment management materials: deleting item (3) recycling materials.</li> <li>Revised IV. 4-2, the usage status of environmentally hazardous substances: deleing the investigation of environmentally hazardous substance.</li> <li>Revised VI: Adding the investigation of the management system for chemicals in a product.</li> </ul>
10.0	Dec. 2010	<ul> <li>Adding "III. Definition" and specifying the meaning of the terminology to be used.</li> <li>Reviewing managed chemical substances (called environment hazardous substances).</li> <li>Changing the treatment of "the environment management system investigation table" to an attached table.</li> </ul>
11.0	Oct. 2014	- Specifying ozone-depleting substances as prohibited substances (prohibiting use in production process).
12.0	Mar. 2016	- Executing overall review for Green Procurement Standard such as information gathering method for managed materials and chemicals in a product.
12.1	Jul. 2016	- Adding specific Phthalic esters (4 substances) to the list of prohibited substances in a product (Applying from April 1st, 2017. Details such as maximum tolerated concentration value is described in an attached document).
13.0	Mar. 2019	<ul> <li>Adding chemSHERPA and an integrated JAMA/JAPIA standard material datasheet as information transfer tool of chemicals in a product.</li> <li>Update for Exemption list to the latest information.</li> </ul>
13.1	May 2022	<ul> <li>Adding LR08(MDR) to Relevant standards for chemical management.</li> <li>Adding "PFOA, its salts and PFOA-related compounds" to Prohibited substances in products.</li> <li>Update for explanation of the prescribed form.</li> <li>Delete for Exemption list.</li> </ul>
13.2	April 2024	<ul> <li>Adding LR09(China RoHS) to Relevant standards for chemical management.</li> <li>Adding "Dechlorane Plus" to Prohibited substances in products.</li> </ul>

# 1. Purpose of Green Procurement

As global environmental problems are becoming increasingly serious, our reduction of environmental impact is becoming an essential condition for realizing a sustainable society in future.

Shindengen Group ensures that "manufacturing of products is aligned with our environmental conservation goals"; by prioritizing procurement of environmentally friendly materials and parts for our products, also known as the "Green Procurement" initiative.

This standard shows our basic policy for the green procurement. We proceed to prioritize the deal with partners and procurement from suppliers who meet this standard.

# 2. Scope

The standard applies to the delivered materials which are built into product (including package materials and included materials) shipped by Shindengen Electric Manufacturing Co., Ltd. and its affiliate companies (Shindengen Group). Also, goods which are delivered in the state of directly contacted to the materials are included as well.

\*Please note that there may be a possibility for the product to be contaminated unintentionally in the process of manufacturing and during transportation.

# 3. Terms and definitions

The following are the definitions of the terms used in this form.

In case there is another definition in the "Green Procurement" related documents, the subject document takes precedence over this document.

# 1) Shindengen Group

Shindengen group consists of Shindengen Electric Manufacturing Co., Ltd. and its affiliate companies. For the coverage of Shindengen group, please refer to the information in the following URL.

Shindengen Electric Manufacturing Co., Ltd. URL https://www.shindengen.co.jp/

# 2) Chemical substance

"Chemical substance" means a chemical element and its compound in the nature state or generated by any manufacturing process. It includes all added ingredients to preserve its stability and any impurities deriving from the applied process. However, any solvents that may be separated without affecting stability of the substance and changing its composition are excluded.

### 3) Mixture

"Mixture" means result of combining two or more chemical substances.

# 4) Article

"Article" means a body of which function is determined by its specific shape, surface or design provided by the production process more than its chemical composition.

# 5) Chemical product

"Chemical product" collectively means chemical substance and mixture.

# 6) Declarable substances

"Declarable substance" means in principle, a chemical substance which corresponds to the management standard of information transfer scheme of chemicals in products (chemSHERPA). In addition, in some cases the substances which is not applied as declarable one in chemSHERPA is treated as a declarable substance if our customers require. (Please refer to the annex for the chemSHERPA-related management standard)

# 7) Material and part

"Material and part" means raw materials and parts which produce a product shipped by Shindengen group. In addition to them, the subject term specifies package material and materials included in the same package.

# 8) Containing

"Containing" means either intentionally or unintentionally making something be a composition element of material such as addition, filling, mixing or adhesion (including contamination deriving from chemical reaction, unintentional mixing or adhesion).

Regarding chemical substance which is specified with the maximum tolerated concentration value, it is not considered "containing" if it contains less than maximum tolerated concentration value. In this case, it is necessary to provide sufficient information (substance name, concentration value and application) for appropriate management of the substance.

# 9) Intentional addition

"Intentional addition" means a state where a chemical substance is added to material and part successively or temporally with purpose to give a specific feature, appearance or quality.

# 10) Impurity

"Impurity" means a chemical substance contained in natural material and cannot be removed technologically through the general purification process to make industrial material; or a chemical substance generated through the chemical synthesis and cannot be removed technologically. In addition, when using the chemical called impurity for the purpose of maintaining / changing the characteristics of parts, the subject chemical substances are treated as intentional addition.

# 11) Concentration

"Concentration" means unless otherwise noted, weight percentage (wt%) of specified substance to homogeneous material (weight ratio ppm must be written with weight percentage (1,000 ppm = 0.1 wt%)). Homogeneous material means one material of uniform composition throughout and should be a minimum unit which cannot be disjointed or separated into different materials by mechanical actions.

# 12) Prohibited substances in products

In principle, it means chemical prohibited to be added to a part and component. Regarding chemical substance which is specified the maximum tolerated concentration value, it does not consider addition if it contains less than maximum tolerated concentration value. In this case, please provide us with sufficient information (substance name, concentration value and application, etc.) for appropriate management of the subject substance.

In addition, in some cases, prohibited substance in product is to be added individually, depending on our customers' requirements. (Please refer to the Annex or specified Substance Group and Example Substance)

# 13) Exemption

Although a substance may be prohibited to use, exemption allows the usage through alternative technology. (Please provide information based on the latest information regarding the applicable exemptions.)

# 14) Information of Chemicals in Products (CiP)

Description of chemicals contained in part and component.

# 4. Acquisition of information of chemicals in products (CiP)

To implement the Green Procurement strategy, each company of Shindengen Group requests that all suppliers managing the chemical substances comply with the "Guidelines for the management of chemicals in products (CiP)" issued by JAMP.

Please refer to JAMP website for the latest version of "Guidelines for the management of chemicals in products (CiP)".

JAMP URL <a href="https://chemsherpa.net/">https://chemsherpa.net/</a>

# 1) Information request

Please provide information along with the contents which Shindengen group request to all suppliers. In addition, required contents may be different by item due to the situation of our product lines and industry trends.

# 2) Prescribed form

# - Certificate of Non-inclusion

It is a guarantee on the chemical substances (substance group) we prohibit to contain for our part and component. Sometimes we request our partner to issue the certificate using the form of individual business unit, depending on our customers' requirement.

# - chemSHERPA-CI

The chemSHERPA-CI can be used as a common scheme for information handling across a supply chain. Chemical information handling between supply-chain partners is essential for appropriate management of chemical substances in products (Chemical products), in order to continuously respond to expanding regulations.

### - chemSHERPA-AI

The chemSHERPA-AI can be used as a common scheme for information handling across a supply chain. Article information handling between supply-chain partners is essential for appropriate management of chemical substances in products (Articles), in order to continuously respond to expanding regulations.

#### - JAPIA standard material datasheet

It is a sheet for information-transfer which is developed based on the agreement of JAPIA for the survey of materials used for automobile and their chemicals in product (CiP).

# - SDS (Safety Data Sheet)

It is a sheet for providing information of property and handing of chemical products and main chemicals in product (CiP).

# - Various analysis data

It is a data of analysis/measurement of the concentration values of chemicals in product (CiP) for specific chemical substances.

If you cannot transfer the information about chemicals in product (CiP), using the above-mentioned forms, please consult with us individually.

# 3) Guideline on management of chemicals in product (CiP)

As for the prohibited chemicals in product, it is necessary to guarantee that prohibited chemicals in product which is specified maximum tolerated concentration value should be kept less than maximum tolerated concentration value. In addition, product not specified maximum tolerated concentration value should be guaranteed to be without intentional addition.

For declarable substances other than the prohibited substance of products, please communicate known substances information thoroughly. In addition, please make best efforts to acquire information from the point of view of compliance and the industry standards.

# 4) Information handling

We appropriately manage the given information on chemicals in product (CiP) provided and effectively use them for reporting of chemicals in product (CiP) of Shindengen.

# 5. Environment Quality Audit

We may conduct an environment quality audit on management system of chemicals in product (CiP) to all suppliers as needed.

Shindengen Electric Manufacturing Co., Ltd.
Asaka Office
Environmental Management Dept.

# Shindengen Group Green Procurement Standard Version 13.2

Annex

# 1) Declarable Substances

Declarable substances of Shindengen Group are listed in Table 1. These are applicable to the management standard of Chemical Information Sharing and Exchange under Reporting Partnership in the supply chain (chemSHERPA). Additionally, in some cases, management standards may be added individually, based on our customers' requirements.

Table 1: Management standard

Management standard	JAMP symbol
JP Chemical Substances Control Law: Class I Specified	LR01
Chemical Substances	* D 00
US Toxic Substances Control Act (TSCA): Section 6	LR02
EU Directive 2000/53/EC (ELV) : Targeted substances	LR03
EU 2011/65/EU (RoHS) : Annex II	LR04
EU 2019/1021 (POPs) : Annex I	LR05
EU REACH(No 1907/2006): The Candidate List of	LR06
Substances of SVHC, Annex XIV Authorisation Substances	
EU REACH (No 1907/2006) : Annex XVII Restriction substances	LR07
EU Medical Devices Regulation (MDR) (EU)2017/745 : Annex I 10.4 Substances	LR08
the Administrative Measures for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products	LR09
Global Automotive Declarable Substance List (GADSL)	IC01
IEC62474 DB Declarable substance groups and declarable substances	IC02

# 2) Prohibited substances in product

Among the declarable substances, the prohibited substances in product which Shindengen Group appoint are listed in table 2. It is necessary to guarantee the management standard (maximum tolerated concentration value) shown in table 2 except the exemption.

In addition, sample of prohibited substances in product are shown at the end of this document. We would like your cooperation as we sometimes add prohibited substances, depending on our customers' requirement.

Table 2: Prohibited substances in Products (Substances Group)

Prohibited substances in products	Maximum tolerated concentration values (wt%)	
Cadmium and its compounds	0.01	
Hexavalent chromium compounds		
Lead and its compounds		
Mercury and its compounds	0.1	
Polybrominated Biphenyls (PBBs)		
Polybrominated diphenyl ethers(PBDEs)		
Bis(2-ethylhexyl) phthalate (DEHP)		
Butyl benzyl phthalate (BBP)	0.1 5)	
Dibutyl phthalate (DBP)	0.1	
Diisobutyl phthalate (DIBP)		

Ozone depleting substances	
Asbestos	
Azo dye and pigment which form certain aromatic amines <sup>1)</sup>	
Polychlorinated biphenyls(PCBs) and Polychlorinated	
terphenyls(PCTs)	
Polychlorinated naphthalenes (more than 2 chlorine atoms)	
Radioactive substances	
Short chain chlorinated paraffins(10-13 carbon atoms)	Prohibited
Tributyltin oxide	intentional addition <sup>2)</sup>
Benzene	
Hexachlorobenzene	
4-nitrobiphenyl and its chlorides	
Bis(chloromethyl) ether	
Dioxins	
Mirex	
Dimethyl fumarate	
Perfluorooctane sulfonic acid (PFOS)	0.1 3)
Tri-substituted organic tin compounds	
Dibutyl tin compounds	0.1 4)
Dioctyltin compounds	
Endosulfan	
Hexabromocyclododecane (HBCDD)	Prohibited
Perfluorooctanoic acid (PFOA), its salts and PFOA-related	intentional addition <sup>2)</sup>
compounds	intentional addition
Dechlorane Plus	

- 1) Being applied to azo dye and pigment which form certain aromatic amine by decomposition under a specific condition. Please refer to the sample material list for certain aromatic amine.
- 2) If there is a rule that an intentional addition is prohibited, this rule covers all supply chain
- 3) An intentional addition is prohibited. Other than that, the addition is less than maximum tolerated concentration value.
- 4) Weight ratio of tin to a compound of article.
- 5) Phthalates applicable to EU RoHS Directive "(EU)2015/863"

# Prohibited substances in products

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Substance Group Name	Example Substances	CAS No.	Remarks
Cadmium and its compounds	[S00158] Other cadmium compounds	-	
Cadmium and its compounds	[S01824] Cadmium nitrate tetrahydrate	10022-68-1	
Cadmium and its compounds	[S02560] Cadmium chloride phosphate (Cd5Cl(PO4)3), manganese-doped	100402-53-7	
Cadmium and its compounds	[S06180] Selenic acid, cadmium salt (1:1), dihydrate	10060-09-0	
Cadmium and its compounds	[S06182] Flue dust, copper-lead blast furnace, cadmium-indium-enriched	100656-55-1	
Cadmium and its compounds	[S06185] Dodecanoic acid, cadmium salt, basic	101012-89-9	
Cadmium and its compounds	[S06186] Octadecanoic acid, cadmium salt, basic	101012-93-5	
Cadmium and its compounds	[S06187] Octadecanoic acid, 12-hydroxy-, cadmium salt, basic	101012-94-6	
Cadmium and its compounds	[S02225] Cadmium chloride	10108-64-2	11th SVHC (Jun/16/2014)
Cadmium and its compounds	[S02227] Cadmium sulfate	10124-36-4	12th SVHC (Dec/17/2014)
Cadmium and its compounds	[S02580] Cadmium oxide (CdO), solid solution with calcium oxide and titanium oxide (TiO2), praseodymium-doped	101356-99-4	
Cadmium and its compounds	[S02581] Cadmium selenide (CdSe), solid solution with cadmium sulfide, zinc selenide and zinc sulfide, aluminum and copper-doped	101357-00-0	
Cadmium and its compounds	[S02582] Cadmium selenide (CdSe), solid solution with cadmium sulfide, zinc selenide and zinc sulfide, copper and manganese-doped	101357-01-1	
Cadmium and its compounds	[S02583] Cadmium selenide (CdSe), solid solution with cadmium sulfide, zinc selenide and zinc sulfide, europium-doped	101357-02-2	
Cadmium and its compounds	[S02584] Cadmium selenide (CdSe), solid solution with cadmium sulfide, zinc selenide and zinc sulfide, gold and manganese-doped	101357-03-3	
Cadmium and its compounds	[S02585] Cadmium selenide (CdSe), solid solution with cadmium sulfide, zinc selenide and zinc sulfide, manganese and silver-doped	101357-04-4	
Cadmium and its compounds	[S02587] Tetradecanoic acid, cadmium salt	10196-67-5	
Cadmium and its compounds	[S02591] Cadmium oxide (CdO), solid solution with magnesium oxide, tungsten oxide (WO3) and zinc oxide	102110-30-5	
Cadmium and its compounds	[S06205] Silicic acid, zirconium salt, cadmium pigment-encapsulated	102184-95-2	
Cadmium and its compounds	[S01823] Cadmium nitrate	10325-94-7	
Cadmium and its compounds	[S01746] Cadmium perchlorate hexahydrate	10326-28-0	
Cadmium and its compounds	[S06210] Cadmium dioleate	10468-30-1	
Cadmium and its compounds	[S06212] (T-4)-Diammonium tetraiodocadmate	105034-60-4	
Cadmium and its compounds	[S02640] Cadmium selenide sulphide	11112-63-3	
Cadmium and its compounds	[S02647] Cadmium zinc sulfide	11129-14-9	
Cadmium and its compounds	[S06322] Cadmium ditetracosanoate	116854-17-2	
Cadmium and its compounds	[S06323] Cadmium ditricosanoate	116920-59-3	
Cadmium and its compounds	[S06335] Cadmium sulfide (Cd0.55S0.45)	117912-89-7	
Cadmium and its compounds	[S06336] Cadmium sulfide (Cd0.53S0.47)	117912-90-0	
Cadmium and its compounds	[S06337] Cadmium sulfide (Cd0.52S0.48)	117912-91-1	
Cadmium and its compounds	[S06350] Barium cadmium tetrastearate	1191-79-3	
Cadmium and its compounds	[S06351] Sulfuric acid, cadmium salt (4:1)	119222-01-4	
Cadmium and its compounds	[S02686] Cadmium arsenide (Cd3As2)	12006-15-4	
Cadmium and its compounds	[S02692] Cadmium titanium oxide (CdTiO3)	12014-14-1	
Cadmium and its compounds	[S01669] Cadmium phosphide	12014-28-7	
Cadmium and its compounds	[S02693] Antimony, compound with cadmium (2:3)	12014-29-8	
Cadmium and its compounds	[S02761] Cadmium peroxide (Cd(O2))	12139-22-9	
Cadmium and its compounds	[S02762] Cadmium zirconium oxide (CdZrO3)	12139-23-0	
Cadmium and its compounds	[S02769] Cadmium chloride phosphate (Cd5Cl(PO4)3)	12185-64-7	
Cadmium and its compounds	[S02770] Cadmium niobium oxide (Cd2Nb2O7)	12187-14-3	
Cadmium and its compounds	[S02777] Cadmium selenide sulfide, (Cd2SeS)	12213-70-6	
Cadmium and its compounds	[S02778] Cadmium selenide sulfide (Cd2SeS)	12214-12-9	
Cadmium and its compounds	[S02803] Cadmium tantalum oxide (CdTa206)	12292-07-8	
Cadmium and its compounds	[S02825] Cadmium zinc sulfide ((Cd,Zn)S)	12442-27-2	
Cadmium and its compounds	[S06509] Chlorous acid, cadmium salt	125687-98-1	
Cadmium and its compounds	[S02848] Cadmium selenide sulfide (Cd(Se,S))	12626-36-7	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

Prohibited Substances in Products

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Substance Group Name	Example Substances	CAS No.	Remarks
Cadmium and its compounds	[S00159] Cadmium oxide	1306-19-0	
· · · · · · · · · · · · · · · · · · ·	<u> </u>		(Jun/20/2013)
Cadmium and its compounds	[S00160] Cadmium sulfide	1306-23-6	10th SVHC (Dec/16/2013)
Cadmium and its compounds	[S01359] Cadmium selenide	1306-24-7	
Cadmium and its compounds	[S01442] Cadmium telluride	1306-25-8	
Cadmium and its compounds	[S06587] Cadmium mercury sulfide	1345-09-1	
Cadmium and its compounds	[S01806] Cadmium bromide tetrahydrate	13464-92-1	
Cadmium and its compounds	[S02939] Phosphoric acid, cadmium salt (2:3)	13477-17-3	
Cadmium and its compounds	[S02940] Silicic acid (H2SiO3), cadmium salt (1:1)	13477-19-5	
Cadmium and its compounds	[S01924] Cadmium sulfate tetrahydrate	13477-21-9	
Cadmium and its compounds	[S02941] Cadmium sulphite	13477-23-1	
Cadmium and its compounds	[S06612] Fatty acids, C6-12, cadmium salts	135742-32-4	
Cadmium and its compounds	[S06623] Cadmium selenide (Cd0.95Se)	136543-49-2	
Cadmium and its compounds	[S06624] Cadmium selenide (Cd0.98Se)	136543-50-5	
Cadmium and its compounds	[S06625] Cadmium selenide (CdSe0.97)	136543-51-6	
Cadmium and its compounds	[S02962] Diboron tricadmium hexaoxide	13701-66-1	
Cadmium and its compounds	[S02968] Dicadmium hexakis(cyano-C)ferrate(4-)	13755-33-4	
Cadmium and its compounds	[S06638] Cadmium diperchlorate	13760-37-7	
Cadmium and its compounds	[S02974] Selenious acid, cadmium salt (1:1)	13814-59-0	
Cadmium and its compounds	[S02975] Selenic acid, cadmium salt (1:1)	13814-62-5	
Cadmium and its compounds	[S02976] Cadmium diricinoleate	13832-25-2	
Cadmium and its compounds	[S01674] Phosphoric acid, cadmium salt	13847-17-1	
Cadmium and its compounds	[S06655] Cadmium chloride (CdCl)	13966-86-4	
Cadmium and its compounds	[S02991] Cadmium molybdenum oxide (CdMoO4)	13972-68-4	
Cadmium and its compounds	[S02993] Sulfamic acid, cadmium salt (2:1)	14017-36-8	
Cadmium and its compounds	[S03003] Cadmium hydrogen phosphate	14067-62-0	
Cadmium and its compounds	[S03006] Cadmium succinate	141-00-4	
Cadmium and its compounds	[S06662] Cadmium iodide (CdI)	14184-47-5	
Cadmium and its compounds	[S04974] Cadmium bis(diethyldithiocarbamat)	14239-68-0	
Cadmium and its compounds	[S01283] Cadmium chromate	14312-00-6	
Cadmium and its compounds	[S01418] Cadmium dipotassium tetracyanide	14402-75-6	
Cadmium and its compounds	[S06668] Potassium trichlorocadmate	14429-85-7	
Cadmium and its compounds	[S03040] Cadmium fluoborate	14486-19-2	
Cadmium and its compounds	[S06674] Cadmium bromate	14518-94-6	
Cadmium and its compounds	[S03043] Phosphoric acid, ammonium cadmium salt (1:1:1)	14520-70-8	
Cadmium and its compounds	[S06675] Bis(dibutyldithiocarbamato-S,S')cadmium	14566-86-0	
Cadmium and its compounds	[S01483] Cadmium 2,4-pentanedionate	14689-45-3	
Cadmium and its compounds	[S06680] Tris(ethylenediamine)cadmium dihydroxide	14874-24-9	
Cadmium and its compounds	[S03068] Cadmium diicosanoate	14923-81-0	
Cadmium and its compounds	[S06684] Cadmium bis(piperidine-1-carbodithioate)	14949-59-8	
Cadmium and its compounds	[S06685] Bis(dimethyldithiocarbamato-S,S')cadmium	14949-60-1	
Cadmium and its compounds	[S06694] Cadmium sulfate hydrate	15244-35-6	
Cadmium and its compounds	[S06695] (OC-6-11)-Tetrapotassium hexachlorocadmate	15276-40-1	
Cadmium and its compounds	[S03093] Cadmium-barium laurate	15337-60-7	
Cadmium and its compounds	[S03106] Diphosphoric acid, cadmium salt (1:2)	15600-62-1	
Cadmium and its compounds	[S03112] Cadmium acrylate	15743-19-8	
Cadmium and its compounds	[S03128] Telluric acid (H2TeO3), cadmium salt (1:1)	15851-44-2	
Cadmium and its compounds	[S03131] Telluric acid (H2TeO4), cadmium salt (1:1)	15852-14-9	
Cadmium and its compounds	[S06720] Cadmium dilactate	16039-55-7	
Cadmium and its compounds	[S03141] Cadmium vanadium oxide (CdV2O6)	16056-72-7	
Cadmium and its compounds	[S06721] 5-oxo-L-proline, cadmium salt	16105-06-9	
Cadmium and its compounds	[S06726] Rubidium tribromocadmate	16593-57-0	
Cadmium and its compounds	[S03163] Cadmium propionate	16986-83-7	
Cadmium and its compounds	[S03166] Cadmium hexafluorosilicate(2-)	17010-21-8	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and chemical substances restricted by laws and regulations. Not all chemical substances are covered.

chemical substances restricted by laws and regulations. Not all chemical substances are covered.

<sup>-</sup> All possible efforts have been made to ensure the accuracy of CAS number and other information, but the accuracy of such details is not guaranteed.

<sup>-</sup> The [Sxxxxx (the x's being a 5 digit number)] on example substances are the Shindengen substance management codes.

All possible efforts have been made to ensure the accuracy of CAS number and other information, but the accuracy of such details is not guaranteed.

<sup>-</sup> The [Sxxxxx (the x's being a 5 digit number)] on example substances are the Shindengen substance management codes.

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Substance Group Name	Example Substances	CAS No.	Remarks
Cadmium and its compounds	[S06738] Undecanoic acid, cadmium salt	17329-48-5	
Cadmium and its compounds	[S06749] Ammonium trichlorocadmate	18532-52-0	
Cadmium and its compounds	[S06750] Rubidium trichlorocadmate	18532-58-6	
Cadmium and its compounds	[S06752] Bis(ethylenediamine)cadmium(2+) bis[dicyanoaurate(1-)]	18974-20-4	
Cadmium and its compounds	[S06753] Cadmium diphenolate	18991-05-4	
Cadmium and its compounds	[S06754] Cadmium bis(dipentyldithiocarbamate)	19010-65-2	
Cadmium and its compounds	[S06755] Cadmium disalicylate	19010-79-8	
Cadmium and its compounds	[S03211] Diphosphoric acid, cadmium salt	19262-93-2	
Cadmium and its compounds	[S03235] Dipotassium tetrachlorocadmate(2-)	20648-91-3	
Cadmium and its compounds	[S01862] Cadmium hydroxide	21041-95-2	
Cadmium and its compounds	[S06762] Cadmium, [29H,31H- phthalocyaninato(2-)kappa.N29,.kappa.N30,.kappa.N31,.kappa.N32]-, (SP-4-1)-	21328-74-5	
Cadmium and its compounds	[S06763] (T-4)-Disodium tetrachlorocadmate	21360-94-1	
Cadmium and its compounds	[S06773] Cadmium di(octanoate)	2191-10-8	
Cadmium and its compounds	[S03253] Cadmium stearate	2223-93-0	
Cadmium and its compounds	[S06776] Cadmium sulfate octahydrate	22465-18-5	
Cadmium and its compounds	[S06780] Cadmium Janace Securiyanace	22750-54-5	
Cadmium and its compounds	[S06782] Cadmium p-toluate	2420-97-5	
Cadmium and its compounds	[S06783] Cadmium p-toluate [S06783] Cadmium bis(2-ethylhexanoate)	2420-98-6	
Cadmium and its compounds	[S06787] Cadmium bis(2-etrymexanoate)	24345-60-6	
Cadmium and its compounds	[S06807] Cadmium Methacrylate	2605-44-9	
Cadmium and its compounds	[S06810] Cadmium epoxyoctadecanoate	26264-48-2	
Cadmium and its compounds	[S06819] Cadmium toluate	27476-27-3	
Cadmium and its compounds	[S06823] Sulfuric acid, cadmium sodium salt (2:1:2)	28038-18-8	
Cadmium and its compounds	[S06824] Sulfuric acid, cadmium potassium salt (2:1:2)	28038-25-7	
Cadmium and its compounds	[S06825] Sulfuric acid, cadmium cesium salt (2:1:2)	28041-77-2	
Cadmium and its compounds	[S06830] Potassium trichlorocadmate monohydrate	28302-54-7	
Cadmium and its compounds	[S06831] Cadmium didecanoate	2847-16-7	
Cadmium and its compounds	[S06844] Cadmium hydroxide hydrate	29736-89-8	
Cadmium and its compounds	[S03390] Cadmium mercury telluride ((Cd,Hg)Te)	29870-72-2	
Cadmium and its compounds	[S06847] [[N,N'-ethylenebis[glycinato]](2-)-N,N',O,O']cadmium	29977-13-7	
Cadmium and its compounds	[S06849] Cadmium bis[benzoate]	3026-22-0	
Cadmium and its compounds	[S06850] Cadmium isooctanoate	30304-32-6	
Cadmium and its compounds	[S06851] Disodium cadmium ethylenediamineacetate	30363-28-1	
Cadmium and its compounds	[S06852] Sulfuric acid, cadmium potassium salt (2:1:2), hexahydrate	30623-04-2	
Cadmium and its compounds	[S06855] Cadmium dodecylbenzenesulphonate	31017-44-4	
Cadmium and its compounds	[S09047] Sulfuric acid, cadmium salt (1:1)	31119-53-6	12th SVHC (Dec/17/2014)
Cadmium and its compounds	[S06857] Cadmium (1,1-dimethylethyl)benzoate	31215-94-8	
Cadmium and its compounds	[S06863] Ammonium triiodocadmate	32593-99-0	
Cadmium and its compounds	[S06870] Cadmium [R-(R*,R*)]-tartrate	34100-40-8	
Cadmium and its compounds	[S06872] Cadmium didocosanoate	34303-23-6	
Cadmium and its compounds	[S06873] Sulfuric acid, cadmium cesium salt (2:1:2), hexahydrate	34345-39-6	
Cadmium and its compounds	[S01715] Cadmium chloride monohydrate	35658-65-2	
Cadmium and its compounds	[S06883] Cadmium 3,5,5-trimethylhexanoate	36211-44-6	
Cadmium and its compounds	[S06886] Benzoic acid, 4-(1-methylethyl)-, cadmium salt	36931-18-7	
Cadmium and its compounds	[S03494] Diphosphoric acid, barium cadmium salt	37131-86-5	
Cadmium and its compounds	[S06901] Sulfuric acid, cadmium potassium salt (2:1:2), dihydrate	38386-25-3	
Cadmium and its compounds	[S06902] Cadmium(2+) (R)-12-hydroxyoctadecanoate	38517-19-0	
Cadmium and its compounds	[S06921] Cadmium 4-(1,1-dimethylethyl)benzoate	4167-05-9	
Cadmium and its compounds	[S06925] Cadmium cinnamate	4390-97-0	
Cadmium and its compounds	[S04973] cadmium(+2) cation diformate	4464-23-7	
		4476-04-4	
Cadmium and its compounds	[S06927] Cadmium sebacate	4476-04-4	
Cadmium and its compounds  Cadmium and its compounds	[S06932] Bis[N,N-bis(carboxymethyl)glycinato(3-)]tricadmium	50648-02-7	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

- Shindengen Electric Manufacturing Co., Ltd	Prohibited Substances in Products	page 4/68
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[S06936] Cadmium nonan-1-oate	5112-16-3	
[S03591] Boric acid, cadmium salt	51222-60-7	
[S01871] Cadmium carbonate	513-78-0	
[S06949] Cadmium o-toluate	52337-78-7	
[S01308] Cadmium cyanide	542-83-6	
[S01842] Cadmium acetate	543-90-8	
[S06986] Sodium trichlorocadmate	55425-74-6	
[S06990] Cadmium bis(4-cyclohexylbutyrate)	55700-14-6	
[S06994] Cadmium divalerate	56982-42-4	
[S01843] Cadmium acetate, dihydrate	5743-04-4	
[S04970] Cadmium sulfoselenide red	58339-34-7	
	592-02-9	
	61789-34-2	
dihydroxypropoxy)hydroxyphosphinyl]oxy]triethylmethylammoniumato]cadmium	0-1001-00-3	
[S07073] Bis(propane-1,2-diyldiamine-N,N')cadmium(2+) bis[bis(cyano-C)aurate(1-)]	67906-19-8	
[S07074] Cadmium dilinoleate	67939-62-2	
formaldehyde, cadmium chloride complexes	00441 33 4	
[S07091] Cadmium, benzoate p-tert-butylbenzoate complexes	68478-53-5	
[S07092] Pyrochlore, bismuth cadmium ruthenium	68479-13-0	
[S07093] Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper chloride-doped	68512-49-2	
[S07094] Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper and manganese-doped	68512-50-5	
[S07095] Cadmium sulfide (CdS), solid soln. with zinc sulfide, aluminum and copper- doped	68512-51-6	
[S07102] Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper and silver-doped	68583-43-7	
[S07103] Cadmium sulfide (CdS), solid soln. with zinc sulfide, nickel and silver-doped	68583-44-8	
[S07104] Cadmium sulfide (CdS), solid soln. with zinc sulfide, silver chloride-doped	68583-45-9	
[S07105] Cadmium sulfide (CdS), solid soln. with zinc sulfide, aluminum and silver-doped	68584-41-8	
[S07106] Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper and nickel-doped	68584-42-9	
[S07113] Cadmium sulfide (CdS), solid soln. with zinc sulfide, aluminum and cobalt and copper and silver-doped	68784-10-1	
[S07115] Barium cadmium calcium chloride fluoride phosphate, antimony and manganese-doped	68784-55-4	
[S07116] Cadmium borate oxide (Cd3(BO2)4O), manganese-doped	68784-58-7	
[S07122] Fatty acids, tall-oil, cadmium salts	68855-80-1	
[S07123] Fatty acids, C8-18 and C18-unsatd., cadmium salts	68876-84-6	
[S07124] Barium cadmium zinc sulfide (Ba2(Cd,Zn)S3), manganese-doped	68876-90-4	
[S07125] Cadmium sulfide (CdS), aluminum and copper-doped	68876-98-2	
	68877-00-9	
[S07138] Cadmium, laurate palmitate stearate complexes	68954-18-7	
	S006949  Cadmium o-toluate	S06949  Cadmium o-toluate

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- Shindengen Electric Manufacturing Co., Ltd	Prohibited Substances in Products	page 5/68
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Substance Group Name	Example Substances	CAS No.	Remarks
Cadmium and its compounds	[S07152] Cadmium, dross	69011-69-4	
Cadmium and its compounds	[S07153] Cadmium, sponge	69011-70-7	
Cadmium and its compounds	[S07154] Wastewater, cadmium sulfate electrolytic, acid	69012-21-1	
Cadmium and its compounds	[S07155] Flue dust, cadmium-refining	69012-57-3	
Cadmium and its compounds	[S07160] Calcines, cadmium residue	69029-63-6	
Cadmium and its compounds	[S07162] Leach residues, cadmium-refining	69029-70-5	
Cadmium and its compounds	[S07165] Residues, cadmium-refining	69029-77-2	
Cadmium and its compounds	[S07171] Slimes and Sludges, cadmium electrolytic	69029-89-6	
Cadmium and its compounds	[S07172] Slimes and Sludges, cadmium-refining, oxidized	69029-90-9	
Cadmium and its compounds	[S07173] Slimes and Sludges, cadmium sump tank	69029-91-0	
Cadmium and its compounds	[S07178] Cadmium(2+) 12-hydroxyoctadecanoate	69121-20-6	
Cadmium and its compounds	[S07180] Cadmium potassium 1-(hydroxyethylidene)bisphosphonate(1:2:1)	69190-99-4	
Cadmium and its compounds	[S07188] Fatty acids, C12-18, barium cadmium salts	70084-75-2	
Cadmium and its compounds	[S07195] Cadmium dianthranilate	7058-55-1	
Cadmium and its compounds	[S04029] Cadmium selenide sulfide (CdSe0.53S0.47)	71243-75-9	
Cadmium and its compounds	[S07205] (R)-12-hydroxyoleic acid, barium cadmium salt	71411-66-0	
Cadmium and its compounds	[S07206] (Z)-2-Butenedioic acid, monooctadecyl ester, cadmium salt	71599-06-9	
Cadmium and its compounds	[S07209] Tetra-mu-chlorodichlorobis[2-[[(2,3-	71861-27-3	
cuamium and its compounds	dihydroxypropoxy)hydroxyphosphinyl]oxy]triethylmethylammoniumato]tricadmium,	71001 27 3	
	stereoisomer		
Cadmium and its compounds	[S07210] Cadmium, dichlorotetrakis(1H-imidazolekappa.N3)-	72275-93-5	
Cadmium and its compounds	[S07212] Zircon, cadmium red	72828-62-7	
Cadmium and its compounds	[S07213] Cadmium zinc sulfide ((Cd,Zn)S), cobalt and copper-doped	72869-26-2	
Cadmium and its compounds	[S07214] Fatty acids, coco, cadmium salts	72869-63-7	
Cadmium and its compounds	[S07217] Zircon, cadmium yellow	72968-34-4	
Cadmium and its compounds	[\$00157] Cadmium	7440-43-9	9th SVHC
			(Jun/20/2013)
Cadmium and its compounds	[S07235] Cadmium ditricos-22-enoate	76835-97-7	
Cadmium and its compounds	[S07238] (OC-6-11)-Dimagnesium hexachlorocadmate dodecahydrate	77289-75-9	
Cadmium and its compounds	[S01805] Cadmium bromide	7789-42-6	
Cadmium and its compounds	[S01716] Cadmium chloride, hydrate(2:5)	7790-78-5	
Cadmium and its compounds	[S01539] Cadmium fluoride	7790-79-6	12th SVHC (Dec/17/2014)
Cadmium and its compounds	[S01655] Cadmium iodide	7790-80-9	
Cadmium and its compounds	[S04194] Cadmium iodate	7790-81-0	
Cadmium and its compounds	[S04195] Cadmium dinitrite	7790-83-2	
Cadmium and its compounds	[S01923] Cadmium sulfate(1:1)hydrate(3:8)	7790-84-3	
Cadmium and its compounds	[S04196] Cadmium tungsten oxide (CdWO4)	7790-85-4	
Cadmium and its compounds	[S07260] Cadmium perchlorate hydrate	79490-00-9	
Cadmium and its compounds	[S04972] Cadmium Zinc Sulfide Yellow	8048-07-5	
Cadmium and its compounds	[S01346] Cadmium oxalate	814-88-0	
Cadmium and its compounds	[S07276] Cadmium isononanoate	84696-56-0	
Cadmium and its compounds	[S07279] Cadmium isooctadecanoate	84878-36-4	
Cadmium and its compounds	[S07280] Cadmium tert-decanoate	84878-37-5	
Cadmium and its compounds	[S07281] Cadmium bis(nonylphenolate)	84878-48-8	
Cadmium and its compounds	[S07282] Cadmium bis(nonyiphenolate)	84878-51-3	
Cadmium and its compounds	[S07284] Flue dust, lead-manufg., cadmium-rich	85117-02-8	
Cadmium and its compounds	[S07284] Flue dust, lead-manuig., cadmium-rich	85117-02-8	
Cadmium and its compounds	[S07291] Fatty acids, C9-11-branched, cadmium salts	85586-15-8	
Cadmium and its compounds	[S07294] Bis(5-oxo-L-prolinato-N1,02)cadmium	85958-86-7	
Cadmium and its compounds	[S07295] Bis(5-oxo-DL-prolinato-N1,O2)cadmium	85994-31-6	
Cadmium and its compounds	[S01392] Cadmium thiocyanate	865-38-3	
Cadmium and its compounds	[S07297] Cadmium bis(2-propylpentanoate)	87835-30-1	
Cadmium and its compounds	[S07301] Cadmium acetate hydrate	89759-80-8	
Cadmium and its compounds	[S07304] Benzenesulfonic acid, mono-C10-13-alkyl derivs., cadmium salts	90194-35-7	
Cadmium and its compounds	[\$07305] Benzoic acid, cadmium salt, basic	90218-85-2	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

<ul> <li>Shindengen</li> </ul>	Electric	Manufact	uring Co.,	Ltd
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Substance Group Name	Example Substances	CAS No.	Remarks
admium and its compounds	[S07306] Decanoic acid, branched, cadmium salts	90342-19-1	
admium and its compounds	[S07307] Hexanoic acid, 2-ethyl-, cadmium salt, basic	90411-62-4	
dmium and its compounds	[S07308] Propanoic acid, cadmium salt, basic	90529-78-5	
dmium and its compounds	[S04971] Cadmium Zinc litophone Yellow	90604-89-0	
dmium and its compounds	[S04969] Cadmium Litophone Yellow	90604-90-3	
dmium and its compounds	[S07311] Leach residues, cadmium cake	91053-44-0	
dmium and its compounds	[S07312] Leach residues, zinc ore-calcine, cadmium-copper ppt.	91053-46-2	
idmium and its compounds	[S07320] Fatty acids, castor-oil, hydrogenated, cadmium salts	91697-35-7	
admium and its compounds	[S07325] Fatty acids, C8-10-branched, cadmium salts	92257-06-2	
admium and its compounds	[S07326] Leach residues, zinc refining flue dust, cadmium-thallium ppt.	92257-11-9	
admium and its compounds	[S07327] Fatty acids, C9-13-neo-, cadmium salts	92704-12-6	
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admium and its compounds	[S07328] Fatty acids, olive-oil, cadmium salts	92704-15-9 92704-19-3	
admium and its compounds	[S07329] Fatty acids, peanut-oil, cadmium salts		
admium and its compounds	[S07330] Fatty acids, rape-oil, cadmium salts	92704-24-0	
admium and its compounds	[S07332] Fatty acids, C14-18 and C18-unsatd., branched and linear, hydro cadmium salts	genated, 92797-28-9	
admium and its compounds	[S05010] Nonanoic acid, branched, cadmium salt	93686-40-9	
admium and its compounds	[S04420] Carbonic acid, cadmium salt	93820-02-1	
admium and its compounds	[S07341] Bis(2-ethylhexyl mercaptoacetato -O',S)cadmium	93858-50-5	
admium and its compounds	[S07342] Cadmium bis(o-nonylphenolate)	93894-07-6	
admium and its compounds	[S07343] Cadmium bis(p-nonylphenolate)	93894-08-7	
admium and its compounds	[S07344] Cadmium bis[p-(1,1,3,3-tetramethylbutyl)phenolate]	93894-09-8	
admium and its compounds	[S07345] Cadmium (Z)-hexadec-9-enoate	93894-10-1	
admium and its compounds	[S07346] Cadmium isodecanoate	93965-24-3	
admium and its compounds	[S07347] Cadmium bis(isoundecanoate)	93965-30-1	
admium and its compounds	[S07348] Cadmium dimethylhexanoate	93983-65-4	
admium and its compounds	[S07352] Cadmium tetrapentyl bis(phosphate)	94232-49-2	
admium and its compounds	[S07355] Cadmium isooctyl phthalate (1:2:2)	94247-16-2	
admium and its compounds	[S07356] Cadmium (1-ethylhexyl) phthalate (1:2:2)	94275-93-1	
admium and its compounds	[S07357] Cadmium octyl phthalate (1:2:2)	94275-94-2	
admium and its compounds	[S07362] Leach residues, cadmium-contg. flue dust	94551-70-9	
admium and its compounds	[S07372] Cadmium diisohexadecanoate	95892-12-9	
admium and its compounds	[S07374] Cadmium diisobutyl dimaleate	97259-82-0	
admium and its compounds	[S07396] Zircon, cadmium orange	99749-34-5	
			4th SVHC
	[S06170] Acids generated from chromium trioxide and their oligomers	-	4th SVHC (Dec/15/2010), JAMP-SN0071
	[S02217] Other hexavalent chromium compounds	-	
exavalent chromium compounds	[S06173] Dilithium dichromate (Li2Cr2O7) dihydrate	10022-48-7	
exavalent chromium compounds	[S07719] Disodium chromate tetrahydrate	10034-82-9	
exavalent chromium compounds	[S02561] Nitric acid, copper(2+) salt, reaction products with ammonia, chi (H2CrO4) diammonium salt and manganese(2+) dinitrate, kilned	romic acid 100402-65-1	
exavalent chromium compounds	[S01284] Calcium chromate dihydrate	10060-08-9	
exavalent chromium compounds	[S02594] Chromium cobalt iron oxide	102262-19-1	
exavalent chromium compounds	[S02595] Chromium cobalt copper iron manganese oxide	102262-21-5	
exavalent chromium compounds	[S02596] Chromium cobalt iron manganese oxide	102262-22-6	
exavalent chromium compounds	[S02215] Barium chromate	10294-40-3	
exavalent chromium compounds	[S02218] Sodium dichromate; Disodium heptaoxidodichromate	10588-01-9	1st SVHC (Oct/28/2008)
exavalent chromium compounds	[S02638] Zinc potassium chromate	11103-86-9	
exavalent chromium compounds	[S04994] Dihydroxy-dioxo-chromium; Chromic acid (H2CrO4); Chromic(VI	acid 11115-74-5	
		119801-45-5	
exavalent chromium compounds			
exavalent chromium compounds	[502707] Chromium nickel oxide (Cr2NiO4); Dichromium nickel tetraoxide [502708] Dichromium zinc tetraoxide		

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Substance Group Name	Example Substances	CAS No.	Remarks
exavalent chromium compounds	[S05018] Dipotassium heptadecaoxotetrazincatetetrachromate(2-)	12433-50-0	
exavalent chromium compounds	[S02852] C.I. Pigment Red 104; Molybdate orange (Lead chromate pigme	nt) 12656-85-8	2nd SVHC (Jan/13/2010)
exavalent chromium compounds	[S06542] Chromium lead oxide (Cr2PbO4)	128976-28-3	
exavalent chromium compounds	[S02900] Chromic acid (H2CrO4), zinc salt (1:1)	1328-67-2	
exavalent chromium compounds	[S02266] Chromium trioxide	1333-82-0	4th SVHC (Dec/15/2010)
exavalent chromium compounds	[S02914] Magnesium chromate; Chromic acid (H2CrO4), magnesium salt	(1:1) 13423-61-5	
exavalent chromium compounds	[S02916] C.I. Pigment Orange 21; Basic lead chromate orange	1344-38-3	
exavalent chromium compounds		13444-75-2	
exavalent chromium compounds	[S06584] Rubidium chromate	13446-72-5	
exavalent chromium compounds	[S06585] Dirubidium dichromate	13446-73-6	
exavalent chromium compounds	[S02922] Dithallium dichromate	13453-35-5	
exavalent chromium compounds	[S02927] Dicesium chromate	13454-78-9	
exavalent chromium compounds	[S01285] Cobalt chromate	13455-25-9	
exavalent chromium compounds	[S02937] Dithallium chromate	13473-75-1	
exavalent chromium compounds	[S06604] Disodium chromate decahydrate	13517-17-4	
exavalent chromium compounds		13530-65-9	
exavalent chromium compounds		13530-67-1	
exavalent chromium compounds	[S02947] Chromic acid (H2Cr2O7); Dihydrogen(heptaoxidodichromate)	13530-68-2	4th SVHC (Dec/15/2010), JAMP-SN0071
exavalent chromium compounds	[S02948] Copper chromate	13548-42-0	
exavalent chromium compounds	[S02960] Copper dichromate	13675-47-3	
exavalent chromium compounds	[S02278] Calcium chromate	13765-19-0	
exavalent chromium compounds	[S06646] Chromium hexafluoride	13843-28-2	
exavalent chromium compounds	[S06647] Lithium dichromate	13843-81-7	
exavalent chromium compounds	[S02995] Zinc dichromate	14018-95-2	
exavalent chromium compounds	[S03007] Magnesium dichromate	14104-85-9	
exavalent chromium compounds	[S06665] Calcium dichromate	14307-33-6	
exavalent chromium compounds	[S03030] Lithium chromate	14307-35-8	
exavalent chromium compounds	[S01283] Cadmium chromate	14312-00-6	
exavalent chromium compounds	[S03036] Chromic acid, ammonium salt	14445-91-1	
exavalent chromium compounds	[S06673] Iron chromate (FeCrO4)	14507-18-7	
exavalent chromium compounds	[S03057] Nickel chromate; Chromic acid nickel(II) salt	14721-18-7	
exavalent chromium compounds	[S01899] Chromium oxychloride; Chromyl dichloride	14977-61-8	
exavalent chromium compounds	[S03074] Chromium (VI) chloride	14986-48-2	
exavalent chromium compounds	[S03104] Nickel dichromate; Chromic acid (H2Cr2O7), nickel(2+) salt (1:1)	15586-38-6	
exavalent chromium compounds	[S03136] Zinc chromate oxide (Zn2(CrO4)O), hydrate (1:1)	15930-94-6	
exavalent chromium compounds	[S03138] Potassium chlorotrioxochromate	16037-50-6	
exavalent chromium compounds	[S03156] Chromic acid (H2CrO4), lanthanum(3+) salt (3:2)	16565-94-9	
exavalent chromium compounds	[S07721] Magnesium chromate pentahydrate	16569-85-0	
exavalent chromium compounds	[S06724] Chromic acid, lanthanum(3+) salt (3:2), heptahydrate	16569-86-1	
exavalent chromium compounds	[S06725] Chromic acid (H2CrO4), neodymium(3+) salt (3:2), heptahydrate	16569-87-2	
exavalent chromium compounds	[S03188] Lead chromate oxide; Dilead chromate oxide	18454-12-1	
exavalent chromium compounds	[S02219] Chromium(6+)	18540-29-9	
exavalent chromium compounds	[S07722] Pyridinium dichromate	20039-37-6	
exavalent chromium compounds	[S03293] Dichromium(III) tris(chromate); Chromium(III) chromate	24613-89-6	6th SVHC (Dec/19/2011), Authorisation Lis
exavalent chromium compounds	[S03341] Chromic acid, barium potassium salt	27133-66-0	
exavalent chromium compounds	[S06875] Magnesium dichromate (MgCr2O7) hexahydrate	34448-20-9	
exavalent chromium compounds	[S06885] Chromic acid (H2CrO4), lanthanum (3+) salt (3:2), octahydrate	36563-89-0	
exavalent chromium compounds	[S06892] Dibismuth dichromium nonaoxide	37235-82-8	
exavalent chromium compounds	[S03499] C.I. Pigment Yellow 36	37300-23-5	
		te 39400-35-6	

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Prohibited Substances in Products

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Substance Group Name	Example Substances	CAS No.	Remarks
Hexavalent chromium compounds	[S03533] Chromic acid, potassium zinc salt	41189-36-0	
	[S05012] Pentazinc(II) chromate octahydroxide	49663-84-5	6th SVHC (Dec/19/2011), Authorisation Lis
Hexavalent chromium compounds	[S06931] Chromic acid (H2CrO4), neodymium(3+) salt (3:2), dihydrate	50316-88-6	
Hexavalent chromium compounds	[S06935] Chromium zinc oxide	50922-29-7	
Hexavalent chromium compounds	[S06960] Chromic acid (H2CrO4), praceodymium(3+) salt (3:2)	53206-40-9	
Hexavalent chromium compounds	[S06961] Chromic acid (H2CrO4), praceodymium(3+) salt (3:2), heptahydrate	53206-41-0	
Hexavalent chromium compounds	[S06971] Chrome Yellow G	53795-87-2	
Hexavalent chromium compounds	[S07723] Tetrabutylammonium, salt with chromic acid (2:1)	56660-19-6	
dexavalent chromium compounds	[S07040] Dipotassium zinc bis(chromate)	63020-43-9	
Hexavalent chromium compounds	[S03930] Chromium hydroxide oxide silicate	68475-49-0	
Hexavalent chromium compounds	[S04982] Chrome niobium titanium buff rutile; C.I. Pigment Yellow 162	68611-42-7	
Hexavalent chromium compounds	[S04171] Chromic acid; Dihydrogen(tetraoxidochromate)	7738-94-5	4th SVHC (Dec/15/2010), JAMP-SN0071
Hexavalent chromium compounds	[S07239] Chromium titanium oxide	77537-22-5	
dexavalent chromium compounds	[S02364] Lead(II) chromate; Lead(II) tetraoxidochromate	7758-97-6	2nd SVHC (Jan/13/2010)
Hexavalent chromium compounds	[S02214] Disodium tetraoxidochromate; Sodium chromate	7775-11-3	3rd SVHC (Jun/18/2010)
lexavalent chromium compounds	[S02366] Dipotassium heptaoxidodichromate; Potassium dichromate	7778-50-9	3rd SVHC (Jun/18/2010)
Hexavalent chromium compounds	[S01286] Silver chromate	7784-01-2	
Hexavalent chromium compounds	[S01881] Silver dichromate	7784-02-3	
Hexavalent chromium compounds	[S01282] Ammonium chromate	7788-98-9	
Hexavalent chromium compounds	[S02372] Dipotassium tetraoxidochromate; Potassium chromate	7789-00-6	3rd SVHC (Jun/18/2010)
Hexavalent chromium compounds	[S02213] Strontium chromate	7789-06-2	5th SVHC (Jun/20/2011)
Hexavalent chromium compounds	[S01879] Ammonium dichromate; Diammonium heptaoxidodichromate	7789-09-5	3rd SVHC (Jun/18/2010)
Hexavalent chromium compounds	[S01880] Sodium dichromate dihydrate(VI); Disodium heptaoxidodichromate dihydrate	7789-12-0	1st SVHC (Oct/28/2008)
Hexavalent chromium compounds	[S07256] Calcium dichromate (CaCr2O7) trihydrate	7789-73-3	
Hexavalent chromium compounds	[S04501] Nitric acid, barium salt, reaction products with ammonia, chromic acid (H2CrO4) diammonium salt and copper(2+) dinitrate, calcined	99328-50-4	
Lead and its compounds	[S02074] Borosilicate lead glass, unspecified	-	
Lead and its compounds	[S02072] Ceramics (lead titanate,PT)	-	
Lead and its compounds	[S02071] Ceramics (lead zirconium titanate,PZT)	-	
Lead and its compounds	[S05160] Lead alkyls	-	
Lead and its compounds	[S02073] Other lead compounds	-	
Lead and its compounds	[S02409] Tetraalkyl lead	-	
Lead and its compounds	[S02555] Lead arsenite	10031-13-7	
Lead and its compounds	[S01819] Lead bromide	10031-22-8	
Lead and its compounds	[S02562] Silicic acid (H2sio3), calcium salt (1:1), lead and manganese-doped	100402-96-8	
Lead and its compounds	[S02565] Lead, dross, vanadium-zinc-containing	100656-49-3	
Lead and its compounds	[S06181] Matte, copper-lead, tellurium-contg.	100656-53-9	
Lead and its compounds	[S06182] Flue dust, copper-lead blast furnace, cadmium-indium-enriched	100656-55-1	
Lead and its compounds	[S01836] Lead nitrate	10099-74-8	8th SVHC (Dec/19/2012)
Lead and its compounds	[S02567] Silicic acid (H2SiO3), lead(2+) salt (1:1)	10099-76-0	
Lead and its compounds	[S02568] Lead vanadate	10099-79-3	
Lead and its compounds	[S02569] Lead, isodecanoate naphthenate complexes, basic	101012-92-4	
Lead and its compounds	[S02570] Lead, isooctanoate neodecanoate complexes	101013-06-3	
Lead and its compounds	[S01666] Lead iodide	10101-63-0	
Lead and its compounds	[S02575] Lead arsenate (Pb3(AsO4)2)	10102-48-4	
Lead and its compounds	[S01653] Lead molybdate	10190-55-3	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and chemical substances restricted by laws and regulations. Not all chemical substances are covered.

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	Shindengen Electric Manufacturing Co., Ltd	Prohibited Substances in Products	page 9/68
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Substance Group Name	Example Substances	CAS No.	Remarks
ead and its compounds	[S06192] Phosphoric acid, calcium salt (1:1), solid soln. with calcium chloride, calcium fluoride, calcium oxide, phosphorus oxide (P205) and strontium oxide, lead and manganese-doped	102047-25-6	
ead and its compounds	[S06193] Barium oxide (BaO), solid soln. with calcium oxide, strontium oxide and tungsten oxide (WO3), lead-doped	102110-24-7	
ead and its compounds	[S06194] Boric acid (H3BO3), solid soln. with barium oxide, calcium oxide and strontium oxide, lead and manganese-doped	102110-26-9	
ead and its compounds	[S02592] Silicic acid, calcium salt, lead and manganese-doped	102110-36-1	
ead and its compounds	[S06200] Lead ores, concs., leached	102110-48-5	
ead and its compounds	[S02593] Residues, copper-iron-lead-nickel matte, sulfuric acid-insol.	102110-49-6	
ead and its compounds	[S06201] Slimes and Sludges, battery scrap, antimony- and lead-rich	102110-60-1	
ead and its compounds	[S06202] Slimes and Sludges, copper conc. roasting off gas scrubbing, lead-mercury- selenium-contg.	102110-61-2	
ead and its compounds	[S06203] Slimes and Sludges, copper-lead ore roasting off gas scrubbing, arsenic-contg.	102110-62-3	
ead and its compounds	[S01635] Lead(II)metaborate	10214-39-8	
ead and its compounds	[S06206] Lead dichlorate	10294-47-0	
ead and its compounds	[S01618] Lead hypophosphite	10294-58-3	
ad and its compounds	[S06207] Lead bis(2-hydroxy-1-propanesulfonate)	103427-19-6	
ad and its compounds	[S06218] Lead fluoride (PbF2.01)	106496-45-1	
ead and its compounds	[S02620] Plumbane, chlorotriethyl-	1067-14-7	
ead and its compounds	[S02624] Lead methacrylate	1068-61-7	
ead and its compounds	[S02070] Lead(II) distearate; Lead stearate	1072-35-1	
ad and its compounds	[S06239] Lead molybdenum oxide (Pb0.51Mo0.4901.98)	108424-14-2	
ad and its compounds	[S06240] Lead molybdenum oxide (Pb0.49-0.51Mo0.49-0.51O1.98-2.02)	108424-15-3	
ad and its compounds	[S06241] Lead molybdenum oxide (Pb0.49Mo0.5102.02)	108424-16-4	
ad and its compounds	[S02632] Diamyldithiocarbamate, lead	109707-90-6	
ad and its compounds	[S02641] Lead chromate silicate	11113-70-5	
ad and its compounds	[S02644] Dibismuth dilead tetraruthenium tridecaoxide	11116-83-9	
ead and its compounds	[S02645] Chromium lead oxide	11119-70-3	
ead and its compounds	[S02646] Silicic acid, lead salt	11120-22-2	8th SVHC (Dec/19/2012)
ead and its compounds	[S02661] Lead oleate	1120-46-3	
ead and its compounds	[S06297] 2-Hydroxy-1-propanesulfonic acid, lead salt (1:?)	114601-64-8	
ead and its compounds	[S06303] Cyclotetrasiloxane-2,2,4,4,6,6,8,8-octol, lead(2+) salt (1:2)	114830-97-6	
ead and its compounds	[S02663] Chlorotriphenylplumbane	1153-06-6	
ead and its compounds	[S02664] Acetoxytriphenylplumbane	1162-06-7	
ad and its compounds	[S02665] Lead sulfomolybdochromate, silica encapsulated	116565-73-2	
ead and its compounds	[S02666] Chromium lead oxide sulfate, silica-modified	116565-74-3	
ead and its compounds	[S06316] Lead silicon oxide (Pb0.18Si0.82O1.82)	116666-25-2	
ead and its compounds	[S02670] Lead succinate	1191-18-0	
ead and its compounds	[S06356] Chromium lead oxide (Cr2Pb4O7)	119801-45-5	
ead and its compounds	[S02691] Plumbate (PbO44-), calcium (1:2), (T-4)-	12013-69-3	
ad and its compounds	[S02706] Dilead chromate dihydroxide	12017-86-6	
ead and its compounds	[S02710] Iron lead oxide (Fe12Pb019)	12023-90-4	
ead and its compounds	[S02712] Hafnium lead trioxide	12029-23-1	
ead and its compounds	[S02714] Plumbate (Pb022-), disodium	12034-30-9	
ead and its compounds	[S02716] Lead neobate	12034-88-7	
ead and its compounds	[S02722] Lead tin oxide (PbSnO3)	12036-31-6	
ead and its compounds	[S02723] Lead oxide sulfate (Pb2O(SO4)); Dilead oxide sulfate	12036-76-9	8th SVHC (Dec/19/2012)
ead and its compounds	[S02740] Bismuth, compound with lead (1:1)	12048-28-1	, ., . ==,
ead and its compounds	[S02749] Lead oxide (Pb2O)	12059-89-1	
ead and its compounds	[S02239] Lead(II) titanate; Lead titanium trioxide	12060-00-3	8th SVHC (Dec/19/2012)
ead and its compounds	[S02750] Lead zirconate	12060-01-4	,, .,/

A list of examples of chemical substances which have been used electrical and electronic equipment and

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Substance Group Name **Example Substances** CAS No. Remarks Lead and its compounds [S02752] Lead oxide sulfate (Pb5O4(SO4)); Pentalead tetraoxide sulfate 12065-90-6 8th SVHC (Dec/19/2012) Lead and its compounds [S02240] Lead selenide 12069-00-0 Lead and its compounds [S06434] Lead oxide (PbO1-2) 121054-00-0 Lead and its compounds [S06435] Lead molybdenum oxide (PbMo508) 121072-42-2 [S06437] Lead sulfide (Pb(SH)2) Lead and its compounds 12135-36-3 12137-74-5 Lead and its compounds [S02760] Lead disulphide Lead and its compounds [S06439] Plumbate (PbO32-), calcium (1:1) 12138-48-6 Lead and its compounds [S02763] Lead oxide phosphonate (Pb3O2(HPO3)); Trilead dioxide phosphonate 12141-20-7 8th SVHC (Dec/19/2012) [S02077] Tetralead trioxide sulphate 12202-17-4 8th SVHC Lead and its compounds (Dec/19/2012) 12205-72-0 Lead and its compounds [S02776] Lead chloride oxide Lead and its compounds [S06448] Plumbate (PbO42-), calcium (1:1), (T-4)-12213-74-0 Lead and its compounds [S06449] Lead oxide (PbO3) 12214-45-8 122162-56-5 Lead and its compounds [S06450] Lead oxide (PbO1.62) Lead and its compounds [S02783] Phenol, tetrapropylene-, lead(2+) salt 122332-23-4 Lead and its compounds [S02798] Lead antimonide 12266-38-5 Lead and its compounds [S02800] Lead hydroxide nitrate 12268-84-7 Lead and its compounds [S02802] 1,3,5,7,9-Pentaoxa-2.lambda.2,4.lambda.2,6.lambda.2,8.lambda.2-12275-07-9 tetraplumbacyclotridec-11-ene-10,13-dione, (Z)-Lead and its compounds [S06484] Lead molybdenum oxide (Pb0.05Mo0.3100.64) 123517-46-4 Lead and its compounds [S06485] 1,3,5,2,4,6-Trioxatriplumbin-2,4,6-triylidene 12359-22-7 12372-45-1 Lead and its compounds [S02810] Potassium pentadecaoxodiplumbatepentaniobate(1-) Lead and its compounds [S02814] Lead sulfate, tribasic 12397-06-7 Lead and its compounds [S02816] Lead, dihydroxy[2,4,6-trinitro-1,3-benzenediolato(2-)]di-12403-82-6 12435-47-1 Lead and its compounds [S02823] Lead germanate Lead and its compounds [S06502] Silicic acid (H4SiO4), lead(2+) salt (2:3) 124826-86-4 Lead and its compounds [S02832] Fatty acids, C4- 20-branched, lead salts 125328-49-6 125454-11-7 Lead and its compounds [S06505] 1,3,2,4-Dioxadiplumbetane, 2,4-dioxide Lead and its compounds [S02839] Lead, C9- 28-neocarboxylate 2-ethylhexanoate complexes, basic 125494-56-6 Lead and its compounds [S02840] Lead. bis(octadecanoato)dioxotri-12565-18-3 Lead and its compounds [S02841] Lead, bis(octadecanoato)dioxotri-12578-12-0 8th SVHC (Dec/19/2012) 12608-25-2 Lead and its compounds [S02843] Basic lead sulfite Lead and its compounds [S02845] Lead chloride (V.A.N.) 12612-47-4 Lead and its compounds [S01354] Lead titanium zirconium trioxide; Lead zirconium titanate 12626-81-2 8th SVHC (Dec/19/2012) Lead and its compounds [S02852] C.I. Pigment Red 104; Molybdate orange (Lead chromate pigment) 12656-85-8 2nd SVHC (Jan/13/2010) Lead and its compounds [S06524] Boric acid, lead salt 12676-62-9 12684-19-4 Lead and its compounds [S06525] Lead iodide Lead and its compounds [S06526] Benzenesulfonic acid, 2-hydroxy-, lead(2+) salt (2:1) 126857-68-9 Lead and its compounds [S02858] Lead silicate sulfate 12687-78-4 Lead and its compounds [S02863] Lead tungsten oxide 12737-98-3 Lead and its compounds [S02864] Lead oxide sulfate 12765-51-4 Lead and its compounds [S06533] Calcium lead oxide 12774-29-7 Lead and its compounds 128226-81-3 [S06539] Lead oxalate trihydrate Lead and its compounds [S06542] Chromium lead oxide (Cr2PbO4) 128976-28-3 Lead and its compounds [S06554] Hexanoic acid. 3.5-dimethyl-, lead(2+) salt 130596-72-4 [S06555] Lead oxide (PbO1.37) 130680-19-2 Lead and its compounds Lead and its compounds [S02877] Lead(2+) (R)-12-hydroxyoleate 13094-04-7 Lead and its compounds [S02251] Lead dioxide 1309-60-0 Lead and its compounds [S01596] Lead hexafluorosilicate 1310-03-8 Lead and its compounds [S06556] Lead hydroxide oxide (Pb2(OH)2O) 1311-11-1 [S02078] Lead(II,IV) oxide 1314-27-8 Lead and its compounds

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- Shindengen Electric Manufacturing Co., Ltd	Prohibited Substances in Products	page 11/68
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Substance Group Name	Example Substances	CAS No.	Remarks
ead and its compounds	[S02255] Orange lead (lead tetroxide)	1314-41-6	8th SVHC (Dec/19/2012)
ead and its compounds	[S02080] Lead(II) sulfide	1314-87-0	
ead and its compounds	[S01447] Lead telluride	1314-91-6	
ead and its compounds	[S02259] Lead(II) oxide	1317-36-8	8th SVHC (Dec/19/2012)
ead and its compounds	[S02260] Trilead bis(carbonate) dihydroxide	1319-46-6	8th SVHC (Dec/19/2012)
ead and its compounds	[S06560] Lead oxide (PbO1.01-1.99)	132003-12-4	
ead and its compounds	[S02898] Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 2',4',5',7'-tetrabromo-3',6'-dihydroxy-, lead salt	1326-05-2	
ead and its compounds	[S06569] Lead oxide (PbO1.57)	133315-99-8	
ead and its compounds	[S02908] Lead oxide	1335-25-7	
ead and its compounds	[S02909] Lead subacetate	1335-32-6	
ead and its compounds	[S06581] 1-Hydroxy-2-propanesulfonic acid, lead salt (1:?)	133988-90-6	
ead and its compounds	[S02912] Lead(2+) 2,4-dinitroresorcinolate	13406-89-8	
ead and its compounds	[S01262] Lead azide	13424-46-9	6th SVHC (Dec/19/2011)
ead and its compounds	[S06582] Lead carbonate	13427-42-4	
ead and its compounds	[S02271] Lead hydroxidcarbonate	1344-36-1	
ead and its compounds	[S02915] C.I. Pigment Tellow 34; Chrome yellow (Lead chromate pigment)	1344-37-2	2nd SVHC (Jan/13/2010)
ead and its compounds	[S02916] C.I. Pigment Orange 21; Basic lead chromate orange	1344-38-3	
ead and its compounds	[S01619] Lead phosphite dibasic	1344-40-7	
ead and its compounds	[S06588] Lead dichlorite	13453-57-1	
ead and its compounds	[S01757] Lead(II)perchlorate trihydrate	13453-62-8	
ead and its compounds	[S02925] Phosphonic acid, lead(2+) salt (1:1)	13453-65-1	
ead and its compounds	[S02926] Lead pyrophosphate	13453-66-2	
ead and its compounds	[S08795] Plumbane, tetrachloro- (9CI)	13463-30-4	
ead and its compounds	[S02943] Lead thiosulfate	13478-50-7	
ead and its compounds	[S02946] Lead antimonate	13510-89-9	
ead and its compounds	[S06602] Lead hydrogenarsenate	13510-91-3	
ead and its compounds	[S06603] Lead dichlorate monohydrate	13510-96-8	
ead and its compounds	[S02949] Lead silicate	13566-17-1	
ead and its compounds	[S06613] Lead molybdenum oxide (Pb3Mo16O24)	135849-93-3	
ead and its compounds	[S01756] Lead perchlorate	13637-76-8	
ead and its compounds	[S02961] 2-Butenedioic acid (E)-, lead salt	13698-55-0	
ead and its compounds	[S06632] Tetrabromolead	13701-91-2	
ead and its compounds	[S06635] Diboric acid, lead(2+) salt (1:2)	13703-85-0	
ead and its compounds	[S02970] Lead disulphamidate	13767-78-7	
ead and its compounds	[S06642] Lead iodide (PbI)	13779-93-6	
ead and its compounds	[S01436] Lead bis(tetrafluoroborate); Lead fluoborate	13814-96-5	8th SVHC (Dec/19/2012)
ead and its compounds	[S01038] Nitrous acid, lead(II) salt	13826-65-8	
ead and its compounds	[S02978] Lead tellurite	13845-35-7	
ead and its compounds	[S06653] Lead chloride (PbCI)	13931-84-5	
ead and its compounds	[S03008] Lead, isotope of mass 205; Lead-205	14119-28-9	
ead and its compounds	[S03009] Lead 209	14119-30-3	
ead and its compounds	[S03025] Lead, isotope of mass 210; Lead-210	14255-04-0	
ead and its compounds	[S03038] 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, lead salt	14450-60-3	
ead and its compounds	[S03039] Lead acrylate	14466-01-4	
	[S06677] Lead molybdenum oxide (Pb2MoO5)	14648-48-7	
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ead and its compounds		14687-25-3	
ead and its compounds	[S03056] Lead 203	14687-25-3 14720-53-7	
ead and its compounds ead and its compounds ead and its compounds	[S03056] Lead 203 [S01636] Lead borate	14720-53-7	
ead and its compounds	[S03056] Lead 203		

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Prohibited Substances in Products

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Substance Group Name	Example Substances	CAS No.	Remarks
ead and its compounds	[S03079] Lead 212	15092-94-1	
ead and its compounds	[S03083] Lead, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, (SP-4-1)-	15187-16-3	
ead and its compounds	[S03087] Chlorotrimethylplumbane	1520-78-1	
ead and its compounds	[S03089] 1,3-Benzenediol, 2,4,6-trinitro-, lead salt	15245-44-0	
ead and its compounds	[S01487] Bis(pentane-2,4-dionato-O,O')lead; Lead(II)2,4-pentanedionate	15282-88-9	(Dec/19/2011)
ead and its compounds	[S03091] Lauric acid, lead salt	15306-30-6	
ead and its compounds	[S03094] 9-Octadecenoic acid (Z)-, lead salt	15347-55-4	
ead and its compounds	[503095] Lead acetate	15347-53-4	
ead and its compounds	[S06699] 4-Methylbenzoic acid, lead(4+) salt (4:1)	15516-84-4	
ead and its compounds	[503100] Phosphonic acid, lead(4+) salt (4.1)	15521-60-5	
ead and its compounds	[S06700] Lead bromide (PbBr)	15576-47-3	
ead and its compounds	[S03110] Octanoic acid, lead salt	15696-43-2	
ead and its compounds	[S02081] Lead sulfate, sulphuric acid, lead salt	15739-80-7	
ead and its compounds	[S03113] Lead, bis(2-hydroxybenzoato-O1,O2)-, (T-4)-	15748-73-9	
ead and its compounds	[S03114] Lead, isotope of mass 202; Lead-202	15752-86-0	
ead and its compounds	[S03114] Lead, ISOtope of mass 202, Lead-202	15773-52-1	
ead and its compounds	[S03116] Lead dihexanoate	15773-53-2	
ead and its compounds	[S03117] Dodecanoic acid, lead(2+) salt	15773-55-4	
ead and its compounds	[S03118] Lead dipalmitate	15773-56-5 15816-77-0	
ead and its compounds	[S03122] Lead 211	15816-77-0	
ead and its compounds	[S06710] Oxalic acid, lead salt (1:?)		
ead and its compounds	[S03127] Phosphoric acid, lead(2+) salt (1:1)	15845-52-0	
ead and its compounds	[S03129] Telluric acid (H2TeO3), lead(2+) salt (1:1)	15851-47-5	
ead and its compounds	[S03134] Silicic acid (H4SiO4), lead salt	15906-71-5	
ead and its compounds	[S03135] Lead benzoate	15907-04-7	
ead and its compounds	[S03139] Phosphonic acid, lead salt	16038-76-9	
ead and its compounds	[S03145] Lead phthalate	16183-12-3	
ead and its compounds	[S03153] Diantimony lead tetroxide	16450-50-3	
ead and its compounds	[S03158] Lead 200	16645-99-1	
ead and its compounds	[S03159] Lead 198	16646-00-7	
ead and its compounds	[S03164] Lead 2-ethylhexoate	16996-40-0	
ead and its compounds	[S03165] Lead linoleate	16996-51-3	
ead and its compounds	[S03171] Lead 201	17239-87-1	
ead and its compounds	[S06737] Carbamodithioic acid, cyclohexylethyl-, lead salt	172777-22-9	
ead and its compounds	[S03172] Lead(II) maleate	17406-54-1	
ead and its compounds	[S03174] Bis(diethyldithiocarbamato-S,S')lead	17549-30-3	
ead and its compounds	[S03175] Methanesulfonic acid, lead(2+) salt	17570-76-2	7th SVHC (Jun/18/2012)
ead and its compounds	[S03176] Plumbane, ethyltrimethyl-	1762-26-1	. ,
ead and its compounds	[S03177] Plumbane, diethyldimethyl-	1762-27-2	
ead and its compounds	[S03178] Plumbane, triethylmethyl-	1762-28-3	
ead and its compounds	[S03182] Lead, [.mu[1,2-benzenedicarboxylato(2-)-O1:O2]]dimuoxotri-, cyclo-	17976-43-1	
ead and its compounds	[S03188] Lead chromate oxide; Dilead chromate oxide	18454-12-1	
ead and its compounds	[S03189] 1,2-Benzenedicarboxylic acid, lead(2+) salt	18608-34-9	
ead and its compounds	[S03198] Lead dilactate	18917-82-3	
ead and its compounds	[S03203] Lead dimethyldithiocarbamate	19010-66-3	
ead and its compounds	[S03207] Lead maleate	19136-34-6	
ead and its compounds	[S03209] Plumbane, tetrabutyl-	1920-90-7	
ead and its compounds	[S03217] Lead palmitate	19528-55-3	
ead and its compounds	[\$03218] 7,11-Metheno-11H,13H-tetrazolo[1,5- c][1,7,3,5,2,6]dioxadiazadiplumbacyclododecine, 5,5,13,13-tetradehydro-4,5-dihydro- 4,8,10,15-tetranitro-	19651-80-0	
ead and its compounds	[S01867] Lead hydroxide	19783-14-3	
ead and its compounds	[S03222] Phosphorodithioate O,O-bis(1,3-dimethylbutyl), lead salt	20383-42-0	
ead and its compounds	[S03224] Lead myristate	20403-41-2	

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- Shindengen Electric Manufacturing Co., Ltd	Prohibited Substances in Products	page 13/68
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Similaringen Electric Manara		74411003 11111044003	page 13/00
Substance Group Name	Example Substances	CAS No.	Remarks
Lead and its compounds	[S03225] Decanoic acid, lead salt	20403-42-3	
Lead and its compounds	[S06758] Phenol, lead(2+) salt (2:1)	20534-94-5	
Lead and its compounds	[S01304] Lead cyanamide	20837-86-9	8th SVHC (Dec/19/2012)
Lead and its compounds	[S03237] Lead cyanamidate	20890-10-2	
Lead and its compounds	[S03238] Lead 2,4-dihydroxybenzoate	20936-32-7	
Lead and its compounds	[S03242] Diphenyllead dichloride	2117-69-3	
Lead and its compounds	[S06760] Heptanoic acid, lead salt	21180-26-7	
Lead and its compounds	[S06775] Disilicic acid, lead(2+) salt (1:3)	22438-69-3	
Lead and its compounds	[S03261] Lead silicate	22569-74-0	
Lead and its compounds	[S03267] Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, lead(2+) sodiumsalt (1:1:2)	22904-40-1	
Lead and its compounds	[S03274] Hexanoic acid, 3,5,5-trimethyl-, lead salt	23621-79-6	
Lead and its compounds	[S03276] Diplumbane, hexaethyl-	2388-00-3	
Lead and its compounds	[S03298] Phosphonic acid, lead(2+) salt	24824-71-3	
Lead and its compounds	[S03308] Carbonic acid, lead(2+) salt	25510-11-6	
Lead and its compounds	[S03312] Lead iodate	25659-31-8	
Lead and its compounds	[S03315] Lead picrate	25721-38-4	
Lead and its compounds	[S06798] Silicic acid (H4SiO4), lead(2+) salt	25725-28-4	
Lead and its compounds	[S01298] Lead hexafluorosilicate(1:1)	25808-74-6	
Lead and its compounds	[S03317] Acetoxytributylplumbane	2587-82-8	
Lead and its compounds	[S06806] Phenol, lead salt (1:?)	25987-03-5	
Lead and its compounds	[S03323] Thiosulphuric acid, lead salt	26265-65-6	
Lead and its compounds	[S03348] Lead neodecanoate	27253-28-7	
		27253-28-7	
Lead and its compounds	[S03349] Isononanoic acid, lead salt		
Lead and its compounds	[S03354] Lead 199	27486-00-6	
Lead and its compounds	[S06820] Lead bis(methylbenzoate)	27496-91-9	
Lead and its compounds	[S06829] Lead ditetracosanoate	28267-01-8	
Lead and its compounds	[S03385] Lead sebacate	29473-77-6	
Lead and its compounds	[S03387] Lead didocosanoate	29597-84-0	
Lead and its compounds	[S06848] (T-4)-Bis[bis(1-methylethyl)carbamodithioato-S,S']lead	30051-53-7	
Lead and its compounds	[S02313] Lead di(acetate)	301-04-2	10th SVHC (Dec/16/2013)
Lead and its compounds	[S03397] Hexanoic acid, 2-ethyl-, lead(2+) salt	301-08-6	
Lead and its compounds	[S06854] Silicic acid (H2Si2O5), lead(2+) salt (1:1)	30719-10-9	
Lead and its compounds	[S06856] Sulfuric acid, lead(2+) salt	31044-02-7	
Lead and its compounds	[S01581] Hexaphenyldiplumbane; Hexaphenyldilead	3124-01-4	
Lead and its compounds	[S03411] Lead dimyristate	32112-52-0	
Lead and its compounds	[S03413] Docosanoic acid, lead salt	3249-61-4	
Lead and its compounds	[S03432] Lead dilinoleate	33627-12-2	
Lead and its compounds	[S03440] Lead dibromate	34018-28-5	
Lead and its compounds	[S06871] 2-Methylbenzoic acid, lead(4+) salt (4:1)	34295-32-4	
Lead and its compounds	[S03443] Tetrapropyl lead	3440-75-3	
Lead and its compounds	[S03451] Lead (II) methylthiolate	35029-96-0	
Lead and its compounds	[S03454] Lead cyanamide	35112-70-0	
Lead and its compounds	[S06879] Lead oxide (Pb2O2)	35229-41-5	
Lead and its compounds	[S03468] Orthoboric acid, lead(2+) salt	35498-15-8	
Lead and its compounds	[S03471] Lead bis(3,5,5-trimethylhexanoate)	35837-70-8	
Lead and its compounds	[S03489] Lead, bis(dipentylcarbamodithioato-S,S')-, (T-4)-	36501-84-5	
Lead and its compounds	[S02321] Trilead(II) bis(arsenate)	3687-31-8	6th SVHC (Dec/19/2011)
Lead and its compounds	[S03495] Lead ruthenium oxide (PbRuO3)	37194-88-0	, .,,
Lead and its compounds	[S03498] Dilead dirhodium heptaoxide	37240-96-3	
Lead and its compounds	[S03513] Lead isophthalate	38787-87-0	
Lead and its compounds	[S03521] Lead hydroxide	39345-91-0	
Lead and its compounds	[S06908] Lead sulfide	39377-56-5	
zeaa aa ita compounta	[500500] Lead Samue	33377 30-3	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

	Prohibited Substances in Products	page 14/68
Example Substances	CAS No.	Remarks
d, lead salt, tribasic	39386-06-6	
silicate	39390-00-6	
у	39412-44-7	
d, lead salt (1:?)	41234-07-5	
1.1		

Substance Group Name	Example Substances	CAS No.	Remarks
ead and its compounds	[S06909] Sulfurous acid, lead salt, tribasic	39386-06-6	
ead and its compounds	[S06910] Lead chloride silicate	39390-00-6	
ead and its compounds	[S03522] Lead/Tin alloy	39412-44-7	
ead and its compounds	[S06917] Nonanoic acid, lead salt (1:?)	41234-07-5	
ead and its compounds	[S03534] Lead b-resorcylate	41453-50-3	
ead and its compounds	[S06920] Lead fluoride (PbF3)	41547-50-6	
ead and its compounds	[S03537] Lead bis(piperidine-1-carbodithioate)	41556-46-1	
ead and its compounds	[S03539] Lead propionate	42558-73-6	
ead and its compounds	[S03540] Sulfuric acid, barium lead salt	42579-89-5	
ead and its compounds	[S03578] Phenol, 2-methyldinitro-, lead salt	50319-14-7	
ead and its compounds	[S06934] Bicyclo[2.2.2]oct-5-ene-2,3-dicarboxylic acid, 1-methyl-4-(1-methylethyl)-, lead(2+) salt, compd. with lead oxide (PbO) (2:1:?)	50729-74-3	
ead and its compounds	[S03585] Lead naphthalate	50825-29-1	
ead and its compounds	[S03588] 3-(Triphenylplumbyl)-1H-pyrazole	51105-45-4	
ead and its compounds	[S03592] 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, lead(2+) salt (2:3)	512-26-5	
ead and its compounds	[S03596] Lead nitroresorcinate	51317-24-9	
ead and its compounds	[S03597] Trinitrophloroglucinol, lead salt	51325-28-1	
ead and its compounds	[S03598] Acetic acid, lead salt, basic; Acetic acid, lead salt, basic	51404-69-4	8th SVHC (Dec/19/2012)
ead and its compounds	[S03604] Lead chromate sulfate (Pb9(CrO4)5(SO4)4)	51899-02-6	
ead and its compounds	[S03610] Octadecanoic acid, lead(2+) salt, tribasic	52080-60-1	
ead and its compounds	[S03611] Sulfurous acid, lead salt, basic	52231-92-2	
ead and its compounds	[S06948] Lead bis(2-methylbenzoate)	52337-73-2	
ead and its compounds	[S03622] Lead methacrylate	52609-46-8	
ead and its compounds	[S03625] Lead stearate dibasic	52652-59-2	
ead and its compounds	[S03627] Sulfuric acid, lead salt, tetrabasic	52732-72-6	
ead and its compounds	[S03630] Lead bis(isononanoate)	52847-85-5	
ead and its compounds	[S06956] Lead fluoride	53096-04-1	
ead and its compounds	[S06957] (T-4)-Sodium [N,N-bis(carboxymethyl)glycinato(3-)-N,O,O',O'']plumbate	53113-58-9	
ead and its compounds	[S03639] Arsenic acid, lead (4+) salt	53404-12-9	
ead and its compounds	[S06969] 2-Propenenitrile, polymer with 2,4,8,10-tetraoxaspiro[5.5]undecane-3,9-dipropanamine	53754-99-7	
ead and its compounds	[S06971] Chrome Yellow G	53795-87-2	
ead and its compounds	[S03649] Phosphonic acid, lead salt, basic	53807-64-0	
ead and its compounds	[S03659] 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, lead salt	54554-36-8	
ead and its compounds	[S01856] Lead tetraacetate	546-67-8	
ead and its compounds	[S06989] 3,9-Bis(3-aminopropyl)-2,4,8,10-tetraoxaspiro[5,5]undecane- acrylonitrileadduct	55492-65-4	
ead and its compounds	[S03681] Dibasic lead stearate	56189-09-4	
ead and its compounds	[S03690] Acetoxytrimethylplumbane	5711-19-3	
ead and its compounds	[S03694] Lead, [1,2-benzenedicarboxylato(2-)]oxodi-	5711-19-5	
ead and its compounds	[S07007] Lead bis(4-methylbenzoate)	58274-53-6	
ead and its compounds	[S03710] Lead bis(4-interrylbenzbate)	58405-97-3	
		592-05-2	
ead and its compounds	[S01313] Lead(II) dicyanide	592-05-2	
ead and its compounds	[S01398] Lead dithiocyanate		
ead and its compounds	[S01429] Tetraphenyl lead	595-89-1 598-63-0	
ead and its compounds	[S02341] Lead carbonate		
ead and its compounds	[S03756] Lead 5-nitroterephthalate	60580-60-1	
ead and its compounds	[S02079] Lead(II) acetate, trihydrate	6080-56-4	
ead and its compounds	[S03763] 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, lead(2+) salt (2:3), trihydrate	6107-83-1	
ead and its compounds	[S03764] Salicylate, lead (II)	6107-93-3	
ead and its compounds	[S03773] Naphthenic acids, lead manganese salts	61788-52-1	
ead and its compounds	[S03774] Fatty acids, tall-oil, lead manganese salts	61788-53-2	
ead and its compounds	[S03775] Fatty acids, tall-oil, lead salts	61788-54-3	
ead and its compounds	[S05006] Naphthenic acid, cobalt lead manganese salt	61789-50-2	

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- Shindengen Electric Manufacturing Co., Ltd	Prohibited Substances in Products	page 15/68
- Shindengen Electric Manufacturing Co., Etc	FIUIIDILEU SUDSTAILES III FIUUULIS	Dage 13/00

Substance Group Name	Example Substances	CAS No.	Remarks
Lead and its compounds	[S03781] Naphthalenesulfonic acid, dinonyl-, lead(2+) salt	61867-68-3	
Lead and its compounds	[S03785] Sulfurous acid, lead salt, dibasic	62229-08-7	
			(Dec/19/2012)
_ead and its compounds	[S03789] Bis(o-acetoxybenzoato)lead	62451-77-8	
ead and its compounds	[S03794] Cyclohexanebutanoic acid, lead(2+) salt	62637-99-4	
ead and its compounds	[S03808] Lead(2+) heptadecanoate	63399-94-0	
ead and its compounds	[S07041] Lead diundecanoate	63400-07-7	
ead and its compounds	[S07042] Lead dinonanoate	63400-08-8	
ead and its compounds	[S03813] Naphthalenesulfonic acid, diisononyl-, lead(2+) salt	63568-30-9	
ead and its compounds	[S07045] Sulfuric acid, lead salt (1:?), basic	63653-42-9	
ead and its compounds	[S03822] Lead styphnate	63918-97-8	
_ead and its compounds	[S03833] Isooctanoic acid, lead salt	64504-12-7	
ead and its compounds	[S03837] Lead dipicrate	6477-64-1	6th SVHC (Dec/19/2011)
ead and its compounds	[S03840] Lead dibutanolate	65119-94-0	
ead and its compounds	[\$03841] Lead(2+) 4,6-dinitro-o-cresolate	65121-76-8	
ead and its compounds	[S03842] Lead 12-hydroxyoctadecanoate	65127-78-8	
ead and its compounds	[S03843] Plumbane, tetrakis(1-methylpropyl)-	65151-08-8	
ead and its compounds	[S03844] Bismuth lead ruthenium oxide	65229-22-3	
ead and its compounds	[S03861] Petrolatum, petroleum, oxidized, lead salt	67674-14-0	
ead and its compounds	[S03862] Lead silicate sulfate	67711-86-8	
ead and its compounds	[S03898] Silicic acid, lead nickel salt	68130-19-8	
ead and its compounds	[S03899] Fatty acids, C12-18, lead salts	68131-60-2	
ead and its compounds	[S07079] Resin acids and Rosin acids, calcium salts, polymers with lead resinates and sapond. linseed oil	68139-27-5	
ead and its compounds	[S03904] Linseed oil, reaction products with lead oxide (Pb3O4) and mastic	68152-99-8	
ead and its compounds	[\$03905] 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, lead(2+) bis(2-methyl-2-propenoate) and .alpha(2-methyl-1-oxo-2-propenyl)omega[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)	68155-47-5	
ead and its compounds	[S03906] Lead, 2-ethylhexanoate tall-oil fatty acids complexes	68187-37-1	
ead and its compounds	[S07082] Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper and lead-doped	68332-81-0	
ead and its compounds	[S03921] Lead phthalate	6838-85-3	
ead and its compounds	[S03923] Fatty acids, C8-10-branched, lead salts, basic	68409-79-0	
ead and its compounds	[S03924] Copper, .betaresorcylate salicylate lead complexes	68411-07-4	
ead and its compounds	[S07084] 1,3-Benzenediol, 2-nitro-, lead salt, basic	68411-33-6	
ead and its compounds	[S03925] Lead oxide (PbO), lead-contg.	68411-78-9	
ead and its compounds	[S07087] Oils, menhaden, lead salts	68424-76-0	
ead and its compounds	[S07090] Hexanoic acid, dimethyl-, lead(2+) salt, basic	68442-95-5	
ead and its compounds	[S07096] Hexanoic acid, 2-ethyl-, lead(2+) salt, basic	68515-76-4	
ead and its compounds	[S07097] Hexanoic acid, 3,5,5-trimethyl-, lead(2+) salt, basic	68515-77-5	
ead and its compounds	[S03934] Lead, isooctanoate naphthenate complexes	68515-80-0	
ead and its compounds	[S07098] Linseed oil, lead manganese salt	68553-17-3	
ead and its compounds	[S07099] Oils, fish, lead salts	68553-63-9	
ead and its compounds	[S07100] Spinels, boron calcium lead silicon white	68555-05-5	
ead and its compounds	[S07101] Spinels, lead silicon tin zinc white	68555-07-7	
ead and its compounds	[S07108] Zinc sulfide (ZnS), copper and lead-doped	68585-90-0	
ead and its compounds	[S03938] Phenol, dodecyl-, lead(2+) salt	68586-21-0	
ead and its compounds	[S05000] Fatty acids, C6-19-branched, lead salts, basic	68603-83-8	
ead and its compounds	[S07109] Carboxylic acids, tall-oil, lead salts, basic	68603-93-0	
ead and its compounds	[S03939] Castor oil, dehydrated, polymer with rosin, calcium lead zinc salt	68604-05-7	
ead and its compounds	[S07110] Octanoic acid, branched, lead salts, basic	68604-56-8	
ead and its compounds	[S07111] Fatty acids, tallow, hydrogenated, lead salts	68605-98-1	
ead and its compounds	[S03940] Plumbane, ethyl methyl derivitives	68610-17-3	
ead and its compounds	[S07114] Tungstate (W042-), calcium (1:1), (T-4)-, lead-doped	68784-53-2	
ead and its compounds	[S07117] Calcium, acetate coco fatty acids decanoate hydrogenated tallow fatty acids	68784-59-8	
Site to compounds	octanoate lead complexes	00.04 00-0	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

Prohibited Substances in Products page 16/68

Substance Crown Name	Evample Substances	CAS No	Domark-
Substance Group Name	Example Substances	CAS No.	Remarks
ead and its compounds	[S07118] Silicic acid (H6Si2O7), barium magnesium strontium salt, lead-doped	68784-74-7	
ead and its compounds	[S07119] Silicic acid (H2Si2O5), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD); the substance is a compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008]	68784-75-8 81 (E	ec/19/2012)
ead and its compounds	[S07120] Silicic acid (H4SiO4), magnesium manganese(2+) zinc salt, arsenic and lead- doped	68784-76-9	
ead and its compounds	[S07129] Cadmium sulfide (CdS), copper and lead-doped	68891-87-2	
ead and its compounds	[S03947] 2,4-Cyclohexadien-1-one, 3,5,6-trihydroxy-4,6-bis(3-methyl-2-butenyl)-2-(3-methyl-2-oxobutyl)-, lead salt, (R)-	68901-11-1	
ead and its compounds	[S03948] .alphaD-Glucopyranose, 1-(dihydrogen phosphate), lead salt	68901-12-2	
ead and its compounds	[S07132] Acetic acid, reaction products with lead oxide (PbO), silica and sulfuric acid	68937-05-3	
ead and its compounds	[S07134] Resin acids and Rosin acids, calcium lead salts	68952-91-0	
ead and its compounds	[S07137] Benzoic acid, 2,4-dihydroxy-, lead salt, basic	68954-05-2	
ead and its compounds	[S07140] Gilsonite, polymer with cyclopentadiene, dicyclopentadiene and linseed oil, lead salts	68956-49-0	
ead and its compounds	[S07145] Barium bismuth lead niobium titanium oxide	68987-33-7	
ead and its compounds	[S03962] Gilsonite, polymer with linseed oil, lead salt	68989-89-9	
ead and its compounds	[S03963] Linseed oil, polymer with tung oil, lead salt	68990-75-0	
ead and its compounds	[S03965] Lead, [1,2-benzenedicarboxylato(2-)]dioxotri-	69011-06-9 8t	h SVHC ec/19/2012)
ead and its compounds	[S03966] Lead chromate silicate (Pb3(CrO4)(SiO4))	69011-07-0	
ead and its compounds	[S03968] Lead alloy, dross	69011-59-2	
ead and its compounds	[S03969] Lead alloy, Pb,Sn, dross	69011-60-5	
ead and its compounds	[S07156] Flue dust, lead-tin alloy-manufg.	69012-60-8	
ead and its compounds	[S03972] Lead, dross, antimony-rich	69029-45-4	
ead and its compounds	[S03973] Lead, dross, bismuth-rich	69029-46-5	
ead and its compounds	[S03974] Lead, antimonial	69029-50-1	
ead and its compounds	[S03975] Lead, antimonial, dross	69029-51-2	
ead and its compounds	[S03976] Lead, dross	69029-52-3	
ead and its compounds	[S03977] Lead oxide (PbO), retort	69029-53-4	
ead and its compounds	[S07158] Slags, lead reverbatory smelting	69029-58-9	
ead and its compounds	[S07159] Bismuth, refinery lead chloride residues	69029-61-4	
ead and its compounds	[S07161] Flue dust, lead-refining	69029-67-0	
ead and its compounds	[S03978] Leach residues, lead slag	69029-71-6	
ead and its compounds	[S07163] Leach residues, precious metal recovery lead refining	69029-72-7	
ead and its compounds	[S07164] Calcines, lead ore conc.	69029-74-9	
ead and its compounds	[S07166] Residues, lead roaster	69029-78-3	
ead and its compounds	[S07167] Residues lead smelting	69029-79-4	
ead and its compounds	[S07168] Residues, precious metal recovery lead refining	69029-80-7	
ead and its compounds	[S07169] Slags, lead smelting	69029-84-1	
ead and its compounds	[S07170] Slags, precious metal recovery lead refining	69029-85-2	
ead and its compounds	[S07174] Slimes and Sludges, lead refining	69029-93-2	
ead and its compounds	[S07175] (T-4)-Bis[bis(2-methylproply)carbamodithioato-S,S']lead	69090-73-9	
ead and its compounds	[S07176] Calcium, acetate candelilla wax oleate tallow lead complexes	69103-03-3	
ead and its compounds	[S07177] Fatty acids, tallow, hydrogenated, mixed with acetic acid, coconut oil, decanoic acid and octanoic acid, calcium lead salts	69103-04-4	
ead and its compounds	[S03985] Lead, dross, copper-rich	69227-11-8	
ead and its compounds	[S03986] Diacetoxydiphenylplumbane	6928-68-3	
ead and its compounds	[S07184] Lead bis[(E)-9-octadecenoate]	69637-83-8	
ead and its compounds	[S03989] Lead, C6-19-branched carboxylate naphthenate complexes	70084-67-2	
ead and its compounds	[S04000] 1,3-Benzenediol, nitro-, lead(2+) salt (1:1)	70268-38-1	
ead and its compounds	[S04002] Lead, decanoate octanoate complexes	70321-55-0	
ead and its compounds	[S04004] Lead, alkyls, manufacturing wastes	70513-89-2	
ead and its compounds	[S04005] Flue dust, lead blast furnace	70514-05-5	
ead and its compounds	[S04006] Slimes and sludges, lead sinter dust scrubber	70514-37-3	
Lead and its compounds	[S04008] Formic acid, lead salt	7056-83-9	

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- Shindengen Electric Manufacturing Co., Ltd	Prohibited Substances in Products	page 17/68
- Shindengen Electric Manufacturing Co., Ltd	Profibiled Substances in Products	page 1//pg

Substance Group Name	Example Substances	CAS No.	Remarks
Lead and its compounds	[S04012] Lead(2+) isooctadecanoate	70727-02-5	
Lead and its compounds	[S07196] Fatty acids, C18-unsatd., dimers, polymers with dehydrated castor-oil fatty acids and glycerol, lead salts	70879-91-3	
Lead and its compounds	[S07197] (T-4)-Bis(dipropylcarbamodithioato-S,S')lead	70995-63-0	
Lead and its compounds	[S04039] Lead(2+) neodecanoate	71684-29-2	
Lead and its compounds	[S04040] Lead(II) fumarate	71686-03-8	
Lead and its compounds	[S04047] Hydroxy(neodecanoato-O)lead	71753-04-3	
Lead and its compounds	[S07208] Silicic acid (H6Si2O7), barium zinc salt (1:1:2), lead-doped	71799-66-1	
Lead and its compounds	[S07211] Lead bis(2-hydroxyethanesulfonate)	72437-77-5	
Lead and its compounds	[S04080] Lead bis(nonylphenolate)	72586-00-6	
Lead and its compounds	[S04104] Lead(2+) octanoate	7319-86-0	
Lead and its compounds	[S04137] Lead stearate	7428-48-0	
Lead and its compounds	[S02075] Lead	7439-92-1	19th Candidate List of SVHC (Jun.//27/2018) PRTR1
Lead and its compounds	[S01694] Lead sulfite	7446-10-8	
Lead and its compounds	[S02082] Lead(II) sulfate	7446-14-2	
Lead and its compounds	[S01388] Lead selenate	7446-15-3	
Lead and its compounds	[S02354] Lead(II) phosphate	7446-27-7	
Lead and its compounds	[S04141] Lead selenite	7488-51-9	
Lead and its compounds	[S01439] Tetramethyl lead	75-74-1	
Lead and its compounds	[S04158] Lead, bis(diphenylcarbamodithioato-S,S')-, (T-4)-	75790-73-7	
Lead and its compounds	[S04165] Lead arsenate, unspecified	7645-25-2	
Lead and its compounds	[S07236] Lead di(22-tricosenoate)	76835-98-8	
Lead and its compounds	[S07237] 2-Methylbenzoic acid, lead salt (1:?)	76925-97-8	
Lead and its compounds	[S04169] Lead(4+) stearate	7717-46-6	
Lead and its compounds	[S01731] Lead chloride	7758-95-4	
Lead and its compounds	[S02364] Lead(II) chromate; Lead(II) tetraoxidochromate	7758-97-6	2nd SVHC (Jan/13/2010)
Lead and its compounds	[S02543] Lead tungsten oxide	7759-01-5	
Lead and its compounds	[S01566] Lead difluoride	7783-46-2	
Lead and its compounds	[S01567] Lead(IV) fluoride	7783-59-7	
Lead and its compounds	[S02411] Lead(II) hydrogenarsenate	7784-40-9	1st SVHC (Oct/28/2008)
Lead and its compounds	[S01411] Tetraethyl lead	78-00-2	8th SVHC (Dec/19/2012)
Lead and its compounds	[S05017] Pigment Lightfast Lead-Molybdate Orange OS (9CI)	78690-68-3	
Lead and its compounds	[S04206] Lead, (2-methyl-4,6-dinitrophenolato-O1)(nitrato-O)muoxodi-, monohydrate	79357-62-3	
Lead and its compounds	[S04209] Lead, C3-13-fatty acid naphthenate complexes	79803-79-5	
Lead and its compounds	[S07261] Pyrochlore, antimony lead yellow; C.I. Pigment Yellow 41	8012-00-8	8th SVHC (Dec/19/2012)
Lead and its compounds	[S04217] Lead formate	811-54-1	
Lead and its compounds	[S04223] Fatty acids, C9-11-branched, lead salts	81412-57-9	
Lead and its compounds	[S04224] Lead dipropionate	814-70-0	
Lead and its compounds	[S01353] Lead oxalate	814-93-7	
Lead and its compounds	[S04225] Butanedioic acid, 2,3-dihydroxy- [R-(R*,R*)]-, lead(2+) salt (1:1)	815-84-9	
Lead and its compounds	[S04226] Lead malate	816-68-2	
Lead and its compounds	[S04227] Lead dibutyrate	819-73-8	
Lead and its compounds	[S07268] Benzenesulfonic acid, 4-hydroxy-, lead(2+) salt (2:1)	825-91-2	
Lead and its compounds	[S07270] Hydroxybenzenesulfonic acid, lead salt (1:?)	82696-30-8	
Lead and its compounds	[S07271] Hexafluorosilicate(2-), lead(2+) (1:1), tetrahydrate	83689-82-1	
Lead and its compounds	[S04246] Lead, C5-23-branched carboxylate C4-10-fatty acid naphthenate complexes	83711-45-9	
Lead and its compounds	[S04247] Lead, C5-23-branched carboxylate naphthenate complexes	83711-46-0	
Lead and its compounds	[S04248] Lead, C5-23-branched carboxylate naphthenate octanoate complexes	83711-47-1	
Lead and its compounds	[S04276] Lead, C5-23-branched carboxylate C4-10-fatty acid complexes	84066-98-8	

A list of examples of chemical substances which have been used electrical and electronic equipment and

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- The [Sxxxxx (the x's being a 5 digit number)] on example substances are the Shindengen substance management codes.

Lead and its compounds

Lead and its compounds

Lead and its compounds

Lead and its compounds

- Shindengen Electric Manufacturing Co., Ltd. -**Prohibited Substances in Products** page 18/68 Substance Group Name **Example Substances** CAS No. Remarks Lead and its compounds [S04277] Lead, C5-23-branched carboxylate octanoate complexes 84066-99-9 Lead and its compounds [S04278] Lead, C4-10-fatty acid naphthenate complexes 84067-00-5 Lead and its compounds [S07272] Matte, lead 84195-51-7 [S07273] Slimes and Sludges, lead, electrolytic 84195-60-8 Lead and its compounds Lead and its compounds [S07274] Speiss, lead 84195-61-9 84394-98-9 Lead and its compounds [S04290] Lead bis(p-octylphenolate) Lead and its compounds [S04292] Fatty acids, C8-18 and C18-unsaturated, lead salts 84776-36-3 Lead and its compounds [S04294] Fatty acids, C8-12, lead salts 84776-53-4 Lead and its compounds [S04295] Fatty acids, C18-24, lead salts 84776-54-5 [S04296] [.mu.-(4,6-Dinitroresorcinolato(2-)-O1,O3)]dihydroxydilead 84837-22-9 Lead and its compounds Lead and its compounds [S04297] Lead(II) isodecanoate 84852-34-6 Lead and its compounds [S04303] Lead, isononanoate isooctanoate complexes, basic 84929-94-2 Lead and its compounds [S04304] Lead, isooctanoate neodecanoate complexes, basic 84929-95-3 84929-96-4 Lead and its compounds [\$04305] Lead, naphthenate neodecanoate complexes, basic Lead and its compounds [S04306] Lead, isononanoate naphthenate complexes 84929-97-5 [S04307] Benzenesulfonic acid, 4-C10-13-sec-alkyl derivitives, lead(2+) salts 84961-75-1 Lead and its compounds Lead and its compounds [S04309] Fatty acids, C8-10-branched, lead salts 85049-42-9 Lead and its compounds [S07284] Flue dust, lead-manufg., cadmium-rich 85117-02-8 [S04313] Lead(2+) 4-(1,1-dimethylethyl)benzoate 85292-77-9 Lead and its compounds Lead and its compounds [S04316] Lead bis(5-oxo-L-prolinate) 85392-77-4 Lead and its compounds [S04317] Lead bis(5-oxo-DL-prolinate) 85392-78-5 [S04325] Lead uranate pigment Lead and its compounds 85536-79-4 Lead and its compounds [S04332] Lead bis(tetracosylbenzenesulphonate) 85865-91-4 [\$04333] Lead bis[didodecylbenzenesulphonate] 85865-92-5 Lead and its compounds Lead and its compounds [S04336] Lead(2+) acrylate 867-47-0 [S04338] Lead dibenzoate 873-54-1 Lead and its compounds 87835-32-3 Lead and its compounds [S07298] Lead bis(2-propylpentanoate) Lead and its compounds 87903-39-7 [S04339] Lead hydroxysalicylate Lead and its compounds [S07302] Resin acids and Rosin acids, lead salts 9008-26-8 Lead and its compounds [S04343] 1,2-Benzenedicarboxylic acid, lead(2+) salt, basic 90193-83-2 Lead and its compounds [S04344] 2-Butenedioic acid (E)-, lead(2+) salt, basic 90268-59-0 [S04345] 2-Butenedioic acid (Z)-, lead(2+) salt, basic 90268-66-9 Lead and its compounds Lead and its compounds [S04346] Decanoic acid, branched, lead salts 90342-24-8 Lead and its compounds [S04347] Dodecanoic acid, lead salt, basic 90342-56-6 Lead and its compounds [S04348] Hexadecanoic acid, lead salt, basic 90388-09-3 Lead and its compounds [S04349] Hexadecanoic acid, lead(2+) salt, basic 90388-10-6 Lead and its compounds [\$04350] 9-Hexadecenoic acid, lead(2+) salt, (Z)-, basic 90388-15-1 Lead and its compounds [S04351] Isodecanoic acid, lead salt, basic 90431-14-4 90431-21-3 Lead and its compounds [S04352] Isononanoic acid, lead salt, basic [S04353] Isooctanoic acid, lead salt, basic Lead and its compounds 90431-26-8 Lead and its compounds [S04354] Lead, C8-10-branched fatty acids C9-11-neofatty acids naphthenate 90431-27-9 complexes, overbased Lead and its compounds [S04355] Lead, C8-10-branched fatty acids C9-11-neofatty acids naphthenate 90431-28-0 Lead and its compounds [S04356] Lead, 2-ethylhexanoate isodecanoate complexes, basic 90431-30-4 90431-31-5 Lead and its compounds [S04357] Lead, 2-ethylhexanoate isononanoate complexes, basic Lead and its compounds [S04358] Lead, 2-ethylhexanoate isooctanoate complexes, basic 90431-32-6 Lead and its compounds [S04359] Lead, 2-ethylhexanoate naphthenate complexes 90431-33-7 Lead and its compounds [S04360] Lead, 2-ethylhexanoate naphthenate complexes, basic 90431-34-8 Lead and its compounds [S04361] Lead, 2-ethylhexanoate neodecanoate complexes, basic 90431-35-9 90431-36-0 Lead and its compounds [S04362] Lead, isodecanoate isononanoate complexes, basic

[S04363] Lead, isodecanoate isooctanoate complexes, basic

[S04365] Lead, isodecanoate neodecanoate complexes, basic

[S04366] Lead, isononanoate naphthenate complexes, basic

[S04364] Lead, isodecannate nanhthenate complexes

90431-37-1

90431-38-2

90431-39-3

90431-40-6

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Substance Group Name	Example Substances	CAS No.	Remarks
Lead and its compounds	[S04367] Lead, isononanoate neodecanoate complexes, basic	90431-41-7	
Lead and its compounds	[S04368] Lead, isooctanoate naphthenate complexes, basic	90431-42-8	
Lead and its compounds	[S04369] Lead, naphthenate neodecanoate complexes	90431-43-9	
Lead and its compounds	[S04370] Lead, neononanoate neoundecanoate complexes, basic	90431-44-0	
Lead and its compounds	[S04371] Neodecanoic acid, lead salt, basic	90459-25-9	
Lead and its compounds	[S04372] Neononanoic acid, lead salt, basic	90459-26-0	
Lead and its compounds	[S04373] Neoundecanoic acid, lead salt, basic	90459-28-2	
Lead and its compounds	[S04381] Octadecanoic acid, lead salt, basic	90459-51-1	
Lead and its compounds	[S04382] Octadecanoic acid, lead(2+) salt, basic	90459-52-2	
Lead and its compounds	[S04383] 9-Octadecenoic acid (Z)-, lead salt, basic	90459-88-4	
Lead and its compounds	[S04384] 2-Propenoic acid, 2-methyl-, lead salt, basic	90552-19-5	
Lead and its compounds	[S04385] Sulfuric acid, lead(2+) salt, basic	90583-07-6	
Lead and its compounds	[S04386] Sulfurous acid, lead(2+) salt, basic	90583-37-2	
Lead and its compounds	[S04387] Tetradecanoic acid, lead salt, basic	90583-65-6	
Lead and its compounds	[S04389] Fatty acids, C6- 19-branched, lead salts	91002-20-9	
Lead and its compounds	[S04390] Fatty acids, C8-9, lead salts	91031-60-6	
Lead and its compounds	[S04391] Fatty acids, C8-10, lead salts	91031-61-7	
Lead and its compounds	[S04392] Fatty acids, C16-18, lead salts	91031-62-8	8th SVHC (Dec/19/2012)
Lead and its compounds	[S07313] Leach residues, zinc ore, lead-contg.	91053-49-5	
Lead and its compounds	[S04393] Naphthenic acids, lead (2+) salts	91078-81-8	
Lead and its compounds	[S07317] Lead bis(2-butylbenzoate)	91187-55-2	
Lead and its compounds	[S07318] Boric acid (H3BO3), lead(2+) salt (2:3)	91388-81-7	
Lead and its compounds	[S04395] Isodecanoic acid, lead(2+) salt, basic	91671-82-8	
Lead and its compounds	[S04396] Isooctanoic acid, lead(2+) salt, basic	91671-83-9	
Lead and its compounds	[S04397] Isoundecanoic acid, lead(2+) salt, basic	91671-84-0	
Lead and its compounds	[S04398] Fatty acids, castor-oil, hydrogenated, lead salts	91697-36-8	
Lead and its compounds	[S04401] Phosphorodithioic acid, mixed O,O-bis(bu and pentyl) esters, lead(2+) salt	91783-10-7	
Lead and its compounds	[S04402] Fatty acids, coco, lead salts	92044-89-8	
Lead and its compounds	[S04403] Naphthenic acids, lead salts, basic	92045-67-5	
Lead and its compounds	[S04404] Lead, C4-10-fatty acid octanoate complexes	92200-92-5	
Lead and its compounds	[S04413] Fatty acids, C14-26, lead salts	93165-26-5	
Lead and its compounds	[S07333] Slags, lead-zinc smelting	93763-87-2	
Lead and its compounds	[S07337] Flue gases, lead-zinc blast furnace	93821-47-7	
Lead and its compounds	[S07338] Slimes & Sludges, lead-zinc blast furnace, offgas wet cleaning	93821-70-6	
Lead and its compounds	[S04422] Speiss, lead-zinc	93821-72-8	
Lead and its compounds	[S04423] Lead 3-(acetamido)phthalate	93839-98-6	
Lead and its compounds	[S04424] Lead bis(2-ethylhexanolate)	93840-04-1	
Lead and its compounds	[S04425] Lead(2+) 4,4'-isopropylidenebisphenolate	93858-23-2	
·		93858-24-3	
Lead and its compounds Lead and its compounds	[S04426] Lead(2+) (Z)-hexadec-9-enoate [S04429] Carbamodithioic acid, ethylphenyl-, lead(2+) salt	93892-65-0	
Lead and its compounds	[S04430] Lead(2+) neononanoate	93894-48-5	
Lead and its compounds	[S04431] Lead(2+) neonoteanoate	93894-49-6	
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Lead and its compounds	[S04432] (Neononanoato-O)(neoundecanoato-O)lead	93894-64-5	
Lead and its compounds	[S04436] Phosphoric acid, mixed butyl and hexyl diesters, lead(2+) salts	93925-27-0	
Lead and its compounds	[S04438] Lead bis(isoundecanoate)	93965-29-8	
Lead and its compounds	[S04439] Lead bis(tricosanoate)	93966-37-1	
Lead and its compounds	[S04440] Lead tetracosanoate	93966-38-2	
Lead and its compounds	[S04441] Lead pentadecanoate	93966-74-6	
Lead and its compounds	[S04442] Lead(II) isooctanoate	93981-67-0	
Lead and its compounds	[S04444] Hexacosanoic acid, lead salt	94006-20-9	
Lead and its compounds	[S04445] [.mu[[5,5'-Azobis[1H-tetrazolato]](2-)]]dihydroxydilead	94015-57-3	
Lead and its compounds	[S04453] Lead diundec-10-enoate	94232-40-3	
Lead and its compounds	[S04456] (Isononanoato-O)(isooctanoato-O)lead	94246-84-1	
Lead and its compounds	[S04457] (Isodecanoato-O)(isooctanoato-O)lead	94246-85-2	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

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Substance Group Name **Example Substances** CAS No. Remarks 94246-86-3 Lead and its compounds [S04458] (Isodecanoato-O)(isononanoato-O)lead Lead and its compounds [S04459] (Isodecanoato-O)(neodecanoato-O)lead 94246-87-4 Lead and its compounds [S04460] (2-Ethylhexanoato-O)(isooctanoato-O)lead 94246-90-9 [S04461] (2-Ethylhexanoato-O)(isononanoato-O)lead 94246-91-0 Lead and its compounds Lead and its compounds [S04462] (2-Ethylhexanoato-O)(isodecanoato-O)lead 94246-92-1 [S04463] (2-Ethylhexanoato-O)(neodecanoato-O)lead 94246-93-2 Lead and its compounds Lead and its compounds [S04464] Lead icosanoate (1:2) 94266-31-6 Lead and its compounds [S04465] Lead icosanoate 94266-32-7 Lead and its compounds [S04470] Fatty acids, tallow, reaction products with lead oxide 94349-78-7 [S07358] Poplar, Populus gileadensis, ext. 94350-03-5 Lead and its compounds 94481-58-0 Lead and its compounds [S04472] (Isononanoato-O)(neodecanoato-O)lead Lead and its compounds [S04474] Lead, zinc dross 94551-60-7 Lead and its compounds [S07360] Calcines, lead-zinc ore conc. 94551-62-9 94551-66-3 [S07361] Fumes, lead Lead and its compounds Lead and its compounds [S07363] Leach residues, copper-lead 94551-72-1 [S07364] Matte, copper-lead 94551-74-3 Lead and its compounds 94551-78-7 Lead and its compounds [S07365] Residues, lead smelting wastewater treatment Lead and its compounds [S07366] Residues, lead-zinc smelting wastewater treatment 94551-79-8 Lead and its compounds [S07367] Wastes, lead battery reprocessing 94551-99-2 Lead and its compounds [S07368] Waste solids, lead silver anode 94552-05-3 Lead and its compounds [S07371] Methanesulfonic acid, lead salt (1:?) 95860-12-1 [S04478] Lead(2+) isohexadecanoate 95892-13-0 Lead and its compounds Lead and its compounds [S04482] Lead, di-.mu.-hydroxy(2-methyl-4,6-dinitrophenolato-O1)(nitrato-O)di-96471-22-6 [S07373] Slimes and Sludges, lead acetate manuf. 96690-46-9 Lead and its compounds [S04494] Lead, bullion 97808-88-3 Lead and its compounds Lead and its compounds [S04495] Lead fluoride hydroxide 97889-90-2 97952-39-1 Lead and its compounds [S04496] 7-Methyloctanoic acid, lead salt Lead and its compounds [S04497] Nitric acid, lead(2+) salt, reaction products with sodium tin oxide 97953-08-7 Lead and its compounds [S07382] Speiss, lead, nickel-contg. 98246-91-4 [S04502] Sulfuric acid, barium salt (1:1), lead-doped 99328-54-8 Lead and its compounds Lead and its compounds [\$04507] Perchloric acid, reaction products with lead oxide (pbo) and triethanolamine 99749-31-2 [S00764] Alkyl-mercury compounds Mercury and its compounds Mercury and its compounds [S02164] Other mercury compounds 10031-18-2 Mercury and its compounds [S02556] Mercury bromide (HgBr) Mercury and its compounds [S06176] Residues, zinc refining flue dust wastewater, mercury-selenium 100403-63-2 Mercury and its compounds [S02223] Mercuric nitrate 10045-94-0 Mercury and its compounds [S02563] Barium tetraiodomercurate 10048-99-4 Mercury and its compounds [S01288] Chlorophenylmercury 100-56-1 Mercury and its compounds [S02564] Phenylmercuric hydroxide 100-57-2 10112-91-1 Mercury and its compounds [S01901] Mercury chloride 10124-48-8 Mercury and its compounds [S01268] Mercuric chloride, ammoniated Mercury and its compounds [S06202] Slimes and Sludges, copper conc. roasting off gas scrubbing, lead-mercury-102110-61-2 Mercury and its compounds [S02600] Dihydrogen [orthoborato(3-)-O]phenylmercurate(2-) 102-98-7 Mercury and its compounds [S02603] Mercury, phenyl(propanoato-O)-103-27-5 Mercury and its compounds [S02604] Mercury, (2-ethylhexanoato-O)(1-methoxycyclohexyl)-103332-13-4 103369-15-9 Mercury and its compounds [S02605] Mercury, (1-methoxycyclohexyl)(neodecanoato-O)-Mercury and its compounds [S01495] Mercurous nitrate 10415-75-5 Mercury and its compounds [S02606] Mercury, (1-methoxyethyl)(9-octadecenoato-O)-104325-07-7 Mercury and its compounds [S02607] Mercury, (1-methoxycyclohexyl)(9-octadecenoato-0)-104325-08-8 Mercury and its compounds [S02608] Mercury, (1-methoxyethyl)(neodecanoato-O)-104335-53-7 Mercury and its compounds [S02609] Mercury, (2-ethylhexanoato-O)(1-methoxyethyl) 104339-46-0 Mercury and its compounds [S01683] Mercury(II)phosphate 10451-12-4 Mercury and its compounds [S02610] Phenylmercury stearate 104-59-6 Mercury and its compounds [S02611] Mercury, (9-octadecenoato-O)phenyl-, (Z)-104-60-9

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Substance Group Name	Example Substances	CAS No.	Remarks
Mercury and its compounds	[S06227] Diisopropylmercury	1071-39-2	
Mercury and its compounds	[S02625] Bromoethylmercury	107-26-6	
Mercury and its compounds	[S02626] Ethylmercuric chloride	107-27-7	
Mercury and its compounds	[S02627] (Acetato-O)methylmercury	108-07-6	
Mercury and its compounds	[S02631] (Acetato-O)ethylmercury	109-62-6	
Mercury and its compounds	[S02635] Mercury, compound with titanium (1:3)	11083-41-3	
Mercury and its compounds	[S02662] Mercurymethylchloride	115-09-3	
Mercury and its compounds	[S02667] Methylmercury hydroxide	1184-57-2	
Mercury and its compounds	[S02671] Mercury oleate	1191-80-6	
Mercury and its compounds	[S01577] Phenylmercuric bromide	1192-89-8	
Mercury and its compounds	[S06359] Mercurol	12002-19-6	
Mercury and its compounds	[S02746] Mercury, compound with sodium (2:1)	12055-37-7	
Mercury and its compounds	[S01448] Mercury(II)telluride	12068-90-5	
Mercury and its compounds	[S02759] Mercury nitride	12136-15-1	
Mercury and its compounds	[S06464] Mercury, bis(D-gluconato-O1,O2)-, (T-4)-	122582-67-6	
Mercury and its compounds	[S02797] Lactatophenylmercury	122-64-5	
Mercury and its compounds	[S02808] Mercury silver iodide	12344-40-0	
Mercury and its compounds	[S02812] 2-Methoxyethylmercury chloride	123-88-6	
Mercury and its compounds	[S02815] 2-Ethoxyethylmercury chloride	124-01-6	
Mercury and its compounds	[S02819] 2-Ethoxyethylmercury acetate	124-08-3	
Mercury and its compounds	[S06504] Mercury, compd. with potassium (2:1)	12508-72-4	
Mercury and its compounds	[S02867] Mercury, (2',7'-dibromo-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'- [9H]xanthen]-4'-yl)hydroxy-, disodium salt	129-16-8	
Mercury and its compounds	[S06544] Carbonic acid, mercury(2+) salt (1:1)	13004-83-6	
Mercury and its compounds	[\$02879] Dimercury amidatenitrate	1310-88-9	
Mercury and its compounds	[\$02881] Mercuric subsulfate	1312-03-4	
Mercury and its compounds	[S02889] Hexanoic acid, 2-ethyl-, mercury(2+) salt	13170-76-8	
Mercury and its compounds	[S02893] Chloro(hydroxyphenyl)mercury	1320-80-5	
Mercury and its compounds	[S02897] Mercury bis(trifluoroacetate)	13257-51-7	
Mercury and its compounds	[S02901] Bis[(trimethylsilyl)methyl]mercury	13294-23-0	
Mercury and its compounds	[S02902] Mercury, (2-ethylhexanoato-O)phenyl-	13302-00-6	
Mercury and its compounds	[S01878] Mercuric oxycyanide	1335-31-5	
Mercury and its compounds	[S02910] 6-Methyl-3-nitrobenzoxamercurate	133-58-4	
Mercury and its compounds	[S02911] Naphthenic acids, mercury salts	1336-96-5	
Mercury and its compounds	[S01287] Mercury(II) chromate	13444-75-2	
Mercury and its compounds	[S02272] Mercuric sulfide	1344-48-5	
Mercury and its compounds	[S06587] Cadmium mercury sulfide	1345-09-1	
Mercury and its compounds	[S02934] Nitric acid, mercury(2+) salt, hemihydrate	13465-31-1	
Mercury and its compounds	[S02935] Mercury(1+) bromate	13465-33-3	
Mercury and its compounds	[S02936] Mercury (I) chromate	13465-34-4	
Mercury and its compounds	[S06594] Mercury thiocyanate	13465-37-7	
Mercury and its compounds	[S06639] Sulfuric acid, mercury salt	13766-44-4	
Mercury and its compounds	[S08796] Mercury, (octanoatokappa.O)phenyl-	13864-38-5	
Mercury and its compounds	[S02986] Mercurate(2-), tetraiodo-, dicopper(1+), (T-4)-	13876-85-2	
Mercury and its compounds	[S02988] Mercurate(1-), (4-carboxylatophenyl)hydroxy-, sodium	138-85-2	
Mercury and its compounds	[S06654] Perchloric acid, mercury(1+) salt	13932-02-0	
Mercury and its compounds	[S01887] Mercury(I)fluoride	13967-25-4	
Mercury and its compounds	[S06657] Mercury pentanedione	14024-55-6	
Mercury and its compounds	[S03002] (2-Carboxyphenyl)hydroxymercury	14066-61-6	
Mercury and its compounds	[S03004] Mercury dipotassium tetrathiocyanate	14099-12-8	
Mercury and its compounds	[S06661] Sodium chloro(4-sulfonatophenyl)mercurate(1-)	14110-97-5	
		14110-97-5	
Mercury and its compounds	[S03013] Mercury, iodo(iodomethyl)-		
Mercury and its compounds	[S06663] Mercury diazide	14215-33-9	
Mercury and its compounds	[S03024] Hydrargaphen	14235-86-0	
Mercury and its compounds	[S06666] Mercury alloy, base, Hg 86,Mg 14	143197-63-1	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

Mercury and its compounds

Mercury and its compounds

Mercury and its compounds

Mercury and its compounds

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Substance Group Name	Example Substances	CAS No.	Remarks
lercury and its compounds	[S01668] Mercury, iodomethyl-	143-36-2	
ercury and its compounds	[S03033] Phenyl(quinolin-8-olato-N1,O8)mercury	14354-56-4	
ercury and its compounds	[S06667] (T-4)-Diamminedichloromercury	14376-09-1	
ercury and its compounds	[S06670] Selenious acid, mercury(2+) salt (1:1)	14459-36-0	
ercury and its compounds	[S03060] Mercury, bis(phenyldiazenecarbothioic acid 2-phenylhydrazidato-N2,S)-, (T-4)-	14783-59-6	
ercury and its compounds	[S01496] Mercury(I)nitrate dihydrate	14836-60-3	
ercury and its compounds	[S03064] 2-(Ethylmercuriothio)benzoic acid	148-61-8	
lercury and its compounds	[S06688] Mercury azide (Hg(N3))	14990-20-6	
lercury and its compounds	[S06690] Mercury, [2,7-dibromo-9-(2-carboxyphenyl)-6-hydroxy-3-oxo-3H-xanthen-4-yl]hydroxy-, disodium salt	15015-80-2	
lercury and its compounds	[S03082] Methoxyethylmercuric acetate	151-38-2	
ercury and its compounds	[S01896] Mercury iodide	15385-57-6	
ercury and its compounds	[S01903] Mercury bromide	15385-58-7	
lercury and its compounds	[S03097] Mercury bis(4-chlorobenzoate)	15516-76-4	
lercury and its compounds	[S06705] Mercury alloy, base, Hg 50,Cs 33,Na 17	156234-43-4	
ercury and its compounds	[S06706] Mercury alloy, base, Hg 46,Cs 30,Na 24	156234-44-5	
ercury and its compounds	[S06707] (T-4)-Dithallium tetracyanomercurate	15634-23-8	
ercury and its compounds	[S03109] Disodium tetra(cyano-C)mercurate(2-)	15682-88-9	
ercury and its compounds	[S03121] Mercury, chloro[p-(2,4-dinitroanilino)phenyl]-	15785-93-0	
ercury and its compounds	[S03123] Mercurous oxide	15829-53-5	
ercury and its compounds	[S01858] Mercuric acetate	1600-27-7	
ercury and its compounds	[S03154] Otimerate sodium	16509-11-8	
ercury and its compounds	[S06729] Phenylmercuric thiocyanate	16751-55-6	
lercury and its compounds	[S06735] Hydroxymercuri-o-nitrophenol	17140-73-7	
lercury and its compounds	[S06740] Mercury alloy, base, Hg 69,Na 31	175695-12-2	
ercury and its compounds	[S03180] Mercury, chloro(ethanethiolato)-	1785-43-9	
ercury and its compounds	[S03184] Trimercury biscitrate	18211-85-3	
ercury and its compounds	[S03197] Bromo(2-hydroxypropyl)mercury	18832-83-2	
ercury and its compounds	[S03199] Bis(lactato-O1,O2)mercury	18917-83-4	
lercury and its compounds	[S03200] (Lactato-O1,O2)mercury	18918-06-4	
ercury and its compounds	[S01888] Mercury fluoride	18967-25-4	
ercury and its compounds	[S03214] [.mu[Metasilicato(2-)-0:0]]bis(2-methoxyethyl)dimercury	19367-79-4	
ercury and its compounds	[S03216] Mercury, (acetato-O)[4-[[4-(dimethylamino)phenyl]azo]phenyl]-	19447-62-2	
ercury and its compounds	[S03232] Mercurate(2-), tetrachloro-, dipotassium, (T-4)-	20582-71-2	
ercury and its compounds	[S01376] Mercury(II)selenide	20601-83-6	
ercury and its compounds	[S03243] Mercaptomerin sodium	21259-76-7	
ercury and its compounds	[S02167] Mercuric(II) oxide	21908-53-2	
ercury and its compounds	[S03255] Potassium triiodomercurate(1-)	22330-18-3	
ercury and its compounds	[S03256] Ethylmercuric phosphate	2235-25-8	
ercury and its compounds	[S03257] Mercury(1+), amminephenyl-, acetate	22450-90-4	
ercury and its compounds	[S03264] (Phenylmercurio)urea	2279-64-3	
ercury and its compounds	[S06781] Phenylmercuric formamide	22894-47-9	
ercury and its compounds	[S03268] Methylmercury	22967-92-6	
ercury and its compounds	[S03271] [2,2',2"-Nitrilotri(ethanol)-N,O,O',O"]phenylmercury lactate	23319-66-6	
ercury and its compounds	[S06788] (4-Methyl-N-phenylbenzenesulfonamidato-N)phenylmercury	2440-34-8	
ercury and its compounds	[S06789] Chloro(propan-1-yl)mercury	2440-40-6	
ercury and its compounds	[S03291] Ethyliodomercury	2440-40-8	
ercury and its compounds	[S06790] Bis(ethylmercury) hydrogen phosphate	2440-45-1	
ercury and its compounds		2440-43-1	
ercury and its compounds ercury and its compounds	[S03292] Mercury, chloro(2-hydroxy-5-nitrophenyl)-	24579-90-6	
	[S06791] Chloro(2-hydroxy-3,5-dinitrophenyl)mercury	24806-32-4	
ercury and its compounds	[S03297] Mercury, [.mu[dodecylbutanedioato(2-)-O:O']]diphenyldi-	24000-32-4	

[S06804] Methylmercury 2,3-dihydroxypropylmercaptide

[S06805] Methylmercury nitrile

[S06809] Phenylmercuric-8-quinolinate

[S06812] Bromic acid, mercury(2+) salt dihydrate

2597-95-7

2597-97-9 26114-17-0

26522-91-8

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<sup>-</sup> The [Sxxxxx (the x's being a 5 digit number)] on example substances are the Shindengen substance management codes.

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

chemical substances restricted by laws and regulations. Not all chemical substances are covered. - All possible efforts have been made to ensure the accuracy of CAS number and other information, but the accuracy of such details is not guaranteed.

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Substance Group Name	Example Substances	CAS No.	Remarks
Mercury and its compounds	[S06813] Ethyl(ureato-kappaN)mercury	26535-94-4	nemano
Mercury and its compounds	[S03327] Mercury, (neodecanoato-O)phenyl-	26545-49-3	
Mercury and its compounds	[S03328] Hydrogen [3-[(.alphacarboxylato-o-anisoyl)amino]-2-	26552-50-1	
mercary and its compounds	hydroxypropyl]hydroxymercurate(1-)	20332 30 1	
Mercury and its compounds	[S03334] Mercury(2+) chloroacetate	26719-07-3	
Mercury and its compounds	[S03338] (Maleoyldioxy)bis[phenylmercury]	2701-61-3	
Mercury and its compounds	[S06816] (T-4)-Copper tetraiodomercurate	27228-67-7	
Mercury and its compounds	[S03347] Diphenyl[.mu[(tetrapropenyl)succinato(2-)-O:O']]dimercury	27236-65-3	
Mercury and its compounds	[S03353] (Dihydroxyphenyl)phenylmercury	27360-58-3	
Mercury and its compounds	[S03358] Mercury fluoride	27575-47-9	
Mercury and its compounds	[S03359] [2-Ethylhexyl hydrogen maleato-O']phenylmercury	27605-30-7	
Mercury and its compounds	[S01413] Mercury thiocyanatocobaltate(II)	27685-51-4	
Mercury and its compounds	[S03365] Chloro-o-tolylmercury	2777-37-9	
Mercury and its compounds	[S03369] Phenylmercury salicylate	28086-13-7	
Mercury and its compounds	[S06835] Mercury fluoride hydroxide (HgF(OH))	28953-04-0	
Mercury and its compounds	[S03380] Mercury(1+) trifluoroacetate	2923-15-1	
Mercury and its compounds	[S02535] Dimercury(I) oxalate	2949-11-3	
Mercury and its compounds	[S03390] Cadmium mercury telluride ((Cd,Hg)Te)	29870-72-2	
Mercury and its compounds	[S03399] Chloro[p-[(2-hydroxy-1-naphthyl)azo]phenyl]mercury	3076-91-3	
Mercury and its compounds	[S02191] Mercury cyanide oxide	31065-88-0	
Mercury and its compounds	[S03403] (Metaborato-O)phenylmercury	31224-71-2	
Mercury and its compounds	[S03406] [Naphthoato(1-)-0]phenylmercury	31632-68-5	
Mercury and its compounds	[S02537] Sodium 4-chloromercuriobenzoate	3198-04-7	
Mercury and its compounds	[S03412] Phenylmercury dimethyldithiocarbamate	32407-99-1	
Mercury and its compounds	[S03420] Mercury, phenyl(trichloromethyl)-	3294-57-3	
Mercury and its compounds	[S01074] (Bromodichloromethyl)phenylmercury	3294-58-4	
Mercury and its compounds	[S03421] Phenyl(tribromomethyl)mercury	3294-60-8	
Mercury and its compounds	[S03424] Diammonium tetrachloromercurate	33445-15-7	
Mercury and its compounds	[S02166] Mercuric chloride	33631-63-9	
Mercury and its compounds	[S03433] Bis[(+)-lactato]mercury	33724-17-3	
Mercury and its compounds	[\$03434] Mercury, [2,5-dichloro-3,6-dihydroxy-2,5-cyclohexadiene-1,4-dio 01,06]-	nato(2-)- 33770-60-4	
Mercury and its compounds	[S06867] Nitric acid, mercury(2+) salt, sesquihydrate	33960-08-6	
Mercury and its compounds	[S03444] Mercury(II) oxalate	3444-13-1	
Mercury and its compounds	[S03470] Fluorescein mercuric acetate	3570-80-7	
Mercury and its compounds	[S03481] Methylmercury benzoate	3626-13-9	
Mercury and its compounds	[S06887] Mercury cyanide (Hg(CN))	37020-93-2	
Mercury and its compounds	[S06888] Bis(trifluoromethyl)mercury	371-76-6	
Mercury and its compounds	[S06893] Mercury alloy, nonbase, Hg,Mg	37237-15-3	
Mercury and its compounds	[S06897] Mercury iodide	37320-91-5	
Mercury and its compounds	[S03502] Dimethyl[.mu[sulphato(2-)-0:0']]dimercury	3810-81-9	
Mercury and its compounds	[S03504] Mercurous azide	38232-63-2	
Mercury and its compounds	[S03552] Meralein sodium	4386-35-0	
Mercury and its compounds	[S06928] 2-(Acetoxymercuric)ethanol phenylmercuric lactate	4665-55-8	
Mercury and its compounds	[S03565] Mersalyl acid	486-67-9	
Mercury and its compounds	[S03568] Mersalyl	492-18-2	
Mercury and its compounds	[S03574] Mercurobutol	498-73-7	
Mercury and its compounds	[S03577] Methyl mercury dicyandiamide	502-39-6	
Mercury and its compounds	[S03582] Bromomethylmercury	506-83-2	
Mercury and its compounds	[S06939] Mercury chloride	51312-24-4	
Mercury and its compounds	[S06941] Mercury sulfide (Hg2S)	51595-71-2	
Mercury and its compounds	[S06942] Diheptan-1-ylmercury	51622-02-7	
Mercury and its compounds	[S03601] N-(Ethylmercuric)-p-toluenesulphonannilide	517-16-8	
Mercury and its compounds	[S03621] Mercuderamide	525-30-4	

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Substance Group Name	Example Substances	CAS No.	Remarks
Mercury and its compounds	[S06955] Mercury alloy, base, Hg,Ca	53007-72-0	
Mercury and its compounds	[S03631] Mercury(2+), bis(2,4,6-tri-2-pyridinyl-1,3,5-triazine-N1,N2,N6)-, (OC-6-1'2)-	53010-52-9	
Mercury and its compounds	[S06963] Phenylmercuric ammonium acetate	53404-67-4	
Mercury and its compounds	[S06964] Phenylmercuric ammonium propionate	53404-68-5	
Mercury and its compounds	[S06965] Phenylmercuric carbonate	53404-69-6	
Mercury and its compounds	[S06966] Phenylmercuric monoethanol ammonium lactate	53404-70-9	
Mercury and its compounds	[S03648] Mercury, bis(4-methylphenyl)-	537-64-4	
Mercury and its compounds	[S03650] Mercury, chloro(4-methylphenyl)-	539-43-5	
Mercury and its compounds	[S06978] [N-(2-Methylphenyl)benzenesulfoneamidato-N]phenylmercury	54129-03-2	
Mercury and its compounds	[503655] Tetrakis(acetato-O)[.mu.4-(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',4',5',7'-tetrayl)]tetramercury	54295-90-8	
Mercury and its compounds	[S06979] Butan-1-yl(chloro)mercury	543-63-5	
Mercury and its compounds	[S06980] Mercury alloy, base, Hg,Sr	54428-47-6	
Mercury and its compounds	[S03661] Sodium o-(ethylmercurithio)benzoate	54-64-8	
Mercury and its compounds	[S03671] Phenylmercuric nitrate	55-68-5	
Mercury and its compounds	[503672] (2',7'-Dibromo-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'- [9H]xanthen]-4'-yl)hydroxymercury	55728-51-3	
Mercury and its compounds	[S03688] Mercury, phenyl(phenyldiazenecarbothioic acid 2-phenylhydrazidato)-	56724-82-4	
Mercury and its compounds	[S03696] [Benzoato(2-)-C2,O1]mercury	5722-59-8	
Mercury and its compounds	[S03699] Mercury, compound with sodium (4:1)	57363-77-6	
Mercury and its compounds	[S07006] Phenylmercuric monoethanol ammonium acetate	5822-97-9	
Mercury and its compounds	[S03709] Mercuric benzoate	583-15-3	
Mercury and its compounds	[S03711] 2-Hydroxy-5-(1,1,3,3-tetramethylbutyl)phenylmercury acetate	584-18-9	
Mercury and its compounds	[S03712] Disuccinimidomercury	584-43-0	
Mercury and its compounds	[S07009] Mercury alloy, base, Hg,Ba	58570-91-5	
Mercury and its compounds	[S03717] Chloro-2-thienylmercury	5857-39-6	
Mercury and its compounds	[S01338] Diphenyl mercury	587-85-9	
Mercury and its compounds	[S07010] Mercury phenate	588-66-9	
Mercury and its compounds	[S03720] Mercury succinate	589-65-1	
Mercury and its compounds	[S03721] Methyl(pentachlorophenolato)mercury	5902-76-1 591-89-9	
Mercury and its compounds	[S01420] Potassium tetracyanomercurate(II)	591-89-9	
Mercury and its compounds	[S01314] Mercuric cyanide		
Mercury and its compounds	[S03730] Mercury acetate	592-63-2	
Mercury and its compounds	[S01399] Mercuric thiocyanate	592-85-8	
Mercury and its compounds	[S01345] Dimethyl mercury	593-74-8	
Mercury and its compounds	[S03735] Mercury, (acetato-O)[3-(chloromethoxy)propyl-C,O]-	5954-14-3	
Mercury and its compounds	[S03736] Chloro-m-tolylmercury	5955-19-1	
Mercury and its compounds	[S03739] Sodium timerfonate	5964-24-9	
Mercury and its compounds	[S03740] Mercury salicylate	5970-32-1	
Mercury and its compounds	[S03742] Mercurate(1-), (4-carboxylatophenyl)chloro-, hydrogen	59-85-8	
Mercury and its compounds	[S03772] Di-o-tolylmercury	616-99-9	
Mercury and its compounds	[S03780] [(2-Hydroxyethyl)amino]phenylmercury acetate	61792-06-1	
Mercury and its compounds	[S03786] Mercury, chloro(4-hydroxyphenyl)-	623-07-4	
Mercury and its compounds	[S03787] Chlormerodrin	62-37-3	
Mercury and its compounds	[S01263] (Acetato)phenyl mercury	62-38-4	
Mercury and its compounds	[S03795] Cyclohexanebutanoic acid, mercury(2+) salt	62638-02-2	
Mercury and its compounds	[S03796] [.mu[Orthoborato(2-)-O:O']]diphenyldimercury	6273-99-0	
Mercury and its compounds	[S01319] Diethyl mercury	627-44-1	
Mercury and its compounds	[S03798] Mercury, (acetato-O)(4-aminophenyl)-	6283-24-5	
Mercury and its compounds	[S07038] Dipropan-1-ylmercury	628-85-3	
Mercury and its compounds	[S01911] Mercury fulminate	628-86-4	
Mercury and its compounds	[S03800] Mercury, dibutyl-	629-35-6	
Mercury and its compounds	[S03803] Mercurous acetate	631-60-7	
Mercury and its compounds	[503807] Mercurate(2-), tetraiodo-, (T-4)-, dihydrogen, compound with 5-iodo-2- pyridinamine (1:2)	63325-16-6	
Mercury and its compounds	[S03811] Mercury, (acetato-O)(2-hydroxy-5-nitrophenyl)-	63468-53-1	

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- Shindengen Electric Manufacturing Co., Ltd	Prohibited Substances in Products	page 25/68
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Substance Group Name	Example Substances	CAS No.	Remarks
Mercury and its compounds	[S03812] Mercury, bis(acetato-O)(benzenamine)-	63549-47-3	
Mercury and its compounds	[S03823] Mercury gluconate	63937-14-4	
Mercury and its compounds	[S03832] Hydrogen [metasilicato(2-)-0](2-methoxyethyl)mercurate(1-)	64491-92-5	
Mercury and its compounds	[S03834] Mercury distearate, pure	645-99-8	
Mercury and its compounds	[S03883] Bis(trichloromethyl)mercury	6795-81-9	
Mercury and its compounds	[S03910] Mercury, (acetato-O)diamminephenyl-, (T-4)-	68201-97-8	
Mercury and its compounds	[S03945] Mercury acetylide	68833-55-6	
Mercury and its compounds	[S07179] Di-sec-butylmercury	691-88-3	
Mercury and its compounds	[S07193] Slimes and Sludges, chlorine manuf. mercury cell brine treatment	70514-23-7	
Mercury and its compounds	[S04043] Mercury(1+) ethyl sulphate	71720-55-3	
Mercury and its compounds	[S04069] Mercurate(1-), triiodo-, hydrogen, compound with 3-methyl-2(3H)-benzothiazolimine (1:1)	72379-35-2	
Mercury and its compounds	[S07218] Sodium hydroxy(4-sulfonatophenyl)mercurate(1-)	73548-15-9	
Mercury and its compounds	[S02168] Mercury	7439-97-6	
Mercury and its compounds	[S02165] Mercury(II) chloride	7487-94-7	
Mercury and its compounds	[S04152] Mercurous chloride	7546-30-7	
Mercury and its compounds	[S05003] Mercury, (2-mercaptoacetamidato-O,S)methyl	7548-26-7	
Mercury and its compounds	[S01759] Mercury(II)perchlorate	7616-83-3	
Mercury and its compounds	[S04164] Sodium [3-[[(3-carboxylatopropionamido)carbonyl]amino]-2-	7620-30-6	
Mercury and its compounds	methoxypropyl]hydroxymercurate(1-) [S04174] Mercury(2+) (9Z,12Z)-octadeca-9,12-dienoate	7756-49-2	
Mercury and its compounds	[S01667] Mercury iodide	7774-29-0	
Mercury and its compounds	[S07242] Nitric acid, mercury(1+) salt monohydrate	7774-23-0	
Mercury and its compounds	[S04180] Mercurous iodide	7783-30-4	
Mercury and its compounds	[S04181] Mercury diiodate	7783-32-6	
Mercury and its compounds	[S04182] Mercury(II) potassium iodide	7783-33-7	
Mercury and its compounds	[S04183] Mercury (II) nitrate, monohydrate	7783-34-8	
Mercury and its compounds	[S02367] Mercuric sulfate	7783-35-9	
Mercury and its compounds	[S01940] Mercurous sulfate	7783-36-0	
Mercury and its compounds	[S01570] Mercury fluoride	7783-39-3	
Mercury and its compounds	[S02544] Mercury disilver tetraiodide	7784-03-4	
Mercury and its compounds	[S04185] Mercuric arsenate	7784-37-4	
Mercury and its compounds	[S02545] Mercury dichromate	7789-10-8	
Mercury and its compounds	[S01820] Mercuric bromide	7789-47-1	
Mercury and its compounds	[S07259] Dibenzylmercury	780-24-5	
Mercury and its compounds	[S02547] Phenylmercury hydroxidephenylmercury nitrate	8003-05-2	
Mercury and its compounds	[S07265] Mercury alloy, base, Hg 84,K 16	82151-04-0	
Mercury and its compounds	[S04270] Bis(acetato-O)[.mu[1,3-dioxane-2,5-diylbis(methylene)-c:c',O,O']]dimercury	84029-43-6	
Mercury and its compounds	[S07296] Mercurate(1-), [3-(3-carboxylato-2-oxo-2H-1-benzopyran-8-yl)-2-methoxypropyl]hydroxy-, hydrogen	86-36-2	
Mercury and its compounds	[S04337] Mercury, methyl(8-quinolinolato-N1,O8)-	86-85-1	
Mercury and its compounds	[S02529] Chloro(o-hydroxyphenyl)mercury	90-03-9	
Mercury and its compounds	[S04388] Mercury, chloro[2-(2-cyclohexen-1-yl)-3-benzofuranyl]-	90584-88-6	
Mercury and its compounds	[S07315] Slimes and Sludges, alkali metal chloride electrolysis, mercury-free	91081-66-2	
Mercury and its compounds	[S07316] Slimes and Sludges, chlorine manuf. mercury cell process	91081-69-5	
Mercury and its compounds	[S07321] Slimes and Sludges, chlorine manuf. mercury cell brine treatment wastewater	91722-12-2	
Mercury and its compounds	[S07323] Mercury, reaction products with stibnite (Sb2S3)	92200-97-0	
Mercury and its compounds	[S04421] Diiodo(5-iodopyridin-2-amine-N1)mercury	93820-20-3	
Mercury and its compounds	[S04427] [.mu[[4,4'-(Oxydiethylene) bis(dodecenylsuccinato)](2-)]]diphenyldimercury	93882-20-3	
Mercury and its compounds	[S04446] Mercury thallium dinitrate	94022-47-6	
Mercury and its compounds	[S04447] [.mu[(Oxydiethylene but-2-enedioato)(2-)]]diphenyldimercury	94070-92-5	
Mercury and its compounds	[S07349] [mu-[(oxydiethylene phthalato)(2-)]]diphenylmercury	94070-93-6	
Mercury and its compounds	[S07354] Sulfurous acid, mercury(2+) salt (1:1)	94238-21-8	
Mercury and its compounds	[S04468] Bis(5-oxo-DL-prolinato-N1,O2)mercury	94276-38-7	
Mercury and its compounds	[S04469] Hydrogen .muhydroxy[.mu[orthoborato(3-)-0:0']]diphenyldimercurate(1-)	94277-53-9	
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Substance Group Name	Example Substances	CAS No.	Remarks
Mercury and its compounds	[S04473] Bis(5-oxo-L-prolinato-N1,O2)mercury	94481-62-6	
Mercury and its compounds	[S07375] Bis(2,3,4,5,6-pentafluorophenyl)mercury	973-17-1	
olybrominated biphenyls (PBBs)	[S08282] 2,3-Dibromobiphenyl	115245-06-2	
olybrominated biphenyls (PBBs)	[S08283] 2,4,5-Tribromobiphenyl	115245-07-3	
olybrominated biphenyls (PBBs)	[S08284] 3,4,5-Tribromobiphenyl	115245-08-4	
olybrominated biphenyls (PBBs)	[S08285] 2,3,4,5-Tetrabromobiphenyl	115245-09-5	
olybrominated biphenyls (PBBs)	[S08286] 2,3,4,6-Tetrabromobiphenyl	115245-10-8	
olybrominated biphenyls (PBBs)	[S05971] 2,2',3,3',4,6'-Hexabromobiphenyl	119264-50-5	
olybrominated biphenyls (PBBs)	[S05972] 2,2',3,3',5,6'-Hexabromobiphenyl	119264-51-6	
olybrominated biphenyls (PBBs)	[S05973] 2,2',3,4,5',6-Hexabromobiphenyl	119264-52-7	
olybrominated biphenyls (PBBs)	[S05974] 2,2',3,5,5',6-Hexabromobiphenyl	119264-53-8	
olybrominated biphenyls (PBBs)	[S05975] 2,2',3,4,5,5'-Hexabromobiphenyl	120991-47-1	
olybrominated biphenyls (PBBs)	[S05976] 2,3,3',4,5,5'-Hexabromobiphenyl	120991-48-2	
olybrominated biphenyls (PBBs)	[S02870] 1,1'-Biphenyl, 2,2'-dibromo-	13029-09-9	
olybrominated biphenyls (PBBs)	[S02040] Decabromobiphenyl	13654-09-6	
olybrominated biphenyls (PBBs)	[S08287] 2,3',4-Tribromobiphenyl	144978-86-9	
olybrominated biphenyls (PBBs)	[S08288] 2,3,3',4',6-Pentabromobiphenyl	144978-89-2	
olybrominated biphenyls (PBBs)	[S08289] 2,2',4-Tribromobiphenyl	144978-90-5	
olybrominated biphenyls (PBBs)	[S08272] 3,5-Dibromobiphenyl	16372-96-6	
olybrominated biphenyls (PBBs)	[S03150] 1,1'-Biphenyl, 3,3',5,5'-tetrabromo-	16400-50-3	
olybrominated biphenyls (PBBs)	[S03151] 1,1'-Biphenyl, 3,3'-dibromo-	16400-51-4	
olybrominated biphenyls (PBBs)	[S02035] 2-Bromobiphenyl	2052-07-5	
olybrominated biphenyls (PBBs)	[S02036] 3-Bromobiphenyl	2113-57-7	
olybrominated biphenyls (PBBs)	[S08273] Ar,Ar'-Dibromobiphenyl	27479-65-8	
olybrominated biphenyls (PBBs)	[S02043] Nonabromobiphenyl	27753-52-2	
olybrominated biphenyls (PBBs)	[S03366] Octabromobiphenyl	27858-07-7	
olybrominated biphenyls (PBBs)	[S02045] Heptabromobiphenyl	35194-78-6	
olybrominated biphenyls (PBBs)	[S02044] Hexabromo-1,1-biphenyl	36355-01-8	
olybrominated biphenyls (PBBs)	[S05956] 2,2',4,4',5,6'-Hexabromobiphenyl	36402-15-0	
olybrominated biphenyls (PBBs)	[S03507] 1,1'-Biphenyl, 2,3,4,5,6-pentabromo-	38421-62-4	
olybrominated biphenyls (PBBs)	[S02041] Tetrabromobiphenyl	40088-45-7	
olybrominated biphenyls (PBBs)	[S03569] 1,1'-Biphenyl, 2,3'-dibromo-	49602-90-6	
olybrominated biphenyls (PBBs)	[S03570] 1,1'-Biphenyl, 2,4'-dibromo-	49602-91-7	
olybrominated biphenyls (PBBs)	[S08290] 2,2',6-Tribromobiphenyl	507241-82-9	
olybrominated biphenyls (PBBs)	[S08274] Tribromobiphenyl	51202-79-0	
olybrominated biphenyls (PBBs)	[S03645] 1,1'-Biphenyl, 2,4-dibromo-	53592-10-2	
olybrominated biphenyls (PBBs)	[S05957] 2,2',3,3',5,5'-Hexabromobiphenyl	55066-76-7	
olybrominated biphenyls (PBBs)	[S02046] Pentabromobiphenyl	56307-79-0	
olybrominated biphenyls (PBBs)	[S03695] 1,1'-Biphenyl, 3,4'-dibromo-	57186-90-0	
olybrominated biphenyls (PBBs)	[S03701] 1,1'-Biphenyl, 2,5-dibromo-	57422-77-2	
olybrominated biphenyls (PBBs)	[S03722] 1,1'-Biphenyl, 2,6-dibromo-	59080-32-9	
olybrominated biphenyls (PBBs)	[S03723] 1,1'-Biphenyl, 2,4,6-tribromo-	59080-33-0	
olybrominated biphenyls (PBBs)	[S02042] Tribromobiphenyl	59080-34-1	
olybrominated biphenyls (PBBs)	[S03724] 1,1'-Biphenyl, 2,3',5-tribromo-	59080-35-2	
olybrominated biphenyls (PBBs)	[\$03725] 1,1'-Biphenyl, 2,4',5-tribromo-	59080-36-3	
olybrominated biphenyls (PBBs)	[S03726] 1,1'-Biphenyl, 2,2',5,5'-tetrabromo-	59080-37-4	
olybrominated biphenyls (PBBs)	[S03727] 1,1'-Biphenyl, 2,3',4',5-tetrabromo-	59080-38-5	
olybrominated biphenyls (PBBs)	[S03728] 1,1'-Biphenyl, 2,2',4,5',6-pentabromo-	59080-39-6	
olybrominated biphenyls (PBBs)	[S02034] 2,2',4,4',5,5'-Hexabromo-1,1-biphenyl	59080-40-9	
olybrominated biphenyls (PBBs)	[S05958] 2,2',4,4',6,6'-Hexabromobiphenyl	59261-08-4	
olybrominated biphenyls (PBBs)	[S02338] Polybrominated biphenyls	59536-65-1	
		59536-65-1	
olybrominated biphenyls (PBBs)	[S03738] 1,1'-Biphenyl, 3,4,4',5-tetrabromo-	59589-92-3	

Polybrominated biphenyls (PBBs) [S03747] 1,1'-Biphenyl, 2,2',4,5'-tetrabromo-

Polybrominated biphenyls (PBBs) [S03748] 1,1'-Biphenyl, 2,2',5,6'-tetrabromo-

Polybrominated biphenyls (PBBs) [S05959] 3,3',4,4',5,5'-Hexabromobiphenyl

60044-24-8

60044-25-9

60044-26-0

chemical substances restricted by laws and regulations. Not all chemical substances are covered.

<sup>-</sup> All possible efforts have been made to ensure the accuracy of CAS number and other information, but the accuracy of such details is not guaranteed.

<sup>-</sup> The [Sxxxxx (the x's being a 5 digit number)] on example substances are the Shindengen substance management codes.

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and chemical substances restricted by laws and regulations. Not all chemical substances are covered.

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Substance Group Name	Example Substances	CAS No.	Remarks
olybrominated biphenyls (PBBs)	[S03749] 1,1'-Biphenyl, 3,4-dibromo-	60108-72-7	
olybrominated biphenyls (PBBs)	[S02039] Octabromodiphenyl	61288-13-9	
olybrominated biphenyls (PBBs)	[S03828] 1,1'-Biphenyl, 2,4,4',6-tetrabromo-	64258-02-2	
olybrominated biphenyls (PBBs)	[S03829] 1,1'-Biphenyl, 2,4',6-tribromo-	64258-03-3	
olybrominated biphenyls (PBBs)	[S08270] 2,4,4'-Tribromobiphenyl	6430-90-6	
olybrominated biphenyls (PBBs)	[S03852] 1,1'-Biphenyl, 2,2',4,4'-tetrabromo-	66115-57-9	
olybrominated biphenyls (PBBs)	[S08271] 3,4,4'-Tribromobiphenyl	6683-35-8	
olybrominated biphenyls (PBBs)	[S02345] Firemaster FF-1	67774-32-7	
lybrominated biphenyls (PBBs)	[S03871] 1,1'-Biphenyl, 2,2',4,5,5'-pentabromo-	67888-96-4	
olybrominated biphenyls (PBBs)	[S08275] 2,3',4,4',5-Pentabromobiphenyl	67888-97-5	
olybrominated biphenyls (PBBs)	[S05960] 2,2',3,4,4',5'-Hexabromobiphenyl	67888-98-6	
olybrominated biphenyls (PBBs)	[S05961] 2,3,4,4',5,5'-Hexabromobiphenyl	67888-99-7	
olybrominated biphenyls (PBBs)	[S05962] 2,2',3,4',5',6-Hexabromobiphenyl	69278-59-7	
lybrominated biphenyls (PBBs)	[S08276] 3,4',5-Tribromobiphenyl	72416-87-6	
olybrominated biphenyls (PBBs)	[S04102] 1,1'-Biphenyl, 2,2',3,4',5'-pentabromo-	73141-48-7	
olybrominated biphenyls (PBBs)	[S04129] 1,1'-Biphenyl, 2',3,4,4',5-pentabromo-	74114-77-5	
olybrominated biphenyls (PBBs)	[S04168] 1,1'-Biphenyl, 3,3',4,4'-tetrabromo-	77102-82-0	
olybrominated biphenyls (PBBs)	[S05963] 2,3,3',4,4',5-Hexabromobiphenyl	77607-09-1	
olybrominated biphenyls (PBBs)	[S04198] 1,1'-Biphenyl, 2,2',3,4,6-pentabromo-	77910-04-4	
olybrominated biphenyls (PBBs)	[S04215] 1,1'-Biphenyl, 2,2',4,5,6'-pentabromo-	80274-92-6	
olybrominated biphenyls (PBBs)	[S08277] 2,3',4,5,5'-Pentabromobiphenyl	80407-70-1	
olybrominated biphenyls (PBBs)	[S05964] 2,2',3,4,4',5-Hexabromobiphenyl	81381-52-4	
olybrominated biphenyls (PBBs)	[S04222] 1,1'-Biphenyl, 2,2',4,4',5-pentabromo-	81397-99-1	
olybrominated biphenyls (PBBs)	[S08278] 3,3',4,5,5'-Pentabromobiphenyl	81902-33-2	
olybrominated biphenyls (PBBs)	[S05965] 2,2',3,3',4,4'-Hexabromobiphenyl	82865-89-2	
olybrominated biphenyls (PBBs)	[S05966] 2,2',3,3',4,5'-Hexabromobiphenyl	82865-90-5	
olybrominated biphenyls (PBBs)	[S05967] 2,3,3',4',5',6-Hexabromobiphenyl	82865-91-6	
olybrominated biphenyls (PBBs)	[S04286] 1,1'-Biphenyl, 2,3',4,4'-tetrabromo-	84303-45-7	
olybrominated biphenyls (PBBs)	[S08279] 3,3',4,4',5-Pentabromobiphenyl	84303-46-8	
olybrominated biphenyls (PBBs)	[S05968] 2,3,3',4,4',5'-Hexabromobiphenyl	84303-47-9	
olybrominated biphenyls (PBBs)	[S05969] 2,3,4,4',5',6-Hexabromobiphenyl	84303-48-0	
olybrominated biphenyls (PBBs)	[S08280] 2,3',4,4',6-Pentabromobiphenyl	86029-64-3	
olybrominated biphenyls (PBBs)	[S04340] 1,1'-Biphenyl, 2,2',3,5',6-pentabromo-	88700-05-4	
olybrominated biphenyls (PBBs)	[S02038] 4-Bromobiphenyl	92-66-0	
olybrominated biphenyls (PBBs)	[S02037] 4,4'-Dibromodiphenyl	92-86-4	
olybrominated biphenyls (PBBs)	[S05970] 2,2',3,4',6,6'-Hexabromobiphenyl	93261-83-7	
olybrominated biphenyls (PBBs)	[S04483] 1,1'-Biphenyl, 2,3,4,4',5-pentabromo-	96551-70-1	
olybrominated biphenyls (PBBs)	[S04484] 1,1'-Biphenyl, 2,2',4,6'-tetrabromo-	97038-95-4	
olybrominated biphenyls (PBBs) olybrominated biphenyls (PBBs)	[S04485] 1,1'-Biphenyl, 2,2',6,6'-tetrabromo- [S04486] 1,1'-Biphenyl, 2,2',4,4',6-pentabromo-	97038-96-5 97038-97-6	
olybrominated biphenyls (PBBs)	[S04487] 1,1-Biphenyl, 2,2,4,4,6-pentabromo-	97038-97-6	
olybrominated biphenyls (PBBs)	[S08281] 2,3,3',4-Tetrabromobiphenyl	97038-99-8	
olybrominated biphenyls (PBBs)	[S04488] 1,1'-Biphenyl, 2,2',4,6,6'-pentabromo-	97063-75-7	
olybrominated diphenyl ethers	[S02025] PBDEs	97003-73-7	
BDEs)	[S02024] 4-Bromophenyl phenyl ether	101-55-3	
BDEs)			
blybrominated diphenyl ethers BDEs)	[S05979] Benzene, 1,1'-oxybis[3,5-dibromo-	103173-66-6	EVILIC
blybrominated diphenyl ethers BDEs)	[S02027] Decabromodiphenyl ether		SVHC c/19/2012)
blybrominated diphenyl ethers BDEs)	[505985] -	116995-32-5	
olybrominated diphenyl ethers BDEs)	[S05984] Benzene, 1,2,4,5-tetrabromo-3-(2,4-dibromophenoxy)-	116995-33-6	
olybrominated diphenyl ethers	[\$05986] -	117948-63-7	

- A list of examples of chemical substances which have been used electrical and electronic equipment and
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(PBDEs)

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- Shindengen Electric Manufacturing Co., Ltd. -

Prohibited Substances in Products

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Substance Group Name	Example Substances	CAS No.	Remarks
Polybrominated diphenyl ethers [PBDEs]	[505981] -	189084-65-9	
Polybrominated diphenyl ethers (PBDEs)	[S02023] 4,4'-Dibromodiphenyl ether	2050-47-7	
Polybrominated diphenyl ethers PBDEs)	[S04880] 2,2',4,4',5,6'-Hexabromodiphenyl ether	207122-15-4	
Polybrominated diphenyl ethers (PBDEs)	[S04882] 2,2',3,4,4',5',6-Heptabromodiphenyl ether	207122-16-5	
Polybrominated diphenyl ethers (PBDEs)	[S05982] Benzene, 1,1'-oxybis[tribromo-	31153-30-7	
Polybrominated diphenyl ethers (PBDEs)	[S02033] Pentabromobiphenyl ether	32534-81-9	
Polybrominated diphenyl ethers (PBDEs)	[S02026] Octabromodiphenyl ether	32536-52-0	
Polybrominated diphenyl ethers (PBDEs)	[505983] -	35854-94-5	
Polybrominated diphenyl ethers (PBDEs)	[S02031] Hexabromodiphenyl ether	36483-60-0	
Polybrominated diphenyl ethers [PBDEs]	[S02028] Tetrabromodiphenyl ether	40088-47-9	
Polybrominated diphenyl ethers (PBDEs)	[S04881] 2,2',3,3',4,5',6-Heptabromodiphenyl ether	446255-22-7	
Polybrominated diphenyl ethers (PBDEs)	[S02029] Tribromobiphenyl ether	49690-94-0	
Polybrominated diphenyl ethers PBDEs)	[S05977] Benzene, 1,1'-oxybis[2,4-dibromo-	5436-43-1	
Polybrominated diphenyl ethers PBDEs)	[S05980] 2,2',4,4',5-Pentabromodiphenyl ether	60348-60-9	
Polybrominated diphenyl ethers (PBDEs)	[S02030] Nonabromobiphenyl ether	63936-56-1	
Polybrominated diphenyl ethers (PBDEs)	[S04879] 2,2',4,4',5,5'-Hexabromodiphenyl ether	68631-49-2	
Polybrominated diphenyl ethers (PBDEs)	[S02032] Heptabromobiphenyl ether	68928-80-3	
Polybrominated diphenyl ethers (PBDEs)	[S05978] Benzene, 1,1'-oxybis[3,4-dibromo-	93703-48-1	
Prohibited Phthalates (RoHS Directive)	[S02233] Bis(2-ethylhexyl)phthalate(DEHP)	117-81-7	To be applied starting from April 1, 2017 (Prohibited substances). 1st SVHC (Oct./2/2008), 12th SVHC (Dec./17/2014)
Prohibited Phthalates (RoHS Directive)	[S01531] Diisobutyl phthalate (DIBP)	84-69-5	To be applied starting from April 1, 2017 (Prohibited substances). 2nd SVHC (Jan/13/2010)
Prohibited Phthalates (RoHS Directive)	[S02380] Dibutyl phthalate	84-74-2	To be applied starting from April 1, 2017 (Prohibited substances). 1st SVHC (Oct/28/2008)

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and chemical substances restricted by laws and regulations. Not all chemical substances are covered.

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<sup>-</sup> The [Sxxxxx (the x's being a 5 digit number)] on example substances are the Shindengen substance management codes.

- Shindengen Electric Manufacturing Co., Ltd	Prohibited Substances in Products	page 29/68
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Substance Group Name	Example Substances	CAS No.	Remarks
Prohibited Phthalates (RoHS Directive)	[S02382] Butyl benzyl phthalate(BBP)	85-68-7	To be applied starting from April 1, 2017 (Prohibited substances). 1st SVHC (Oct/28/2008)
CFC)	[S06040] Dichlorotetrafluoroethane; CFC-114	-	
Ozone Depleting Substances (A-I, CFC)	[S06083] Trichlorotrifluoroethane; CFC-113	-	
Ozone Depleting Substances (A-I, CFC)	[S02892] dichlorotetrafluoroethane	1320-37-2	
Ozone Depleting Substances (A-I, CFC)	[S05030] Trichlorotrifluoroethane	26523-64-8	
Ozone Depleting Substances (A-I, CFC)	[S00114] Trichlorotrifluoroethane(CFC-113)	354-58-5	
Ozone Depleting Substances (A-I, CFC)	[S04930] 1,1-Dichloro-1,2,2,2-tetrafluorethane (CFC-114)	374-07-2	
Ozone Depleting Substances (A-I, CFC)	[S00119] Trichlorofluoromethane	75-69-4	
Ozone Depleting Substances (A-I, CFC)	[S00082] Dichlorodifluoromethane(CFC-12)	75-71-8	
Ozone Depleting Substances (A-I, CFC)	[S02359] Trichlorotrifluoroethane; CFC-113	76-13-1	
Ozone Depleting Substances (A-I, CFC)	[S00083] Dichlorotetrafluoroethane(CFC-114)	76-14-2	
Ozone Depleting Substances (A-I, CFC)	[S02360] Monochloropentafluoroethane(CFC-115)	76-15-3	
Ozone Depleting Substances (A-II, Halon)	[S06055] Dibromotetrafluoroethane; halone-2402	-	
Ozone Depleting Substances (A-II, Halon)	[S00094] Dibromotetrafluoroethane(Halon2402)	124-73-2	
Ozone Depleting Substances (A-II, Halon)	[S03307] Dibromotetrafluoroethane	25497-30-7	
Ozone Depleting Substances (A-II, Halon)	[S03350] 1,1-Dibromo-1,2,2,2-tetrafluoroethane	27336-23-8	
Ozone Depleting Substances (A-II, Halon)	[S00128] Bromochlorodifluoromethane(Halon1211)	353-59-3	
Ozone Depleting Substances (A-II, Halon)	[S00137] Bromotrifluoromethane(Halon1301)	75-63-8	
Ozone Depleting Substances (B-I, CFC)	[S09118] 1,1,1,3-Tetrachloro-2,2,3,3-tetrafluoropropane	-	
Ozone Depleting Substances (B-I, CFC)	[S09109] 1,1,2-Trichloropentafluoropropane	-	
Ozone Depleting Substances (B-I, CFC)	[S09105] 1,1,3-Trichloropentafluoropropane	-	
Ozone Depleting Substances (B-I, CFC)	[S09119] Hexachlorodifluoropropane	-	
Ozone Depleting Substances (B-I, CFC)	[S06074] Tetrachlorodifluoroethane; CFC-112	-	
Ozone Depleting Substances (B-I, CFC)	[S00150] Pentachlorotrifluoropropane (CFC-213)	134237-31-3	
Ozone Depleting Substances (B-I, CFC)	[S02917] Hexachlorodifluoropropane	134452-44-1	
Ozone Depleting Substances (B-I, CFC)	[S00148] Heptachlorofluoropropane(CFC-211)	135401-87-5	
,	[S00120] 1,2,2-Trichloro-1,1,3,3,3-pentafluoropropane (CFC-21	5) 1599-41-3	
	[S08817] 1,1,3-Trichloro-1,2,2,3,3-pentafluoropropane	1652-81-9	
	[S00032] 1,1,1,3-Tetrachlorotetrafluoropropane	2268-46-4	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

Prohibited Substances in Products page 30/68

Shindengen Electric Manufac	turing Co., Ltd Pro	phibited Substances in Products	page 30/68
Substance Group Name	Example Substances	CAS No.	Remarks
Ozone Depleting Substances (B-I, CFC)	[S00031] 1,1,1,3,3-Pentachloro-2,2,3-trifluoropropane(CFC-213)	2354-06-5	
Ozone Depleting Substances (B-I, CFC)	[S01416] Tetrachlorodifluoroethane; CFC-112a	28605-74-5	
Ozone Depleting Substances (B-I, CFC)	[S00104] Tetrachlorotetrafluoropropane (CFC-214)	29255-31-0	
Ozone Depleting Substances (B-I, CFC)	[S00144] 1,1,1,3,3,3-Hexachloro-2,2-difluoropropane (CFC-212)	3182-26-1	
Ozone Depleting Substances (B-I, CFC)	[S00151] 1,1,1,2,2-Pentachloro-2-fluoroethane (CFC-111)	354-56-3	
Ozone Depleting Substances (B-I, CFC)	[S00147] 1-Fluoroheptachloropropane(CFC-211)	422-78-6	
Ozone Depleting Substances (B-I, CFC)	[S07468] 1,1,1,2,3,3,3-Heptachloro-2-fluoropropane (CFC-211ba)	422-81-1	
Ozone Depleting Substances (B-I, CFC)	[S00155] 1-Chloro-1,1,2,2,3,3,3-heptafluoropropane(CFC-217)	422-86-6	
Ozone Depleting Substances (B-I, CFC)	[S09106] Dichloro(hexafluoro)propane	42560-98-5	
Ozone Depleting Substances (B-I, CFC)	[S00035] 1,1,1-Trichloropentafluoropropane	4259-43-2	
Ozone Depleting Substances (B-I, CFC)	[S00090] 1,2-Dichloro-1,1,2,3,3,3-hexafluoropropane (CFC-216)	661-97-2	
Ozone Depleting Substances (B-I, CFC)	[S02358] Chlorotrifluoromethane (CFC-13)	75-72-9	
Ozone Depleting Substances (B-I, CFC)	[S04929] 1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	
Dzone Depleting Substances (B-I, CFC)	[S00102] 1,1,2,2-Tetrachloro-1,2-difluoroethane (CFC-112)	76-12-0	
Dzone Depleting Substances (B-I, CFC)	[S00045] 1,2,3-Trichloropentafluoropropane	76-17-5	
Ozone Depleting Substances (B-I, CFC)	[S08870] Propane, 1,1,2-trichloro-1,2,3,3,3-pentafluoro-	812-30-6	
Dzone Depleting Substances (B-II, Carbon tetrachloride)	[S00156] Carbon tetrachloride (Tetrachloromethane)	56-23-5	
Ozone Depleting Substances (B- III, Trichloroethane)	[502350] 1,1,1,-Trichloroethane(methylchloroform) and its isomers (extrichloroethane)	ccept 1,1,2- 71-55-6	
Ozone Depleting Substances (C-I,	[S06015] Chlorotrifluoroethane; HCFC-133	-	
Ozone Depleting Substances (C-I,	[S06047] Dichloropentafluoropropane; HCFC-225	-	
Ozone Depleting Substances (C-I,	[S09121] Heptachlorofluoropropane	-	
Ozone Depleting Substances (C-I,	[S09113] Trichlorodifluoroethane	-	
Ozone Depleting Substances (C-I, HCFC)	[S00064] 2-Chloro-1,3-difluoropropane	102738-79-4	
Ozone Depleting Substances (C-I, HCFC)	[S04978] Chloropentafluoropropane	108662-83-5	
Ozone Depleting Substances (C-I, HCFC)	[S04977] Chloroofluoroethane	110587-14-9	
Ozone Depleting Substances (C-I,	[S00040] 1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb)	111512-56-2	
Dzone Depleting Substances (C-I,	[S05011] Pentachlorodifluoropropane	116867-32-4	
Dzone Depleting Substances (C-I,	[S04991] Dichlorotrifluoropropane	116890-51-8	
Ozone Depleting Substances (C-I,	[S04990] Dichlorofluoropropane	127404-11-9	
Dzone Depleting Substances (C-I,	[S08792] Tetrachloro(difluoro)propane	127564-82-3	
Ozone Depleting Substances (C-I,	[S00084] Dichlorotetrafluoropropane(HCFC-234)	127564-83-4	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and chemical substances restricted by laws and regulations. Not all chemical substances are covered.

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Substance Group Name	Example Substances	CAS No.	Remarks
Ozone Depleting Substances (C-I, HCFC)	[S08793] Trichloro(difluoro)propane	127564-90-3	
Ozone Depleting Substances (C-I, HCFC)	[S08794] Trichloro(tetrafluoro)propane	127564-91-4	
Ozone Depleting Substances (C-I, HCFC)	[S00091] Dichloropentafluoropropane,(Ethyne,fluoro-)(HCFC-225)	127564-92-5	
Ozone Depleting Substances (C-I, HCFC)	[S00059] 2,2-Dichloro-1,1,1,3,3-pentafluoropropane(HCFC-225aa)	128903-21-9	
Ozone Depleting Substances (C-I, HCFC)	[S02262] Chlorotrifluoroethane(HCFC-133)	1330-45-6	
Ozone Depleting Substances (C-I, HCFC)	[S00152] Pentachlorofluoropropane(HCFC-231)	134190-48-0	
Ozone Depleting Substances (C-I, HCFC)	[S00106] Tetrachlorofluoropropane(HCFC-241)	134190-49-1	
Ozone Depleting Substances (C-I, HCFC)	[S00073] Chlorotetrafluoropropane(HCFC-244)	134190-50-4	
Ozone Depleting Substances (C-I, HCFC)	[S00118] Trichlorofluoropropane(HCFC-251)	134190-51-5	
Ozone Depleting Substances (C-I, HCFC)	[S00081] Dichlorodifluoropropane(HCFC-252)	134190-52-6	
Ozone Depleting Substances (C-I, HCFC)	[S00070] Chlorodifluoropropane(HCFC-262)	134190-53-7	
Ozone Depleting Substances (C-I, HCFC)	[S00075] Chlorofluoropropane(HCFC-271)	134190-54-8	
Ozone Depleting Substances (C-I, HCFC)	[S02270] 1,1,2,2-Tetrachloro-1-fluoroethane(HCFC-121)	134237-32-4	
Ozone Depleting Substances (C-I, HCFC)	[S09115] 1,2,2-Trichloro-1,1-difluoroethane	134237-33-5	
Ozone Depleting Substances (C-I, HCFC)	[S00116] 1,1,2-Trichloro-2-fluoroethane(HCFC-131)	134237-34-6	
Ozone Depleting Substances (C-I, HCFC)	[S00145] Hexachlorofluoropropane(HCFC-221)	134237-35-7	
Ozone Depleting Substances (C-I, HCFC)	[S00149] Pentachlorodifluoropropane(HCFC-222)	134237-36-8	
Ozone Depleting Substances (C-I, HCFC)	[S00105] Tetrachlorotrifluoropropane(HCFC-223)	134237-37-9	
Ozone Depleting Substances (C-I, HCFC)	[S00113] 1,3,3-Trichloro-1,1,2,2-tetrafluoropropane(HCFC-224)	134237-38-0	
Ozone Depleting Substances (C-I, HCFC)	[S00103] Tetrachlorodifluoropropane(HCFC-232)	134237-39-1	
Ozone Depleting Substances (C-I, HCFC)	[S00115] Trichlorotrifluoropropane(HCFC-233)	134237-40-4	
Ozone Depleting Substances (C-I, HCFC)	[S00078] Chloropentafluoropropane(HCFC-235)	134237-41-5	
Ozone Depleting Substances (C-I, HCFC)	[S00112] Trichlorodifluoropropane(HCFC-242)	134237-42-6	
Ozone Depleting Substances (C-I, HCFC)	[S00086] Dichlorotrifluoropropane(HCFC-243)	134237-43-7	
Ozone Depleting Substances (C-I, HCFC)	[S00074] Chlorotrifluoropropane(HCFC-253)	134237-44-8	
Ozone Depleting Substances (C-I, HCFC)	[S00088] Dichlorofluoropropane(HCFC-261)	134237-45-9	
Ozone Depleting Substances (C-I, HCFC)	[S00077] 2-Chloro-1,1,1,3,3,3-hexafluoropropane(HCFC-226)	134308-72-8	
Ozone Depleting Substances (C-I, HCFC)	[S00038] 1,1-Dichloro-1,2,2,3,3-pentafluoropropane(HCFC-225cc)	13474-88-9	
Ozone Depleting Substances (C-I, HCFC)	[S00053] 1,3-Dichloro-1,1,2,3,3-pentafluoropropane(HCFC-225ea)	136013-79-1	
Ozone Depleting Substances (C-I, HCFC)	[S00057] 1-Chloro-1-fluoroethane(HCFC-151)	1615-75-4	
Ozone Depleting Substances (C-I, HCFC)	[S00049] 1,2-Dichloro-1,1-difluoroethane(HCFC-132b)	1649-08-7	
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<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

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- Shindengen Electric Manufac	dengen Electric Manufacturing Co., Ltd Prohibited Substances in Products		Prohibited Substances in Products page 32/68	
Substance Group Name	Example Substances	CAS No.	Remarks	
Ozone Depleting Substances (C-I, HCFC)	[S02296] 1,1-Dichloro-1-fluoroethane(HCFC-141b)	1717-00-6		
Ozone Depleting Substances (C-I, HCFC)	[S00041] 1,1-Dichloro-1,2-difluoroethane(HCFC-132c)	1842-05-3		
Ozone Depleting Substances (C-I, HCFC)	[503269] 1-Chloro-1-fluoroethylene (HCFC-1131a)	2317-91-1		
Ozone Depleting Substances (C-I, HCFC)	[S03275] Ethane, 1,1,1-trichloro-2-fluoro-	2366-36-1		
Ozone Depleting Substances (C-I, HCFC)	[S00087] Dichlorofluoroethane(HCFC-141)	25167-88-8		
Ozone Depleting Substances (C-I, HCFC)	[S02307] Chlorodifluoroethane(HCFC-142)	25497-29-4		
Ozone Depleting Substances (C-I, HCFC)	[S00080] Dichlorodifluoroethane(HCFC-132)	25915-78-0		
Ozone Depleting Substances (C-I, HCFC)	[S04980] Chlorotrifluoropropane (HCFC-253)	26588-23-8		
Ozone Depleting Substances (C-I, HCFC)	[S00117] Trichlorofluoroethane(HCFC-131)	27154-33-2		
Ozone Depleting Substances (C-I, HCFC)	[S02312] 2-Chloro-1,1,1,2-tetrafluoroethane; HCFC-124	2837-89-0		
Ozone Depleting Substances (C-I, HCFC)	[S04976] Chlorohexafluoropropane (HCFC-226)	28987-04-4		
Ozone Depleting Substances (C-I, HCFC)	[S07439] Hexachlorofluoropropane (HCFC-221)	29470-94-8		
Ozone Depleting Substances (C-I, HCFC)	[S08842] Propane, tetrachlorotrifluoro-	29470-95-9		
Ozone Depleting Substances (C-I, HCFC)	[S00060] 2,2-Dichloro-1,1,1-trifluoroethane	306-83-2		
Ozone Depleting Substances (C-I, HCFC)	[S03436] Ethane, 1-chloro-1,2-difluoro-	338-64-7		
Ozone Depleting Substances (C-I, HCFC)	[503437] 2-Chloro-1,1-difluoroethane	338-65-8		
Ozone Depleting Substances (C-I, HCFC)	[S00062] 2,3-Dichloro-1,1,1-trifluoropropane	338-75-0		
Ozone Depleting Substances (C-I, HCFC)	[S00085] Dichlorotrifluoroethane(HCFC-123)	34077-87-7		
Ozone Depleting Substances (C-I, HCFC)	[S00030] 1,1,1,2-Tetrachloro-2-fluoroethane(HCFC-121a)	354-11-0		
Ozone Depleting Substances (C-I, HCFC)	[S07449] 1,1,1-Trichloro-2,2-difluoroethane (HCFC-122b)	354-12-1		
Ozone Depleting Substances (C-I, HCFC)	[S00036] 1,1,2,2-Tetracloro-1-fluoroethane	354-14-3		
Ozone Depleting Substances (C-I, HCFC)	[S03462] Ethane, 1,2-difluoro-1,1,2-trichloro-	354-15-4		
Ozone Depleting Substances (C-I, HCFC)	[S00044] 1,2,2-Trichloro-1,1-difluoroethane	354-21-2		
Ozone Depleting Substances (C-I, HCFC)	[S00047] 1,2-Dichloro-1,1,2-trifluoroethane(HCFC-123a)	354-23-4		
Ozone Depleting Substances (C-I, HCFC)	[S00054] 1-Chloro-1,1,2,2-tetrafluoroethane(HCFC-124a)	354-25-6		
Ozone Depleting Substances (C-I, HCFC)	[S00058] 1-Fluoro-1,2,2-trichloroethane	359-28-4		
Ozone Depleting Substances (C-I, HCFC)	[S00111] Trichlorodifluoroethane(HCFC-122)	41834-16-6		
Ozone Depleting Substances (C-I, HCFC)	[S00065] 2-Chloro-2-fluoropropane	420-44-0		
Ozone Depleting Substances (C-I, HCFC)	[S07455] 1,2-Dichloro-2-fluoropropane	420-97-3		
Ozone Depleting Substances (C-I, HCFC)	[S07456] 1-Chloro-2,2-difluoropropane (HCFC-262ca)	420-99-5		
Ozone Depleting Substances (C-I, HCFC)	[S07457] 1-Chloro-1,1-difluoropropane (HCFC-262fc)	421-02-3		

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- Shindengen Electric Manufacturing Co., Ltd	Prohibited Substances in Products	page 33/68
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Substance Group Name		Example Substances	CAS No.	Remarks
Ozone Depleting Substances (C-I, HCFC)	[S04933] 1-chloro-	1,1,2-trifluoroethane	421-04-5	
Ozone Depleting Substances (C-I, HCFC)	[S08306] Propane,	1,1,2-trichloro-1-fluoro-	421-41-0	
Ozone Depleting Substances (C-I, HCFC)	[S07458] 1-Chloro-	1,1,2,2-tetrafluoropropane (HCFC-244cc)	421-75-0	
Ozone Depleting Substances (C-I, HCFC)	[S07459] 1,1,1,2,3-	pentachloro-2-fluoro-propane (HCFC-231bb)	421-94-3	
Ozone Depleting Substances (C-I, HCFC)	[S07460] 1,1,1,2,2,	3-Hexachloro-3-fluoropropane (HCFC-221ab)	422-26-4	
Ozone Depleting Substances (C-I, HCFC)	[S07461] 1,2,2,3,3-	pentachloro-1,1-difluoropropane (HCFC-222aa)	422-30-0	
Ozone Depleting Substances (C-I, HCFC)	[S00046] 1,2-Dichle	oro-1,1,2,3,3-pentafluoropropane(HCFC-225bb)	422-44-6	
Ozone Depleting Substances (C-I, HCFC)	[S00061] 2,3-Dichle	oro-1,1,1,2,3-pentafluoropropane(HCFC-225ba)	422-48-0	
Ozone Depleting Substances (C-I, HCFC)	[S07462] 1,1,1,3,3-	pentachloro-2,2-difluoropropane (HCFC-222ca)	422-49-1	
Ozone Depleting Substances (C-I, HCFC)	[S07463] 1,1,1,3-Te	etrachloro-2,2,3-trifluoropropane (HCFC-223cb)	422-50-4	
Ozone Depleting Substances (C-I, HCFC)	[S07464] 1,1,1-Tric	hloro-2,2,3,3-tetrafluoropropane	422-51-5	
Ozone Depleting Substances (C-I, HCFC)	[S07465] 1,1,3,3-Te	etrachloro-1,2,2-trifluoropropane (HCFC-223ca)	422-52-6	
Ozone Depleting Substances (C-I, HCFC)	[S07466] 1,1,3-Tric	hloro-1,2,2,3-tetrafluoropropane (HCFC-224cb)	422-53-7	
Ozone Depleting Substances (C-I, HCFC)	[S07467] 1,3,3-Tric	hloro-1,1,2,2-tetrafluoropropane	422-54-8	
Ozone Depleting Substances (C-I, HCFC)	[S09131] 1-Chloro-	1,1,2,2,3,3-hexafluoropropane	422-55-9	
Ozone Depleting Substances (C-I, HCFC)	[S00066] 3,3-Dichle	oro-1,1,1,2,2-pentafluoropropane(HCFC-225ca)	422-56-0	
Ozone Depleting Substances (C-I, HCFC)	[S09132] 3-Chloro-	1,1,1,2,2,3-hexafluoropropane	422-57-1	
Ozone Depleting Substances (C-I, HCFC)	[S07470] 1,2-Dichle	oro-1,2,3,3-tetrafluoropropane (HCFC-234db)	425-94-5	
Ozone Depleting Substances (C-I, HCFC)	[S04931] 1,1-Dichle	oro-2-fluoroethane; Freon-141a	430-53-5	
Ozone Depleting Substances (C-I, HCFC)	[S07471] 1-Chloro-	1-fluoropropane (HCFC-271fb)	430-55-7	
Ozone Depleting Substances (C-I, HCFC)	[S00051] 1,2-Dichle	oro-1-fluoroethane	430-57-9	
Ozone Depleting Substances (C-I, HCFC)	[S00050] 1,2-Dichle	oro-1,2-difluoroethane	431-06-1	
Ozone Depleting Substances (C-I, HCFC)	[S04934] 1-chloro-	1,2,2-trifluoroethane	431-07-2	
Ozone Depleting Substances (C-I, HCFC)	[S00048] 1,2-Dichle	oro-1,1,3,3,3-pentafluoropropane(HCFC-225da)	431-86-7	
Ozone Depleting Substances (C-I, HCFC)	[S07472] 2-Chloro-	1,1,1,3,3,3-hexafluoropropane	431-87-8	
Ozone Depleting Substances (C-I, HCFC)	[S00068] 3-Chloro-	1,1,1-trifluoropropane(HCFC-253fb)	460-35-5	
Ozone Depleting Substances (C-I, HCFC)	[S07474] 1,3,3,Tric	hloro-1,1-difluoropropane (HCFC-242fa)	460-63-9	
Ozone Depleting Substances (C-I, HCFC)	[S00067] 3,3-Dichle	oro-1,1,1-trifluoropropane	460-69-5	
Ozone Depleting Substances (C-I, HCFC)	[S07475] 1,1,1,3-Te	etrachloro-3,3-difluoropropane (HCFC-232fc)	460-89-9	
Ozone Depleting Substances (C-I, HCFC)	[S00055] 1-Chloro-	1,1,3,3,3-pentafluoropropane	460-92-4	
Ozone Depleting Substances (C-I, HCFC)	[S00043] 1,1-Dichle	oro-2,2-difluoroethane	471-43-2	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

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Substance Group Name	Example Substances	CAS No.	Remarks
Ozone Depleting Substances (C-I, HCFC)	[S00052] 1,3-Dichloro-1,1,2,2,3-pentafluoropropane(HCFC-225cb)	507-55-1	
Ozone Depleting Substances (C-I, HCFC)	[S03678] Chloro-1,1-difluoroethane	55949-44-5	
Ozone Depleting Substances (C-I, HCFC)	[S00076] Chlorofluoromethane(HCFC-31)	593-70-4	
Ozone Depleting Substances (C-I, HCFC)	[S08860] Propane, trichlorotrifluoro-	61623-04-9	
Ozone Depleting Substances (C-I, HCFC)	[S00072] Chlorotetrafluoroethane(HCFC-124)	63938-10-3	
Ozone Depleting Substances (C-I, HCFC)	[S07491] 1,1,2,3-Tetrachloro-1-fluoropropane (HCFC-241db)	666-27-3	
Ozone Depleting Substances (C-I, HCFC)	[S00069] 3-Chloro-1,1,2,2-tetrafluoropropane (HCFC-244ca)	679-85-6	
Ozone Depleting Substances (C-I, HCFC)	[S00034] 1,1,1-Trichloro-3,3,3-trifluoropropane	7125-83-9	
Ozone Depleting Substances (C-I, HCFC)	[S00039] 1,1-Dichloro-1,2,2-trifluoropropane	7125-99-7	
Ozone Depleting Substances (C-I, HCFC)	[S00089] Dichlorofluoromethane(HCFC-21)	75-43-4	
Ozone Depleting Substances (C-I, HCFC)	[S00071] Chlorodifluoromethane(HCFC-22)	75-45-6	
Ozone Depleting Substances (C-I, HCFC)	[S00056] 1-Chloro-1,1-difluoroethane(HCFC-142b)	75-68-3	
Ozone Depleting Substances (C-I, HCFC)	[S00063] 2-Chloro-1,1,1-trifluoroethane(HCFC-133a)	75-88-7	
Ozone Depleting Substances (C-I, HCFC)	[S07515] 1-Chloro-2-fluoroethane	762-50-5	
Ozone Depleting Substances (C-I, HCFC)	[S00042] 1,1-Dichloro-1-fluoropropane	7799-56-6	
Ozone Depleting Substances (C-I, HCFC)	[S00033] 1,1,1-Trichloro-2-fluoroethane(HCFC-131b)	811-95-0	
Ozone Depleting Substances (C-I, HCFC)	[S02379] 1,1-Dichloro-1,2,2-trifluoroethane(HCFC-123b)	812-04-4	
Ozone Depleting Substances (C-I, HCFC)	[S00037] 1,1,3-Trichloro-1-fluoropropane	818-99-5	
Ozone Depleting Substances (C-I, HCFC)	[S07517] 1,3-Dicloro-1,1-difluoropropane (HCFC-252fb)	819-00-1	
Ozone Depleting Substances (C-I, HCFC)	[S00079] Dichloro-1,1,2-trifluoroethane	90454-18-5	
Ozone Depleting Substances (C-II, HBFC)	[S09110] Bromodifluoroethane	-	
Ozone Depleting Substances (C-II, HBFC)	[S00131] Bromodifluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S09112] Bromofluoroethane	-	
Ozone Depleting Substances (C-II, HBFC)	[S09130] Bromofluoropropane	-	
	[S09134] Bromohexafluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S09122] BromopentafluoroPropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S09116] Bromotetrafluoroethane	-	
•	[S09125] Bromotetrafluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S09108] Bromotrifluoroethane	-	
,	[S09127] Bromotrifluoropropane	-	
-,	[S09107] Dibromodifluoroethane	-	

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- Shindengen Electric Manufac	turing Co., Ltd	Prohibited Substances in Products	page 35/68
Substance Group Name	Example Substances	CAS No.	Remarks
Ozone Depleting Substances (C-II, HBFC)	[S09126] Dibromodifluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S09111] Dibromofluoroethane	-	
Ozone Depleting Substances (C-II, HBFC)	[S09129] Dibromofluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S09133] Dibromopentafluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S00095] Dibromotetrafluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S09124] Dibromotrifluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S09114] Dobromotrifluoroethane	-	
Ozone Depleting Substances (C-II, HBFC)	[S00146] Hexabromofluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S00153] Pentabromodifluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S00154] Pentabromofluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S00107] Tetrabromodifluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S09117] Tetrabromofluoroethane	-	
Ozone Depleting Substances (C-II, HBFC)	[S00110] Tetrabromofluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S00108] Tetrabromotrifluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S00121] Tribromodifluoroethane	-	
Ozone Depleting Substances (C-II, HBFC)	[S09123] Tribromodifluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S00125] Tribromofluoroethane	-	
Ozone Depleting Substances (C-II, HBFC)	[S09128] Tribromofluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S00123] Tribromotetrafluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S00124] Tribromotrifluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S02651] C3H5F2Br	111483-20-6	
Ozone Depleting Substances (C-II, HBFC)	[S00133] 2-Bromo-1,1,1,2-tetrafluoroethane	124-72-1	
Ozone Depleting Substances (C-II, HBFC)	[S03066] C3H3FBr4; Propane, 1,1,1,3-tetrabromo-3-fluoro-	148875-95-0	
Ozone Depleting Substances (C-II, HBFC)	[S03067] C3H2F2Br4	148875-98-3	
Ozone Depleting Substances (C-II, HBFC)	[S00132] Bromodifluoromethane	1511-62-2	
Ozone Depleting Substances (C-II, HBFC)	[S04897] C3H5FBr2; Propane, 1,3-dibromo-2-fluoro-	1786-38-5	
Ozone Depleting Substances (C-II, HBFC)	[S00100] Dibromofluoromethane	1868-53-7	
Ozone Depleting Substances (C-II, HBFC)	[S00139] Bromofluoropropane	1871-72-3	
Ozone Depleting Substances (C-II, HBFC)	[S05051] C3H3F4Br; Propane, 2-bromo-1,1,3,3-tetrafluoro-	19041-01-1	
Ozone Depleting Substances (C-II, HBFC)	[S02655] C3H5F6Br	2195-05-3	
Ozone Depleting Substances (C-II, HBFC)	[S00141] 1-Bromo-1,1,2,3,3,3-hexafluoropropane	2252-78-0	

- A list of examples of chemical substances which have been used electrical and electronic equipment and
- chemical substances restricted by laws and regulations. Not all chemical substances are covered.
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Shindengen Electric Manufacturing Co., Ltd	Prohibi
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- Shindengen Electric Manufact		Prohibited Substances in Products	page 36/68
Substance Group Name	Example Substances	CAS No.	Remarks
Ozone Depleting Substances (C-II, HBFC)	[S05046] Propane, 2-bromo-1,1,1,3,3-pentafluoro-	22692-16-6	
Ozone Depleting Substances (C-II, HBFC)	[S05048] Propane, 2-bromo-1,1,2,3,3-pentafluoro-	26391-11-7	
Ozone Depleting Substances (C-II, HBFC)	[S05052] C3H3F4Br; Propane, 2-bromo-1,1,1,3-tetrafluoro-	29151-25-5	
Ozone Depleting Substances (C-II, HBFC)	[S00109] Ethane, 1,1,2,2-tetrabromo-1-fluoro-	306-80-9	
Ozone Depleting Substances (C-II, HBFC)	[S03455] 1-Bromo-3-fluoropropane	352-91-0	
•	[S05042] Ethane, 1,1,1,2-tetrabromo-2-fluoro-	353-93-5	
	[S04100] C2HF2Br3; 1,2,2-Tribromo-1,1-difluoroethane	353-97-9	
,	[S00096] 1,2-Dibromo-1,1,2-trifluoroethane	354-04-1	
,	[S00098] 1,2-Dibromo-1-fluoroethane	358-97-4	
-7	[S03474] 2-Bromo-1,1-difluoroethane; C2H3F2Br	359-07-9	
	[S03477] C2H2F2Br2: 1,1-Dibromo-2,2-difluoroethane	359-19-3	
Ozone Depleting Substances (C-II, HBFC)	[S00140] Bromofluoromethane	373-52-4	
Ozone Depleting Substances (C-II, HBFC)	[S00130] Bromodifluoroethane	420-47-3	
-,	[S03744] C2H2FBr3; 1,1,2-Tribromo-1-fluoroethane	420-88-2	
Ozone Depleting Substances (C-II, HBFC)	[S02653] C3H5F4Br	420-89-3	
Ozone Depleting Substances (C-II, HBFC)	[S02654] C3H5F5Br	420-98-4	
Ozone Depleting Substances (C-II, HBFC)	[S00135] 2-Bromo-1,1,1-trifluoroethane	421-06-7	
Ozone Depleting Substances (C-II, HBFC)	[S00136] Bromotrifluoropropane	421-46-5	
Ozone Depleting Substances (C-II, HBFC)	[\$03567] 1,2,2-Tribromo-3,3,3-trifluoropropane	421-90-9	
Ozone Depleting Substances (C-II, HBFC)	[S05043] Propane, 3-bromo-1,1,1,2,2-pentafluoro-	422-01-5	
Ozone Depleting Substances (C-II, HBFC)	[S02652] C3H5F3Br	430-87-5	
Ozone Depleting Substances (C-II, HBFC)	[S00097] 1,2-Dibromo-3,3,3-trifluoropropane	431-21-0	
Ozone Depleting Substances (C-II, HBFC)	[S00101] 1,2-Dibromo-1,1,3,3,3-pentafluoropropane	431-78-7	
Ozone Depleting Substances (C-II, HBFC)	[S04896] 1,2-Dibromo-3-fluoropropane; C3H5FBr2	453-00-9	
	[S00093] 1,3-Dibromo-1,1-difluoropropane	460-25-3	
	[S03557] 3-Bromo-1,1,1-trifluoropropane	460-32-2	
	[S05055] Propane, 3-bromo-1,1,1,3-tetrafluoro-	460-67-3	
-,	[S03558] 1,3-Dibromo-1,1,3,3-tetrafluoropropane	460-86-6	
-,	[S00142] 2-Bromo-1,1,1,3,3-pentafluoropropane	460-88-8	
Ozone Depleting Substances (C-II, HBFC)	[S02656] C3H5F7Br	461-49-4	
	[S00099] 1,3-Dibromo-1-fluoropropane	51584-26-0	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and chemical substances restricted by laws and regulations. Not all chemical substances are covered.

<sup>-</sup> All possible efforts have been made to ensure the accuracy of CAS number and other information, but the accuracy of such details is not guaranteed.

<sup>-</sup> The [Sxxxxx (the x's being a 5 digit number)] on example substances are the Shindengen substance management codes.

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Substance Group Name	Example Substances	CAS No.	Remarks
Ozone Depleting Substances (C-II, HBFC)	[S05049] C3H2F5Br; Propane, 3-bromo-1,1,1,2,3-pentafluoro-, (R*,S*)-	53692-43-6	
Ozone Depleting Substances (C-II, HBFC)	[S05050] C3H2F5Br; Propane, 3-bromo-1,1,1,2,3-pentafluoro-, (R*,R*)-	53692-44-7	
Ozone Depleting Substances (C-II, HBFC)	[S03743] C2H2FBr3; 1,1,2-Tribromo-2-fluoroethane	598-67-4	
Ozone Depleting Substances (C-II, HBFC)	[S04898] C3H5FBr2; Propane, 1,2-dibromo-1-fluoro-, (R*,R*)-	62135-10-8	
Ozone Depleting Substances (C-II, HBFC)	[S04899] C3H5FBr2; Propane, 1,2-dibromo-1-fluoro-, (R*,S*)-	62135-11-9	
Ozone Depleting Substances (C-II, HBFC)	[S03853] Propane, 1,2,3-tribromo-1,1-difluoro-	666-25-1	
Ozone Depleting Substances (C-II, HBFC)	[S03854] C3HF4Br3; Propane, 1,2,3-tribromo-1,1,3,3-tetrafluoro-	666-48-8	
Ozone Depleting Substances (C-II, HBFC)	[S04099] C2HF2Br3; 1,2,2-Tribromo-1,1-difluoroethane	677-34-9	
Ozone Depleting Substances (C-II, HBFC)	[S05044] Propane, 2-bromo-1,1,1,2,3-pentafluoro-	677-52-1	
Ozone Depleting Substances (C-II, HBFC)	[S05045] Propane, 1-bromo-1,1,2,2,3-pentafluoro-	677-53-2	
Ozone Depleting Substances (C-II, HBFC)	[S00134] 3-Bromo-1,1,2,2-tetrafluoropropane	679-84-5	
Ozone Depleting Substances (C-II, HBFC)	[S05047] Propane, 1-bromo-1,2,2,3,3-pentafluoro-	679-94-7	
Ozone Depleting Substances (C-II, HBFC)	[S05053] Propane, 1-bromo-1,2,2,3-tetrafluoro-	70192-71-1	
Ozone Depleting Substances (C-II, HBFC)	[S00122] 1,1,1-Tribromo-2,2-difluoropropane	70192-80-2	
Ozone Depleting Substances (C-II, HBFC)	[S05054] Propane, 1-bromo-1,1,2,2-tetrafluoro	70192-84-6	
Ozone Depleting Substances (C-II, HBFC)	[S00126] Tribromofluoropropane	75372-14-4	
Ozone Depleting Substances (C-II, HBFC)	[S00092] 1,2-Dibromo-1,1-difluoroethane	75-82-1	
Ozone Depleting Substances (C-II, HBFC)	[S00138] 1-Bromo-2-fluoroethane	762-49-2	
Ozone Depleting Substances (C- III, Bromochloromethane)	[S00129] Bromochloromethane	74-97-5	
Ozone Depleting Substances (E-I, Bromomethane)	[S00143] Bromomethane(Methyl bromide)	74-83-9	
Ozone Depleting Substances (Others, Trichloroethane)	[S02376] 1,1,2-Trichloroethane	79-00-5	
Ozone Depleting Substances (Others)	[S05164] 1-Bromopropane; n-Propyl bromide	106-94-5	8th SVHC (Dec/19/2012), Authorisation List
Ozone Depleting Substances (Others)	[S02826] Dibromochloromethane	124-48-1	
Ozone Depleting Substances (Others)	[S02967] 1,2-Dibromo-1,1,2-trichloroethane	13749-38-7	
Ozone Depleting Substances (Others)	[S07430] Trifluoroiodomethane	2314-97-8	
Ozone Depleting Substances (Others)	[S00127] Fluoroethyne	2713-09-9	
Ozone Depleting Substances (Others)	[S03458] Tribromofluoromethane	353-54-8	
Ozone Depleting Substances (Others)	[S03459] Bromodichlorofluoromethane	353-58-2	
Ozone Depleting Substances (Others)	[S03461] 1-Bromo-2-chloro-1,1,2-trifluoroethane	354-06-3	
Ozone Depleting Substances (Others)	[S03463] Ethane, 2-bromo-1-chloro-1,1,2-trifluoro-	354-20-1	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

Prohibited Substances in Products page 38/68

Substance Group Name **Example Substances** CAS No. Remarks Ozone Depleting Substances [S03465] 1,1,1-Tribromo-2,2,2-trifluoroethane 354-48-3 (Others) Ozone Depleting Substances [S03466] 1,2-Dibromo-1-chloro-1,2,2-trifluoroethane 354-51-8 (Others) Ozone Depleting Substances [S03467] Bromopentafluoroethane 354-55-2 (Others) Ozone Depleting Substances [S00922] Butane, decafluoro-355-25-9 (Others) Ozone Depleting Substances [S03473] 1-Chloro-1,2-difluoroethylene 359-04-6 (Others) Ozone Depleting Substances [S03475] 2-bromo-1,1-difluoroethylene 359-08-0 (Others) Ozone Depleting Substances [S03476] 2-Chloro-1,1-difluoroethylene 359-10-4 (Others) Ozone Depleting Substances [S03545] 1,2-Dichloro-1-fluoroethylene 430-58-0 (Others) Ozone Depleting Substances [S03546] 1,1-Dibromo-2,2-difluoroethylene 430-85-3 (Others) [S03556] 1-Chloro-2-fluoroethylene Ozone Depleting Substances 460-16-2 (Others) Ozone Depleting Substances 51230-17-2 [S03593] Ethane, 2-bromo-2-chloro-1,1,1-trifluoro-, (2R)-(Others) 51230-18-3 Ozone Depleting Substances [S03594] Ethane, 2-bromo-2-chloro-1,1,1-trifluoro-, (2S)-(Others) Ozone Depleting Substances 558-13-4 [S03673] Tetrabromomethane; Carbon tetrabromide (Others) Ozone Depleting Substances [S03719] 2-Bromo-1,1-dichloroethylene 5870-61-1 (Others) Ozone Depleting Substances [S03732] Tribromochloromethane 594-15-0 (Others) Ozone Depleting Substances [S03733] Dibromodichloromethane 594-18-3 (Others) Ozone Depleting Substances [S03741] Tribromoethylene 598-16-3 (Others) Ozone Depleting Substances [S03745] Bromotrifluoroethylene 598-73-2 (Others) Ozone Depleting Substances [S03802] 1,2-Dibromotetrachloroethane 630-25-1 (Others) Ozone Depleting Substances [S06146] Hexachloroethane 67-72-1 (Others) [S01295] Chloromethane; Methyl chloride 74-87-3 Ozone Depleting Substances (Others) 74925-63-6 Ozone Depleting Substances [S04142] Ethane, bromochlorotrifluoro-(Others) Ozone Depleting Substances [S07506] Ethane, bromo-74-96-4 (Others) Ozone Depleting Substances [S04155] Difluorodibromomethane 75-61-6 (Others) Ozone Depleting Substances [S04156] Bromotrichloromethane 75-62-7 (Others) Ozone Depleting Substances [S04160] 1-Bromo-1-chloro-2,2-difluoroethylene 758-24-7 (Others) Ozone Depleting Substances [S04162] Pentabromoethane 75-95-6 (Others) Ozone Depleting Substances [S00965] Ethane, hexafluoro-76-16-4 (Others) Ozone Depleting Substances 76-19-7 [S00876] Propane, octafluoro-(Others) Ozone Depleting Substances [S04205] Tetrabromoethylene 79-28-7 (Others) Ozone Depleting Substances [S04979] Chlorotrifluoroethylene (Ethene, 1-chloro-1,2,2-trifluoro-; CFC-1113) 79-38-9 (Others)

 $chemical\ substances\ restricted\ by\ laws\ and\ regulations.\ Not\ all\ chemical\ substances\ are\ covered.$ 

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- Shindengen Electric Manufacturing Co., Ltd	Prohibited Substances in Products	page 39/68
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Substance Group Name	Example Substances	CAS No.	Remarks
Asbestos	[S00008] Other asbestos	-	
Asbestos	[S00007] Crocidolite	12001-28-4	
Asbestos	[S00006] Chrysotile	12001-29-5	
Asbestos	[S02767] Actinolite	12172-67-7	
Asbestos	[S00004] Amosite(Grunerite)	12172-73-5	
Asbestos	[S02894] Chrysotile	132207-32-0	
Asbestos	[S02895] Crocidolite	132207-33-1	
Asbestos	[S02265] Asbestos	1332-21-4	
Asbestos	[S02971] Actinolite	13768-00-8	
Asbestos	[S03046] Tremolite	14567-73-8	
Asbestos	[S03167] Anthophyllite	17068-78-9	
Asbestos	[S00003] Actinolite	77536-66-4	
Asbestos	[S00005] Anthophyllite	77536-67-5	
Asbestos	[S00010] Tremolite	77536-68-6	
		//330-06-0	
orm certain aromatic amines	[S09152] Azocolourants and Azodyes which form certain aromatic amines	-	
	[S02226] 4,4'-Methylene-bis(2-chloroaniline)	101-14-4	6th SVHC
form certain aromatic amines	[302220] 4,4 Weather Side emotioning	101 14 4	(Dec/19/2011), Authorisation List
Azocolourants and Azodyes which form certain aromatic amines	[S02229] 4,4'-Methylenedianiline	101-77-9	1st SVHC (Oct/28/2008)
Azocolourants and Azodyes which	[\$00015] 4.4! Oxydianiling	101 90 4	8th SVHC
orm certain aromatic amines	[300013] 4,4 -Oxydianiline	101-60-4	(Dec/19/2012)
Azocolourants and Azodyes which	[S00024] 4-Chloroaniline	106-47-8	(===,==,==,
orm certain aromatic amines	[SOURT   The Control of the Control	100 17 0	
Azocolourants and Azodyes which	[S02234] 3,3'-Dimethoxybenzidine	119-90-4	Substances
orm certain aromatic amines			Prohibited in Products
Azocolourants and Azodyes which form certain aromatic amines	[S02235] 3,3'-Dimethylbenzidine	119-93-7	
Azocolourants and Azodyes which form certain aromatic amines	[S02242] 6-Methoxy-m-toluidine	120-71-8	8th SVHC (Dec/19/2012)
Azocolourants and Azodyes which form certain aromatic amines	[S00011] 2,4,5-Trimethylaniline	137-17-7	
Azocolourants and Azodyes which form certain aromatic amines	[S00017] 4,4'-Thiodianiline	139-65-1	
Azocolourants and Azodyes which form certain aromatic amines	[S02342] p-(Phenylazo)aniline	60-09-3	8th SVHC (Dec/19/2012)
Azocolourants and Azodyes which form certain aromatic amines	[S00012] 4-Methoxy-m-phenylenediamine	615-05-4	
	[S00016] 4,4'-Methylenedi-o-toluidine	838-88-0	8th SVHC (Dec/19/2012)
Azocolourants and Azodyes which form certain aromatic amines	[S00021] o-Anisidine; 2-Methoxyaniline	90-04-0	6th SVHC (Dec/19/2011)
Azocolourants and Azodyes which form certain aromatic amines	[S00013] 2-Naphthylamine	91-59-8	
Azocolourants and Azodyes which form certain aromatic amines	[S00014] 3,3'-Dichlorobenzidine	91-94-1	
Azocolourants and Azodyes which form certain aromatic amines	[S00018] 4-Aminobiphenyl	92-67-1	8th SVHC (Dec/19/2012)
Azocolourants and Azodyes which form certain aromatic amines	[S00025] Benzidine	92-87-5	
Azocolourants and Azodyes which form certain aromatic amines	[S00023] o-Toluidine	95-53-4	8th SVHC (Dec/19/2012)
Azocolourants and Azodyes which form certain aromatic amines	[S00019] 4-Chloro-o-toluidine	95-69-2	
	[S02387] 4-Methyl-m-phenylenediamine	95-80-7	8th SVHC (Dec/19/2012)
Azocolourants and Azodyes which form certain aromatic amines	[S00022] o-Aminoazotoluene; C.I. solvent yellow	97-56-3	8th SVHC (Dec/19/2012)

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Prohibited Substances in Products page 40/68

Shindengen Electric Manufact	turing Co., Ltd	Prohibited Substances in Products	page 40/6
Substance Group Name	Example Substances	CAS No.	Remarks
zocolourants and Azodyes which orm certain aromatic amines	[S00020] 5-Nitro-o-toluidine	99-55-8	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S02020] Monomethyl-dichloro-diphenyl methane(Ugilec 121,Ug	ilec 21) -	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S02018] Other PCBs and PCTs	-	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04774] 2,2',3,4,4',5(or 2,2',3,4,4',5')-Hexachlorobiphenyl	108145-39-7	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04775] (R)-2,2',3,3',4,4',6,6'-Octachlorobiphenyl	109328-45-2	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04776] (S)-2,2',3,3',4,4',6,6'-Octachlorobiphenyl	109328-46-3	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S02017] Chlorodiphenyl(Aroclor 1260)	11096-82-5	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S02015] Aroclor 1254	11097-69-1	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S02639] Aroclor 1221	11104-28-2	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04777] 2,2',3,6,6',?-Hexachlorobiphenyl	111276-74-5	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04778] 2,4,4',?,?-Pentachlorobiphenyl	111276-75-6	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04779] 2,2',6',?,?-Pentachlorobiphenyl	111276-76-7	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04780] 2,2',5,6',?,?-Hexachlorobiphenyl	111276-77-8	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04781] 2,?,?-Trichlorobiphenyl	111276-78-9	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04782] 4,4',?,?,?,-Hexachlorobiphenyl	111276-79-0	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04783] 2,2',5,6',?,?,?-Heptachlorobiphenyl	111276-80-3	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04784] 4,4',?,?,?-Pentachlorobiphenyl	111276-81-4	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04785] 2,3,3',4,4',5,5',?-Octachlorobiphenyl	111276-82-5	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04786] 2,2',5,6',?,?,?-Octachlorobiphenyl	111276-83-6	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S02650] Aroclor 1232	11141-16-5	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S02854] Aroclor 1248	12672-29-6	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S02857] Aroclor 1016	12674-11-2	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S02014] Aroclor	12767-79-2	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04570] 2,2'-Dichlorobiphenyl; PCB-4	13029-08-8	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S02269] Polychlorinated biphenyls	1336-36-3	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04787] (+)-2,2',3,6-Tetrachlorobiphenyl	151262-31-6	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04788] (-)-2,2',3,6-Tetrachlorobiphenyl	151262-32-7	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04789] (+)-2,2',3,5',6-Pentachlorobiphenyl	151262-34-9	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04790] (-)-2,2',3,5',6-Pentachlorobiphenyl	151262-35-0	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04791] (S)-2,2',3,3',6-Pentachlorobiphenyl	153153-43-6	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04792] (R)-2,2',3,3',6-Pentachlorobiphenyl	153153-44-7	

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chemical substances restricted by laws and regulations. Not all chemical substances are covered.

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<sup>-</sup> The [Sxxxxx (the x's being a 5 digit number)] on example substances are the Shindengen substance management codes.

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- Shindengen Electric Manufa	cturing Co., Ltd	Prohibited Substances in Products	page 41/68
Substance Group Name	Example Substances	CAS No.	Remarks
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04793] (S)-2,2',3,4',6-Pentachlorobiphenyl	153153-45-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04794] (R)-2,2',3,4',6-Pentachlorobiphenyl	153153-46-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04795] (S)-2,2',3,3',4,6'-Hexachlorobiphenyl	153153-47-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04796] (R)-2,2',3,3',4,6'-Hexachlorobiphenyl	153153-48-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04797] (S)-2,2',3,3',6,6'-Hexachlorobiphenyl	153153-49-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04798] (R)-2,2',3,3',6,6'-Hexachlorobiphenyl	153153-50-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04571] 2,4,5-Trichlorobiphenyl; PCB-29	15862-07-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04799] (R)-2,2',3,4',5',6-Hexachlorobiphenyl	159000-96-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04800] (S)-2,2',3,4',5',6-Hexachlorobiphenyl	159000-97-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04572] 2,2',6,6'-Tetrachlorobiphenyl; PCB-54	15968-05-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04573] 2,3-Dichlorobiphenyl; PCB-5	16605-91-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S03157] 1,1'-Biphenyl, 2,4',5-trichloro-	16606-02-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04801] (R)-2,2',3,3',4,4',6-Heptachlorobiphenyl	176914-46-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04802] (R)-2,2',3,4,4',5',6-Heptachlorobiphenyl	176914-47-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04803] (S)-2,2',3,3',4,4',6-Heptachlorobiphenyl	176914-48-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04804] (S)-2,2',3,4,4',5',6-Heptachlorobiphenyl	176914-49-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04805] (R)-2,2',3,3',4,4',5,6'-Octachlorobiphenyl	177020-15-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04806] (S)-2,2',3,3',4,4',5,6'-Octachlorobiphenyl	177020-16-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04807] (R)-2,2',3,3',4,6-Hexachlorobiphenyl	179678-26-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04808] (S)-2,2',3,3',4,6-Hexachlorobiphenyl	179678-27-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04811] (R)-2,2',3,3',4,5,6'-Heptachlorobiphenyl	179678-28-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04812] (S)-2,2',3,3',4,5,6'-Heptachlorobiphenyl	179678-29-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04813] (R)-2,2',3,3',4,5',6-Heptachlorobiphenyl	179678-30-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04814] (S)-2,2',3,3',4,5',6-Heptachlorobiphenyl	179678-31-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04815] (R)-2,2',3,3',4,6,6'-Heptachlorobiphenyl	179678-32-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04816] (S)-2,2',3,3',4,6,6'-Heptachlorobiphenyl	179678-33-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04574] 2,3,4,5,6-Pentachlorobiphenyl; PCB-116	18259-05-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04560] 3,3'-Dichlorobiphenyl; PCB-11; 3,3'-DCBP	2050-67-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04561] 4,4'-Dichlorobiphenyl; PCB-15; 4,4'-DCBP	2050-68-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04562] 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl; PCB-209	2051-24-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04563] 2-Chlorobiphenyl; PCB-1; o-Chlorobiphenyl	2051-60-7	

- A list of examples of chemical substances which have been used electrical and electronic equipment and
- $chemical \ substances \ restricted \ by \ laws \ and \ regulations. \ Not \ all \ chemical \ substances \ are \ covered.$
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- The [Sxxxxx (the x's being a 5 digit number)] on example substances are the Shindengen substance management codes.

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Substance Group Name	Example Substances	CAS No.	Remarks
Polychlorinated Biphenyls and	[S04564] 3-Chlorobiphenyl; PCB-2	2051-61-8	
Polychlorinated Terphenyls Polychlorinated Biphenyls and	[S04565] 4-Chlorobiphenyl; PCB-3; p-Chlorobiphenyl	2051-62-9	
Polychlorinated Terphenyls			
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04817] (R)-2,2',3,3',5,6'-Hexachlorobiphenyl	205991-67-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04818] (S)-2,2',3,3',5,6'-Hexachlorobiphenyl	205991-68-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04819] (R)-2,2',3,4,5',6-Hexachlorobiphenyl	205991-69-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04820] (S)-2,2',3,4,5',6-Hexachlorobiphenyl	205991-70-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04821] (+)-2,2',3,3',6-Pentachlorobiphenyl	207004-27-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04822] (+)-2,2',3,3',4,6'-Hexachlorobiphenyl	207004-28-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04823] (-)-2,2',3,3',5,6'-Hexachlorobiphenyl	207004-29-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04824] (+)-2,2',3,3',6,6'-Hexachlorobiphenyl	207004-30-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04825] (-)-2,2',3,3',4,5,6'-Heptachlorobiphenyl	207004-31-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04826] (+)-2,2',3,3',4,6,6'-Heptachlorobiphenyl	207004-32-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04827] (+)-2,2',3,3',4,6-Hexachlorobiphenyl	207004-33-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04828] (+)-2,2',3,3',4,5',6-Heptachlorobiphenyl	207004-34-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04829] (+)-2,2',3,3',4,4',5,6'-Octachlorobiphenyl	207004-35-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04830] (+)-2,2',3,4',5',6-Hexachlorobiphenyl	207004-36-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04566] 2,2',3,3',5,5',6,6'-Octachlorobiphenyl; PCB-202	2136-99-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04831] (+)-2,2',3,4,5',6-Hexachlorobiphenyl	228420-06-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04832] (+)-2,2',3,4,4',5',6-Heptachlorobiphenyl	228420-07-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S03290] 2,2',4,4'-Tetrachlorobiphenyl	2437-79-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04575] Trichlorobiphenyl	25323-68-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S03304] pentachloro[1,1'-biphenyl]	25429-29-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04576] Dichloro-1,1'-biphenyl	25512-42-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04577] 2,3'-Dichloro-1,1'-biphenyl; PCB-6	25569-80-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S02019] Terphenyls	26140-60-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04578] Hexachloro-1,1'-biphenyl	26601-64-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04579] Tetrachlorobiphenyl	26914-33-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04580] Chloro-1,1'-biphenyl; Aroclor1254	27323-18-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S03370] Heptachloro-1,1'-biphenyl	28655-71-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04567] 3,4'-Dichlorobiphenyl; PCB-13	2974-90-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04568] 3,4-Dichlorobiphenyl; PCB-12	2974-92-7	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and chemical substances restricted by laws and regulations. Not all chemical substances are covered.

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- Shindengen Electric Manufa		Prohibited Substances in Products	page 43/68
Substance Group Name	Example Substances	CAS No.	Remarks
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04581] ar,ar,ar-Trichlorobiphenyl	30605-61-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S03404] Tetrachloro(tetrachlorophenyl)benzene	31472-83-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S01965] 2,3',4,4',5-Pentachlorobiphenyl; PCB-118(Co-PCBs)	31508-00-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04582] 2,3',4,4'-Tetrachlorobiphenyl; PCB-66	32598-10-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04583] 2,3',4',5-Tetrachlorobiphenyl; PCB-70	32598-11-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04584] 2,4,4',6-Tetrachloro-1,1'-biphenyl; PCB-75	32598-12-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S01973] 3,3',4,4'-Tetrachlorobiphenyl; PCB-77(Co-PCBs)	32598-13-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S01962] 2,3,3',4,4'-Pentachlorobiphenyl; PCB-105(Co-PCBs)	32598-14-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04585] 2,4,4',5-Tetrachlorobiphenyl; PCB-74	32690-93-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S01971] 3,3',4,4',5,5'-Hexachlorobiphenyl; PCB-169(Co-PCBs)	32774-16-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04586] 2,3,4,4¹-Tetrachlorobiphenyl; PCB-60	33025-41-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04587] 3,4'-Dichlorobiphenyl; PCB-13	33039-81-5	
Polychlorinated Biphenyls and	[S04588] 2,2',3,3',4,4',6,6'-Octachloro-1,1'-biphenyl; PCB-197	33091-17-7	
Polychlorinated Biphenyls and	[S04589] 2,6-Dichloro-1,1'-biphenyl; PCB-10	33146-45-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04590] 2,4-Dichloro-1,1'-biphenyl; PCB-7	33284-50-3	
Polychlorinated Biphenyls and	[S04592] 3,3',5,5'-Tetrachloro-1,1'-biphenyl; PCB-80	33284-52-5	
Polychlorinated Biphenyls and	[S04593] 2,3,4,5-Tetrachloro-1,1'-biphenyl; PCB-61	33284-53-6	
Polychlorinated Biphenyls and	[S04594] 2,3,5,6-Tetrachloro-1,1'-biphenyl; PCB-65	33284-54-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04595] 2,2',4,4',6,6'-Hexachloro-1,1'-biphenyl; PCB-155	33979-03-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04596] 2,5-Dichloro-1,1'-biphenyl; PCB-9	34883-39-1	
Polychlorinated Biphenyls and	[S04597] 3,5-Dichloro-1,1'-biphenyl; PCB-14	34883-41-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04598] 2,4'-Dichloro-1,1'-biphenyl; PCB-8	34883-43-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S03452] 2,4,5,2',4',5'-Hexachlorobiphenyl	35065-27-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04599] 2,2',3,4,4',5'-Hexachloro-1,1'-biphenyl; PCB-138	35065-28-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04600] 2,2',3,4,4',5,5'-Heptachloro-1,1'-biphenyl; PCB-180	35065-29-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04601] 2,2',3,3',4,4',5-Heptachloro-1,1'-biphenyl; PCB-170	35065-30-6	
Polychlorinated Biphenyls and	[S04602] 2,4,6-Trichloro-1,1'-biphenyl; PCB-30	35693-92-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04603] 2,2',5,5'-Tetrachlorobiphenyl; PCB-52	35693-99-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04604] 2,2',3,3',5,5'-Hexachlorobiphenyl; PCB-133	35694-04-3	
Polychlorinated Biphenyls and	[S04605] 2,2',3,4,4',5-Hexachlorobiphenyl; PCB-137	35694-06-5	

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[S04606] 2,2',3,3',4,4',5,5'-Octachlorobiphenyl; PCB-194

Polychlorinated Terphenyls
Polychlorinated Biphenyls and

Polychlorinated Terphenyls

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35694-08-7

- Shindengen Electric Manufacturing Co., Ltd. -

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Example Substances	CAS No.	Remarks
[S04607] 2,2',3,4'-Tetrachloro-1,1'-biphenyl; PCB-42	36559-22-5	
[S02016] Kanechlor 500	37317-41-2	
[S04608] 2,2',5-Trichlorobiphenyl; PCB-18	37680-65-2	
[S04609] 2,2',4-Trichloro-1,1'-biphenyl; PCB-17	37680-66-3	
[S04610] 2',3,5-Trichloro-1,1'-biphenyl; PCB-34	37680-68-5	
[S04611] 3,3',4-Trichlorobiphenyl; PCB-35	37680-69-6	
[S04612] 2,2',4,5,5'-Pentachlorobiphenyl; PCB-101	37680-73-2	
[S04613] 2,2',3,5',6-Pentachloro-1,1'-biphenyl; PCB-95	38379-99-6	
[S04614] 2,2',4,4',5-Pentachloro-1,1'-biphenyl; PCB-99	38380-01-7	
[S04615] 2,2',3,4,5'-Pentachlorobiphenyl; PCB-87	38380-02-8	
[S04616] 2,3,3',4',6-Pentachloro-1,1'-biphenyl; PCB-110	38380-03-9	
[S04617] 2,2',3,4',5',6-Hexachloro-1,1'-biphenyl; PCB-149	38380-04-0	
[S04618] 2,2',3,3',4,6'-Hexachloro-1,1'-biphenyl; PCB-132	38380-05-1	
[S04619] 2,2',3,3',4,4'-Hexachloro-1,1'-biphenyl; PCB-128	38380-07-3	
[S01961] 2,3,3',4,4',5-Hexachlorobiphenyl; PCB-156(Co-PCBs)	38380-08-4	
[S04620] 2,2',3,3',6,6'-Hexachloro-1,1'-biphenyl; PCB-136	38411-22-2	
[S04621] 2,2',3,3',4,5,6'-Heptachloro-1,1'-biphenyl; PCB-174	38411-25-5	
[S04622] 2,2',6-Trichloro-1,1'-biphenyl; PCB-19	38444-73-4	
[S04623] 2,3',6-Trichlorobiphenyl; PCB-27	38444-76-7	
[S04624] 2,4',6-Trichloro-1,1'-biphenyl; PCB-32	38444-77-8	
[S04625] 2,2',3-Trichlorobiphenyl; PCB-16	38444-78-9	
[S04626] 2,3',5-Trichlorobiphenyl; PCB-26	38444-81-4	
[S04627] 2,3,3'-Trichloro-1,1'-biphenyl	38444-84-7	
[S04628] 2,3,4'-Trichloro-1,1'-biphenyl; PCB-22	38444-85-8	
[S04629] 2',3,4-Trichloro-1,1'-biphenyl; PCB-33	38444-86-9	
[S04630] 3,3',5-Trichloro-1,1'-biphenyl; PCB-36	38444-87-0	
[S04631] 3,4',5-Trichloro-1,1'-biphenyl; PCB-39	38444-88-1	
[S04632] 3,4,4'-Trichloro-1,1'-biphenyl; PCB-37	38444-90-5	
[S04633] 2,2',3,3'-Tetrachlorobiphenyl; PCB-40	38444-93-8	
[S04634] 2,2',4,4',6-Pentachloro-1,1'-biphenyl; PCB-100	39485-83-1	
[S01959] 2,3,3',4,4',5,5'-Heptachlorobiphenyl; PCB-189(Co-PCBs	39635-31-9	
	[S04607] 2,2',3,4'-Tetrachloro-1,1'-biphenyl; PCB-42 [S02016] Kanechlor 500 [S04608] 2,2',5-Trichlorobiphenyl; PCB-18 [S04609] 2,2',4-Trichloro-1,1'-biphenyl; PCB-17 [S04610] 2',3,5-Trichloro-1,1'-biphenyl; PCB-34 [S04611] 3,3',4-Trichlorobiphenyl; PCB-35 [S04612] 2,2',4,5,5'-Pentachlorobiphenyl; PCB-101 [S04613] 2,2',3,5',6-Pentachloro-1,1'-biphenyl; PCB-95 [S04614] 2,2',4,4',5-Pentachloro-1,1'-biphenyl; PCB-99 [S04615] 2,2',3,4,5'-Pentachloro-1,1'-biphenyl; PCB-99 [S04616] 2,3,3',4',6-Pentachloro-1,1'-biphenyl; PCB-110 [S04617] 2,2',3,4',5',6-Hexachloro-1,1'-biphenyl; PCB-149 [S04618] 2,2',3,3',4,6'-Hexachloro-1,1'-biphenyl; PCB-132 [S04619] 2,2',3,3',4,4'-Hexachloro-1,1'-biphenyl; PCB-128 [S01961] 2,3,3',4,4',5-Hexachloro-1,1'-biphenyl; PCB-136 [S04620] 2,2',3,3',4,5,6'-Hexachloro-1,1'-biphenyl; PCB-136 [S04621] 2,2',3,3',4,5,6'-Heptachloro-1,1'-biphenyl; PCB-174 [S04622] 2,2',6-Trichloro-1,1'-biphenyl; PCB-19 [S04623] 2,3',6-Trichloro-1,1'-biphenyl; PCB-16 [S04624] 2,4',6-Trichloro-1,1'-biphenyl; PCB-26 [S04626] 2,3',5-Trichlorobiphenyl; PCB-26 [S04627] 2,3,3'-Trichloro-1,1'-biphenyl; PCB-33 [S04630] 3,3',5-Trichloro-1,1'-biphenyl; PCB-33 [S04630] 3,3',5-Trichloro-1,1'-biphenyl; PCB-39 [S04631] 3,4',5-Trichloro-1,1'-biphenyl; PCB-39 [S04631] 3,4',5-Trichloro-1,1'-biphenyl; PCB-39 [S04632] 2,2',3,4'-Trichloro-1,1'-biphenyl; PCB-39 [S04633] 2,2',3,3'-Trichloro-1,1'-biphenyl; PCB-39	S04607  2,2',3,4'-Tetrachloro-1,1'-biphenyl; PCB-12   S059-22-5   S02016  Kanechlor 500   37317-41-2   S04608  2,2',5-Trichlorobiphenyl; PCB-18   37680-65-2   S04608  2,2',5-Trichloro-1,1'-biphenyl; PCB-17   37680-66-3   S04608  2,2',5-Trichloro-1,1'-biphenyl; PCB-18   37680-66-3   S04610  2',3,5-Trichloro-1,1'-biphenyl; PCB-34   37680-68-5   S04611  3,3',4-Trichloro-1,1'-biphenyl; PCB-35   37680-69-6   S04611  3,3',4-Trichloro-1,1'-biphenyl; PCB-101   37680-73-2   S04613  2,2',3,5',5-Pentachloro-1,1'-biphenyl; PCB-99   38380-01-7   S04613  2,2',3,4',5-Pentachloro-1,1'-biphenyl; PCB-99   38380-01-7   S04615  2,2',3,4',5-Pentachloro-1,1'-biphenyl; PCB-10   38380-03-9   S04615  2,2',3,4',5-Pentachloro-1,1'-biphenyl; PCB-110   38380-03-9   S04615  2,2',3,4',5-Pentachloro-1,1'-biphenyl; PCB-110   38380-03-9   S04617  2,2',3,4',5-Pentachloro-1,1'-biphenyl; PCB-128   38380-05-1   S04619  2,2',3,3',4,6'-Hexachloro-1,1'-biphenyl; PCB-128   38380-07-3   S04619  2,2',3,3',4,4'-Hexachloro-1,1'-biphenyl; PCB-128   38380-07-3   S04620  2,2',3,3',4,6'-Hexachloro-1,1'-biphenyl; PCB-136   S04619  2,2',3,3',4,6'-Hexachloro-1,1'-biphenyl; PCB-136   S04620  2,2',3,3',4,5,6'-Heptachloro-1,1'-biphenyl; PCB-136   S04620  2,2',3,3',4,5,6'-Heptachloro-1,1'-biphenyl; PCB-136   S04620  2,2',3,3',4,5,6'-Heptachloro-1,1'-biphenyl; PCB-136   S04620  2,2',3,3',4,5,6'-Hexachloro-1,1'-biphenyl; PCB-136   S04620  2,2',3,3'-Trichloro-1,1'-biphenyl; PCB-30   S04620  2,2',3,3'-Trichloro-1,1'-biphenyl; PCB-30   S04620  2,2',3,3'-Trichloro-1,1'-biphenyl; PCB-30   S04620  2,3',5-Trichloro-1,1'-biphenyl; PCB-30   S04620  2,3',5-Trichloro-1,1'-biphenyl; PCB-30   S04620  2,3',5-Trichloro-1,1'-biphenyl; PCB-30   S04630  3,3',5-Trichloro-1,1'-biphenyl; PCB-30   S04630  3,3',5-Trichloro-1,1'-biphenyl; PCB-30   S04630  3,3

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and chemical substances restricted by laws and regulations. Not all chemical substances are covered.

 <sup>-</sup> All possible efforts have been made to ensure the accuracy of CAS number and other information, but the accuracy of such details is not guaranteed.

<sup>-</sup> The [Sxxxxx (the x's being a 5 digit number)] on example substances are the Shindengen substance management codes.

- Shindengen Electric Manufac	cturing Co., Ltd	Prohibited Substances in Products	page 45/68
Substance Group Name	Example Substances	CAS No.	Remarks
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04635] 2,3,3',5,5'-Pentachloro-1,1'-biphenyl; PCB-111	39635-32-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04636] 3,3',4,5,5'-Pentachloro-1,1'-biphenyl; PCB-127	39635-33-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04637] 2,3,3',4',5,5'-Hexachloro-1,1'-biphenyl; PCB-162	39635-34-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04638] 2,3,3',4,5,5'-Hexachloro-1,1'-biphenyl; PCB-159	39635-35-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04639] 2,2',3,3',4,5',6-Heptachloro-1,1'-biphenyl; PCB-175	40186-70-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04640] 2,2',3,3',4,5',6,6'-Octachloro-1,1'-biphenyl; PCB-201	40186-71-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04641] 2,2',3,3',4,4',5,5',6-Nonachloro-1,1'-biphenyl; PCB-206	40186-72-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04642] 2,2',3,4,5,6-Hexachloro-1,1'-biphenyl; PCB-142	41411-61-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04643] 2,3,3',4,5,6-Hexachloro-1,1'-biphenyl; PCB-160	41411-62-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04644] 2,3,4,4',5,6-Hexachloro-1,1'-biphenyl; PCB-166	41411-63-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04645] 2,3,3',4,4',5,6-Heptachloro-1,1'-biphenyl; PCB-190	41411-64-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04646] 2,2',3,5'-Tetrachloro-1,1'-biphenyl; PCB-44	41464-39-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04647] 2,2',4,5'-Tetrachlorobiphenyl; PCB-49	41464-40-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04648] 2,2',5,6'-Tetrachloro-1,1'-biphenyl; PCB-45	41464-41-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04649] 2,3',5,5'-Tetrachloro-1,1'-biphenyl; PCB-72	41464-42-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04650] 2,3,3',4'-Tetrachloro-1,1'-biphenyl; PCB-56	41464-43-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04651] 2,3',4',6-Tetrachloro-1,1'-biphenyl; PCB-71	41464-46-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04652] 2,2',3,6'-Tetrachloro-1,1'-biphenyl; PCB-46	41464-47-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04653] 3,3',4,5'-Tetrachloro-1,1'-biphenyl; PCB-79	41464-48-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04654] 2,3,3',5'-Tetrachloro-1,1'-biphenyl; PCB-58	41464-49-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04655] 2,2',3,4',5'-Pentachlorobiphenyl; PCB-97	41464-51-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04656] 2,2',3,3',4,4',5,6'-Octachloro-1,1'-biphenyl; PCB-196	42740-50-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04657] 2,2',3,4',5,5'-Hexachloro-1,1'-biphenyl; PCB-146	51908-16-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04658] 2,3,4',6-Tetrachloro-1,1'-biphenyl; PCB-64	52663-58-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04659] 2,2',3,4-Tetrachloro-1,1'-biphenyl; PCB-41	52663-59-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04660] 2,2',3,3',6-Pentachloro-1,1'-biphenyl; PCB-84	52663-60-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04661] 2,2',3,5,5'-Pentachloro-1,1'-biphenyl; PCB-92	52663-61-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04662] 2,2',3,3',4-Pentachloro-1,1'-biphenyl; PCB-82	52663-62-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04663] 2,2',3,5,5',6-Hexachloro-1,1'-biphenyl; PCB-151	52663-63-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04664] 2,2',3,3',5,6,6'-Heptachloro-1,1'-biphenyl; PCB-179	52663-64-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04665] 2,2',3,3',4,6,6'-Heptachloro-1,1'-biphenyl; PCB-176	52663-65-7	

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- Shindengen	Electric Manufa	cturing Co	Itd -

Polychlorinated Terphenyls Polychlorinated Biphenyls and

Polychlorinated Terphenyls

- Shindengen Electric Manufa		Prohibited Substances in Products	page 46,
Substance Group Name	Example Substances	CAS No.	Remarks
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04666] 2,2',3,3',4,5'-Hexachloro-1,1'-biphenyl; PCB-130	52663-66-8	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04667] 2,2',3,3',5,5',6-Heptachloro-1,1'-biphenyl; PCB-178	52663-67-9	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04668] 2,2',3,4',5,5',6-Heptachloro-1,1'-biphenyl; PCB-187	52663-68-0	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04669] 2,2',3,4,4',5',6-Heptachloro-1,1'-biphenyl; PCB-183	52663-69-1	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04670] 2,2',3,3',4,5',6'-Heptachloro-1,1'-biphenyl; PCB-177	52663-70-4	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04671] 2,2',3,3',4,4',6-Heptachloro-1,1'-biphenyl; PCB-171	52663-71-5	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S01963] 2,3',4,4',5,5'-Hexachlorobiphenyl; PCB-167(Co-PCBs)	52663-72-6	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04672] 2,2',3,3',4,5,6,6'-Octachloro-1,1'-biphenyl; PCB-200	52663-73-7	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04673] 2,2',3,3',4,5,5'-Heptachloro-1,1'-biphenyl; PCB-172	52663-74-8	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04674] 2,2',3,3',4,5,5',6'-Octachloro-1,1'-biphenyl; PCB-199	52663-75-9	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04675] 2,2',3,4,4',5,5',6-Octachloro-1,1'-biphenyl; PCB-203	52663-76-0	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04676] 2,2',3,3',4,5,5',6,6'-Nonachloro-1,1'-biphenyl; PCB-208	52663-77-1	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04677] 2,2',3,3',4,4',5,6-Octachloro-1,1'-biphenyl; PCB-195	52663-78-2	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04678] 2,2',3,3',4,4',5,6,6'-Nonachloro-1,1'-biphenyl; PCB-207	52663-79-3	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04679] 2,2',3,3',5,6-Hexachlorobiphenyl; PCB-134	52704-70-8	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04680] 2,2',3,4,5,5'-Hexachlorobiphenyl; PCB-141	52712-04-6	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04681] 2,2',3,4,5,5',6-Heptachloro-1,1'-biphenyl; PCB-185	52712-05-7	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04682] 2,2',3,3',5,6'-Hexachloro-1,1'-biphenyl; PCB-135	52744-13-5	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S03643] Aroclor 1242	53469-21-9	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04683] 3,4,5-Trichlorobiphenyl	53555-66-1	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S03647] Nonachloro-1,1'-biphenyl	53742-07-7	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04684] 2,3,4,6-Tetrachlorobiphenyl	54230-22-7	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04685] 2,2',3,4,6-Pentachloro-1,1'-biphenyl; PCB-88	55215-17-3	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04686] 2,2',3,3',4,5-Hexachlorobiphenyl; PCB-129	55215-18-4	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04687] 2,2',3,4,5-Pentachloro-1,1'-biphenyl; PCB-86	55312-69-1	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04688] 2,3,6-Trichlorobiphenyl; PCB-24	55702-45-9	
olychlorinated Biphenyls and	[S04689] 2,3,4-Trichlorobiphenyl; PCB-21	55702-46-0	
olychlorinated Biphenyls and	[S04690] 2,3',4-Trichloro-1,1'-biphenyl; PCB-25	55712-37-3	
olychlorinated Biphenyls and olychlorinated Terphenyls	[S04691] 2,3,5-Trichlorobiphenyl	55720-44-0	
olychlorinated Biphenyls and	[S04692] 2,2',3,3',4,4',5,6-Octachloro-1,1'-biphenyl; PCB-195	55722-26-4	

[S04693] 2,2',3,4,4',6-Hexachlorobiphenyl; PCB-139

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

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<sup>-</sup> The [Sxxxxx (the x's being a 5 digit number)] on example substances are the Shindengen substance management codes.

- Shindengen Electric Manufa		Prohibited Substances in Products  CAS No.	page 47/68
Substance Group Name	Example Substances		Remarks
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04694] 2,2',4,6,6'-Pentachloro-1,1'-biphenyl; PCB-104	56558-16-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04695] 2,3',4,4',6-Pentachloro-1,1'-biphenyl; PCB-119	56558-17-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04696] 2,3',4,5',6-Pentachloro-1,1'-biphenyl; PCB-121	56558-18-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S01972] 3,3',4,4',5-Pentachlorobiphenyl; PCB-126(Co-PCBs)	57465-28-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04697] 2,2',3,4,4',6-Hexachloro-1,1'-biphenyl; PCB-140	59291-64-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04698] 2,3',4,4',5',6-Hexachloro-1,1'-biphenyl; PCB-168	59291-65-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04699] 2,2',3,3',5-Pentachloro-1,1'-biphenyl; PCB-83	60145-20-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04700] 2,2',4,5',6-Pentachloro-1,1'-biphenyl; PCB-103	60145-21-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04701] 2,2',4,4',5,6'-Hexachloro-1,1'-biphenyl; PCB-154	60145-22-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04702] 2,2',3,4,4',5,6'-Heptachloro-1,1'-biphenyl; PCB-182	60145-23-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04703] 2,3',4,6-Tetrachloro-1,1'-biphenyl; PCB-69	60233-24-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04704] 2,2',3,4',6'-Pentachloro-1,1'-biphenyl; PCB-98	60233-25-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S02013] Polychlorinated terphenyls	61788-33-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04705] 2,2',3,3',4,6-Hexachloro-1,1'-biphenyl; PCB-131	61798-70-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04706] 2,4,4'(or 3,4,4')-Trichlorobiphenyl	62461-62-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04707] 2,2',4,6-Tetrachloro-1,1'-biphenyl; PCB-50	62796-65-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S01964] 2',3,4,4',5-Pentachlorobiphenyl; PCB-123(Co-PCBs)	65510-44-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04708] 2,2',3,4,4'-Pentachloro-1,1'-biphenyl; PCB-85	65510-45-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04709] 2,2',4,6'-Tetrachloro-1,1'-biphenyl; PCB-51	68194-04-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04710] 2,2',3,4',6-Pentachloro-1,1'-biphenyl; PCB-91	68194-05-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04711] 2,2',4,5,6'-pentachloro-1,1'-biphenyl; PCB-102	68194-06-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04712] 2,2',3,4',5-Pentachloro-1,1'-biphenyl; PCB-90	68194-07-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04713] 2,2',3,4',6,6'-Hexachloro-1,1'-biphenyl; PCB-150	68194-08-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04714] 2,2',3,5,6,6'-Hexachloro-1,1'-biphenyl; PCB-152	68194-09-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04715] 2,3,3',5',6-Pentachloro-1,1'-biphenyl; PCB-113	68194-10-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04716] 2,3,4',5,6-Pentachloro-1,1'-biphenyl; PCB-117	68194-11-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04717] 2,3',4,5,5'-Pentachloro-1,1'-biphenyl; PCB-120	68194-12-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04718] 2,2',3,4',5,6-Hexachloro-1,1'-biphenyl; PCB-147	68194-13-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04719] 2,2',3,4,5',6-Hexachloro-1,1'-biphenyl; PCB-144	68194-14-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04720] 2,2',3,4,5,6'-Hexachloro-1,1'-biphenyl; PCB-143	68194-15-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04721] 2,2',3,3',4,5,6-Heptachloro-1,1'-biphenyl; PCB-173	68194-16-1	

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Polychlorinated Terphenyls

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- Shindengen Electric Manufacturing Co., Ltd. -

Prohibited Substances in Products page 48/68

- Sililideligeli Electric ivialidia	cturing co., ctu	Profibited Substances in Products	page 48/
Substance Group Name	Example Substances	CAS No.	Remarks
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04722] 2,2',3,3',4,5,5',6-Octachloro-1,1'-biphenyl; PCB-198	68194-17-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S01960] 2,3,3',4,4',5'-Hexachlorobiphenyl; PCB-157(Co-PCBs)	69782-90-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04723] 2,3,3',4,5,5',6-Heptachloro-1,1'-biphenyl; PCB-193	69782-91-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04569] 2,4,4'-Trichlorobiphenyl; PCB-28	7012-37-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04724] 2,3,3',4,5'-Pentachloro-1,1'-biphenyl; PCB-108	70362-41-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04725] 2,2',3,6-Tetrachloro-1,1'-biphenyl	70362-45-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04726] 2,2',3,5-Tetrachloro-1,1'-biphenyl; PCB-43	70362-46-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04727] 2,2',4,5-Tetrachloro-1,1'-biphenyl; PCB-48	70362-47-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04728] 2,3',4',5'-Tetrachloro-1,1'-biphenyl; PCB-76	70362-48-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04729] 3,3',4,5-Tetrachloro-1,1'-biphenyl	70362-49-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S01974] 3,4,4',5-Tetrachlorobiphenyl; PCB-81(Co-PCBs)	70362-50-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04730] 2,3,3',5-Tetrachlorobiphenyl	70424-67-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04731] 2,3,3',4',5-Pentachloro-1,1'-biphenyl; PCB-107	70424-68-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04732] 2,3,3',4,5-Pentachloro-1,1'-biphenyl; PCB-106	70424-69-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04733] 2,3',4',5,5'-Pentachloro-1,1'-biphenyl; PCB-124	70424-70-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04734] 2,3',4,5'-Tetrachloro-1,1'-biphenyl; PCB-68	73575-52-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04735] 2,3',4,5-Tetrachloro-1,1'-biphenyl	73575-53-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04736] 2,2',3,6,6'-Pentachloro-1,1'-biphenyl; PCB-96	73575-54-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04737] 2,2',3,5,6'-Pentachloro-1,1'-biphenyl; PCB-94	73575-55-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04738] 2,2',3,5,6-Pentachloro-1,1'-biphenyl; PCB-93	73575-56-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04739] 2,2',3,4,6'-Pentachloro-1,1'-biphenyl; PCB-89	73575-57-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04740] 2,3',5',6-Tetrachloro-1,1'-biphenyl; PCB-73	74338-23-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04741] 2,3,3',4-Tetrachloro-1,1'-biphenyl; PCB-55	74338-24-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04742] 2,3,3',6-Tetrachloro-1,1'-biphenyl	74472-33-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04743] 2,3,4',5-Tetrachlorobiphenyl	74472-34-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04744] 2,3,3',4,6-Pentachloro-1,1'-biphenyl; PCB-109	74472-35-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04746] 2,3,3',5,6-Pentachloro-1,1'-biphenyl; PCB-112	74472-36-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S01966] 2,3,4,4',5-Pentachlorobiphenyl; PCB-114(Co-PCBs)	74472-37-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04747] 2,3,4,4',6-Pentachloro-1,1'-biphenyl; PCB-115	74472-38-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04748] 2,3',4',5',6-Pentachloro-1,1'-biphenyl; PCB-125	74472-39-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04749] 2,2',3,4,6,6'-Hexachloro-1,1'-Biphenyl; PCB-145	74472-40-5	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and chemical substances restricted by laws and regulations. Not all chemical substances are covered.

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<sup>-</sup> The [Sxxxxx (the x's being a 5 digit number)] on example substances are the Shindengen substance management codes.

- Shindengen Electric Manufacturing Co., Ltd		Prohibited Substances in Products	page 49/68	
	Substance Group Name	Example Substances	CAS No.	Remarks
	Polychlorinated Rinhenyls and	[\$04750] 2 2' 3 4' 5 6'-Heyachloro-1 1'-hinhenyl: PCR-148	7//72-/1-6	

	8 ,			P-0- 1-7
Substance Group Name		Example Substances	CAS No.	Remarks
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04750] 2,2',3,4',	5,6'-Hexachloro-1,1'-biphenyl; PCB-148	74472-41-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04751] 2,3,3',4,4	1',6-Hexachloro-1,1'-biphenyl; PCB-158	74472-42-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04752] 2,3,3',4,5	5',6-Hexachloro-1,1'-biphenyl; PCB-161	74472-43-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04753] 2,3,3',4',	5,6-Hexachloro-1,1'-biphenyl; PCB-163	74472-44-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04754] 2,3,3',4',	5',6-Hexachloro-1,1'-biphenyl; PCB-164	74472-45-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04755] 2,3,3',5,5	5'6-Hexachloro-1,1'-biphenyl; PCB-165	74472-46-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04756] 2,2',3,4,4	1',5,6-Heptachloro-1,1'-biphenyl; PCB-181	74472-47-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04757] 2,2',3,4,4	1',6,6'-Heptachloro-1,1'-biphenyl	74472-48-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04758] 2,2',3,4,5	5,6,6'-Heptachloro-1,1'-biphenyl; PCB-186	74472-49-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04759] 2,3,3',4,4	1',5',6-Heptachlorobiphenyl	74472-50-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04760] 2,3,3',4,5	5,5',6-Heptachloro-1,1'-biphenyl; PCB-192	74472-51-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04761] 2,2',3,4,4	1',5,6,6'-Octachloro-1,1'-biphenyl; PCB-204	74472-52-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04762] 2,3,3',4,4	1',5,5',6-Octachlorobiphenyl	74472-53-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04763] 2,2',3,4',	5,6,6'-Heptachloro-1,1'-biphenyl; PCB-188	74487-85-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S02022] Monome	ethyl-tetrachloro-diphenyl methane(Ugilec 141)	76253-60-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04764] 2,3,3',4',	5'-Pentachloro-1,1'-biphenyl; PCB-122	76842-07-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04218] Monome	ethyldichlorodiphenylmethane	81161-70-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04765] 2,4',?-Tri	ichlorobiphenyl	94487-00-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04766] 2,3,?'(or	3,4,?')-Trichlorobiphenyl	97122-18-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04767] 2,4,?'(2,6	5,?' or 3,5,?')-Trichlorobiphenyl	97122-20-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04768] (+-)-2,2',	3,4,6-Pentachlorobiphenyl	99554-08-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04769] (+-)-2,2',	3,4,4',6-Hexachlorobiphenyl	99554-09-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04770] (+)-2,2',3	3,4,6-Pentachlorobiphenyl	99554-10-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04771] (-)-2,2',3	.4,6-Pentachlorobiphenyl	99554-11-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04772] (+)-2,2',3	3,4,4',6-Hexachlorobiphenyl	99554-12-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04773] (-)-2,2',3	.4,4',6-Hexachlorobiphenyl	99554-13-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S02021] Monome	ethyl-dibromo-diphenyl methane(DBBT)	99688-47-8	
Polychloronaphthalenes (Cl≥2)	[S02010] Other po	olychlorinated naphthalenes	-	
Polychloronaphthalenes (Cl≥2)	[S08785] 1,2,4,5,7	,8-Hexachloronaphthalene	103426-92-2	
Polychloronaphthalenes (Cl≥2)	[S08786] 1,2,3,4,5	,8-Hexachloronaphthalene	103426-93-3	
Polychloronaphthalenes (Cl≥2)	[S08787] 1,2,3,5,7	,8-Hexachloronaphthalene	103426-94-4	
Polychloronaphthalenes (Cl≥2)		,8-Hexachloronaphthalene	103426-95-5	
Polychloronaphthalenes (Cl≥2)		,7-Hexachloronaphthalene	103426-96-6	
Polychloronaphthalenes (Cl≥2)		,7-Hexachloronaphthalene	103426-97-7	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

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CAS No. Remarks

Substance Group Name	Example Substances	CAS No.	Remarks
Polychloronaphthalenes (Cl≥2)	[S02392] Pentachloronaphthalene	1321-64-8	
Polychloronaphthalenes (Cl≥2)	[S02393] Trichloronaphthalene	1321-65-9	
Polychloronaphthalenes (Cl≥2)	[S02395] Hexachloronaphthalene	1335-87-1	
Polychloronaphthalenes (Cl≥2)	[S02394] Tetrachloronaphthalene	1335-88-2	
Polychloronaphthalenes (Cl≥2)	[S08798] 1,2,3,6-Tetrachloronaphthalene	149864-78-8	
Polychloronaphthalenes (Cl≥2)	[S08799] 1,2,6,7-Tetrachloronaphthalene	149864-79-9	
Polychloronaphthalenes (Cl≥2)	[S08800] 1,2,5,8-Tetrachloronaphthalene	149864-80-2	
Polychloronaphthalenes (Cl≥2)	[S08801] 1,2,3,8-Tetrachloronaphthalene	149864-81-3	
Polychloronaphthalenes (Cl≥2)	[S08802] 1,2,7,8-Tetrachloronaphthalene	149864-82-4	
Polychloronaphthalenes (Cl≥2)	[S08803] 1,2,3,7,8-Pentachloronaphthalene	150205-21-3	
Polychloronaphthalenes (Cl≥2)	[S08804] 1,3,6,8-Tetrachloronaphthalene	150224-15-0	
Polychloronaphthalenes (Cl≥2)	[S08805] 1,2,3,6,7-Pentachloronaphthalene	150224-16-1	
Polychloronaphthalenes (Cl≥2)	[S08806] 1,2,4,6,7-Pentachloronaphthalene	150224-17-2	
Polychloronaphthalenes (Cl≥2)	[S08807] 1,2,3,5,6-Pentachloronaphthalene	150224-18-3	
Polychloronaphthalenes (Cl≥2)	[S08808] 1,2,4,5,7-Pentachloronaphthalene	150224-19-4	
Polychloronaphthalenes (Cl≥2)	[S08809] 1,2,4,5,6-Pentachloronaphthalene	150224-20-7	
Polychloronaphthalenes (Cl≥2)	[S08810] 1,2,4,7,8-Pentachloronaphthalene	150224-21-8	
Polychloronaphthalenes (Cl≥2)	[S08811] 1,2,4,6,8-Pentachloronaphthalene	150224-22-9	
Polychloronaphthalenes (Cl≥2)	[S08812] 1,2,3,6,8-Pentachloronaphthalene	150224-23-0	
Polychloronaphthalenes (Cl≥2)	[S08813] 1,2,3,5,8-Pentachloronaphthalene	150224-24-1	
Polychloronaphthalenes (Cl≥2)	[S08814] 1,2,4,5,8-Pentachloronaphthalene	150224-25-2	
Polychloronaphthalenes (Cl≥2)	[S08818] 1,2,3,6,7,8-Hexachloronaphthalene	17062-87-2	
Polychloronaphthalenes (Cl≥2)	[S08821] 1,5-Dichloronaphthalene	1825-30-5	
Polychloronaphthalenes (Cl≥2)	[S08822] 1,4-Dichloronaphthalene	1825-31-6	
Polychloronaphthalenes (Cl≥2)	[S04836] 1,2,3,4-Tetrachloronaphthalene; PCN-27	20020-02-4	
Polychloronaphthalenes (Cl≥2)	[\$08825] 1,2-Dichloronaphthalene	2050-69-3	
Polychloronaphthalenes (Cl≥2)	[S08826] 1,6-Dichloronaphthalene	2050-72-8	
Polychloronaphthalenes (Cl≥2)	[S08827] 1,7-Dichloronaphthalene	2050-73-9	
Polychloronaphthalenes (Cl≥2)	[S08828] 1,8-Dichloronaphthalene	2050-74-0	
Polychloronaphthalenes (Cl≥2)	[S08829] 2,3-Dichloronaphthalene	2050-75-1	
Polychloronaphthalenes (Cl≥2)	[S08830] 2,6-Dichloronaphthalene	2065-70-5	
Polychloronaphthalenes (Cl≥2)	[S08832] 1,3-Dichloronaphthalene	2198-75-6	
Polychloronaphthalenes (Cl≥2)	[S08833] 2,7-Dichloronaphthalene	2198-77-8	
Polychloronaphthalenes (Cl≥2)	[S02396] Octachloronaphthalene	2234-13-1	
Polychloronaphthalenes (Cl≥2)	[S04833] 1,4,6-Trichloronaphthalene; PCN-24	2437-54-9	
Polychloronaphthalenes (Cl≥2)	[S04834] 1,4,5-Trichloronaphthalene; PCN-23	2437-55-0	
Polychloronaphthalenes (Cl≥2)	[S08841] Dichloronaphthalene	28699-88-9	
Polychloronaphthalenes (Cl≥2)	[S04837] 1,3,5,8-Tetrachloronaphthalene; PCN-43	31604-28-1	
Polychloronaphthalenes (Cl≥2)	[S02397] Heptachloronaphthalene	32241-08-0	
Polychloronaphthalenes (Cl≥2)	[S04835] 1,4,5,8-Tetrachloronaphthalene; PCN-46	3432-57-3	
Polychloronaphthalenes (Cl≥2)	[S04838] 2,3,6,7-Tetrachloronaphthalene	34588-40-4	
Polychloronaphthalenes (Cl≥2)	[S03506] Polychlorinated naphthalene	38289-27-9	
Polychloronaphthalenes (Cl≥2)	[S04839] 1,2,4-Trichloronaphthalene; PCN-14	50402-51-2	
Polychloronaphthalenes (Cl≥2)	[S04840] 1,2,3-Trichloronaphthalene; PCN-13	50402-52-3	
Polychloronaphthalenes (Cl≥2)	[S04841] 1,3,5-Trichloronaphthalene; PCN-19	51570-43-5	
Polychloronaphthalenes (Cl≥2)	[S04842] 1,2,6-Trichloronaphthalene; PCN-16	51570-44-6	
Polychloronaphthalenes (Cl≥2)	[S04843] 1,2,4,6(or 1,3,4,7)-Tetrachloronaphthalene; PCN-33	51570-45-7	
Polychloronaphthalenes (Cl≥2)	[S04844] 1,2,3,5-Tetrachloronaphthalene; PCN-28	53555-63-8	
Polychloronaphthalenes (Cl≥2)	[S04845] 1,3,5,7-Tetrachloronaphthalene; PCN-42	53555-64-9	
Polychloronaphthalenes (Cl≥2)	[S04846] 1,2,3,5,7-Pentachloronaphthalene; PCN-52	53555-65-0	
Polychloronaphthalenes (Cl≥2)	[S04847] 1,2,5-Trichloronaphthalene; PCN-15	55720-33-7	
Polychloronaphthalenes (Cl≥2)	[S04848] 1,2,7-Trichloronaphthalene; PCN-17	55720-34-8	
Polychloronaphthalenes (Cl≥2)	[S04849] 1,2,8-Trichloronaphthalene	55720-35-9	
Polychloronaphthalenes (Cl≥2)	[S04850] 1,3,6-Trichloronaphthalene; PCN-20	55720-36-0	
organioronaphidiaienes (CIZZ)	[55 .555] 1,5,6 Themoronaphinalette, FCN-20	33720-30-0	

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Substance Group Name	Example Substances	CAS No.	Remarks
Polychloronaphthalenes (Cl≥2)	[S04852] 1,3,8-Trichloronaphthalene; PCN-22	55720-38-2	
Polychloronaphthalenes (Cl≥2)	[S04853] 1,6,7(or 2,3,5)-Trichloronaphthalene; PCN-25	55720-39-3	
Polychloronaphthalenes (Cl≥2)	[S04854] 2,3,6(or 2,6,7)-Trichloronaphthalene; PCN-26	55720-40-6	
Polychloronaphthalenes (Cl≥2)	[S04855] 1,2,3,7(or 2,3,4,6)-Tetrachloronaphthalene; PCN-30	55720-41-7	
Polychloronaphthalenes (Cl≥2)	[S04856] 1,3,6,7(or 2,3,5,7)-Tetrachloronaphthalene; PCN-44	55720-42-8	
Polychloronaphthalenes (Cl≥2)	[S04857] 1,4,6,7-Tetrachloronaphthalene; PCN-47	55720-43-9	
Polychloronaphthalenes (Cl≥2)	[S08856] 1,2,3,4,5,6,7-Heptachloronaphthalene	58863-14-2	
Polychloronaphthalenes (Cl≥2)	[S02398] 1,2,3,4,5,6,8-Heptachloronaphthalene	58863-15-3	
Polychloronaphthalenes (Cl≥2)	[S08857] 1,2,3,4,5,6-Hexachloronaphthalene	58877-88-6	
Polychloronaphthalenes (Cl≥2)	[S08861] 1,2,4,8-Tetrachloronaphthalene	6529-87-9	
Polychloronaphthalenes (Cl≥2)	[S08862] 1,2,4,5-Tetrachloronaphthalene	6733-54-6	
Polychloronaphthalenes (Cl≥2)	[S04858] 1,2,4,7-Tetrachloronaphthalene	67922-21-8	
Polychloronaphthalenes (Cl≥2)	[S04859] 1,2,5,6-Tetrachloronaphthalene	67922-22-9	
Polychloronaphthalenes (Cl≥2)	[S04860] 1,2,5,7-Tetrachloronaphthalene	67922-23-0	
Polychloronaphthalenes (Cl≥2)	[S04861] 1,2,6,8-Tetrachloronaphthalene	67922-24-1	
Polychloronaphthalenes (Cl≥2)	[S04862] 1,2,3,4,5-Pentachloronaphthalene	67922-25-2	
Polychloronaphthalenes (Cl≥2)	[S04863] 1,2,3,4,6-Pentachloronaphthalene	67922-26-3	
Polychloronaphthalenes (Cl≥2)	[S02399] 1,2,3,4,5,7-Hexachloronaphthalene	67922-27-4	
Polychloronaphthalenes (Cl≥2)	[S02011] Polychlorinated naphthalenes	70776-03-3	
Polychloronaphthalenes (Cl≥2)	[S08873] 1,2,4,5,6,8-Hexachloronaphthalene	90948-28-0	
Radioactive Substances	[S02187] Other radioactive substances		
Radioactive Substances	[S05041] Uranium Compounds	_	
Radioactive Substances	[S02190] Radon	10043-92-2	
Radioactive Substances	[S06178] Cesium-137	10045-97-3	
Radioactive Substances	[S06183] Strontium-90	10098-97-2	
Radioactive Substances	[S07536] Thorium Dioxide	1314-20-1	
Radioactive Substances	[S03008] Lead, isotope of mass 205; Lead-205	14119-28-9	
Radioactive Substances	[S03025] Lead, isotope of mass 210; Lead-210	14255-04-0	
Radioactive Substances	[S06676] Americium-241	14253-04-0	
Radioactive Substances	[\$03114] Lead, isotope of mass 202; Lead-202	15752-86-0	
Radioactive Substances	[S03119] Nickel uranium oxide (NiU3010)	15780-33-3	
Radioactive Substances	[S04048] Nickel uranyl tetraacetate, of uranium depleted in uranium-235	71767-12-9 7440-07-5	
Radioactive Substances Radioactive Substances	[S02189] Plutonium		
	[S08868] Promethium	7440-12-2	
Radioactive Substances	[S05020] Radium	7440-14-4	
Radioactive Substances	[S02185] Strontium	7440-24-6	
Radioactive Substances	[S02188] Thorium	7440-29-1	
Radioactive Substances	[S02183] Americium	7440-35-9	
Radioactive Substances	[S02186] Cesium	7440-46-2	
Radioactive Substances	[S02184] Uranium	7440-61-1	
Radioactive Substances	[S04325] Lead uranate pigment	85536-79-4	
Short Chain Chlorinated Paraffins (C10-13)	[S09241] Chloroalkanes(C=10-22)	104948-36-9	
Short Chain Chlorinated Paraffins (C10-13)	[S06238] Alkanes, C10-12, chloro	108171-26-2	
Short Chain Chlorinated Paraffins (C10-13)	[S06283] 1-chlorododecane	112-52-7	
Short Chain Chlorinated Paraffins (C10-13)	[S03202] Undecane, 1,1,1,3,5,7,9,11-11-nonachloro	18993-26-5	
Short Chain Chlorinated Paraffins (C10-13)	[S03250] Undecane, heptachloro-	219697-10-6	
Short Chain Chlorinated Paraffins (C10-13)	[S03251] Undecane, nonachloro-	219697-11-7	
Short Chain Chlorinated Paraffins (C10-13)	[S06793] 1-chloroundecane	2473-03-2	
Short Chain Chlorinated Paraffins (C10-13)	[S03362] Undecane, decachloro-	276673-33-7	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

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Substance Group Name	Example Substances	CAS No.	Remarks
Short Chain Chlorinated Paraffins (C10-13)	[S03483] Undecane, octachloro-	36312-81-9	
Short Chain Chlorinated Paraffins (C10-13)	[S03751] Undecane, 1,1,1,3,6,7,10,11-octachloro-	601523-20-0	
Short Chain Chlorinated Paraffins (C10-13)	[S09242] Undecane, 1,1,1,3,9,11,11,11-octachloro-	601523-20-0	
Short Chain Chlorinated Paraffins (C10-13)	[S03777] Alkanes, chloro	61788-76-9	
Short Chain Chlorinated Paraffins (C10-13)	[S00603] Paraffin waxes and Hydrocarbon waxes, chloro	63449-39-8	
Short Chain Chlorinated Paraffins (C10-13)	[S09235] 1,1,1,2-Tetrachloroundecane	63981-28-2	
Short Chain Chlorinated Paraffins (C10-13)	[S03950] Alkanes, C6-18, chloro	68920-70-7	
Short Chain Chlorinated Paraffins (C10-13)	[S09236] Chlorinated microcrystalline hydrocarbon waxes (petroleum)	68938-43-2	
Short Chain Chlorinated Paraffins (C10-13)	[S04021] Alkanes, C12-13, chloro	71011-12-6	
Short Chain Chlorinated Paraffins (C10-13)	[S07266] 1-chlorotridecane	822-13-9	
Short Chain Chlorinated Paraffins (C10-13)	[S04279] Alkanes, C10-21, chloro	84082-38-2	
Short Chain Chlorinated Paraffins (C10-13)	[S09237] Alkanes, C10-32, chloro	84776-06-7	
Short Chain Chlorinated Paraffins (C10-13)	[S09238] Paraffin oils, chloro	85422-92-0	
Short Chain Chlorinated Paraffins (C10-13)	[S02171] Chloroalkane(C10-13)	85535-84-8	1st SVHC (Oct/28/2008)
Short Chain Chlorinated Paraffins (C10-13)	[S04955] Alkanes, C12-14, chloro	85536-22-7	
Short Chain Chlorinated Paraffins (C10-13)	[S04519] Alkanes, C10-14, chloro	85681-73-8	
Short Chain Chlorinated Paraffins (C10-13)	[S09243] Chloroalkanes(C=12-16)	866758-65-8	
Short Chain Chlorinated Paraffins (C10-13)	[S09239] Paraffins (petroleum), normal C>10, chloro; Chloroparaffins(C>10, linear chain, petroleum)	97553-43-0	
Short Chain Chlorinated Paraffins (C10-13)	[S09240] Alkanes, C10-26, chloro	97659-46-6	
Tributyl Tin Oxide (TBTO)	[S02336] Bis(tri-n-butyltin)oxide	56-35-9	1st SVHC (Oct/28/2008), Order for Enforcement of the Act on the Regulation of Manufacture and Evaluation of Chemical Substances (Class Specified Chemical Substances)
Benzene	[S02349] Benzene	71-43-2	<u> </u>
Hexachlorobenzene	[S02009] Hexachlorobenzene	118-74-1	
4-Nitrodiphenyl and its salts	[S00002] 1,1'-Biphenyl, 4-nitro- salt	-	
4-Nitrodiphenyl and its salts	[S00001] 1,1'-Biphenyl, 4-nitro-	92-93-3	
Bis(chloromethyl)ether	[S01980] Methane, oxybis[chloro-	542-88-1	
Dioxins (Polychlorodibenzofurans)	[S01952] 1,2,3,4,7,8-Hexachlorodibenzofuran(PCDFs)	-	
Dioxins (Polychlorodibenzofurans)	[S01954] 1,2,3,6,7,8-Hexachlorodibenzofuran(PCDFs)	-	
Diovine (Dolychlorodihonzofyrane)	[S01956] 1,2,3,7,8,9-Hexachlorodibenzofuran(PCDFs)	-	
Dioxilis (Polycilloroulbelizoruralis)	feedered a 2 a 7 a Pour delle en Plant of the (Peeps)	_	
	[SU1968] 2,3,4,7,8-Pentachiorodibenzoturan(PCDFs)		
Dioxins (Polychlorodibenzofurans)	[S01968] 2,3,4,7,8-Pentachlorodibenzofuran(PCDFs)  [S01976] Octachlorodibenzofuran(PCDFs)	39001-02-0	
Dioxins (Polychlorodibenzofurans) Dioxins (Polychlorodibenzofurans) Dioxins (Polychlorodibenzofurans) Dioxins (Polychlorodibenzofurans)	[S01976] Octachlorodibenzofuran(PCDFs)	39001-02-0 51207-31-9	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and chemical substances restricted by laws and regulations. Not all chemical substances are covered.

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Substance Group Name	Evample Substances	CAS No.	Romarks
- Shindengen Electric Manufacturing Co., Ltd		Prohibited Substances in Products	page 53/68

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Substance Group Name	Example Substances	CAS No.	Remarks
	[S03691] 2,3,4,7,8-Pentachloro dibenzofurans	57117-31-4	
Dioxins (Polychlorodibenzofurans)		57117-41-6	
Dioxins (Polychlorodibenzofurans)		57117-44-9	
Dioxins (Polychlorodibenzofurans)		60851-34-5	
Dioxins (Polychlorodibenzofurans)		67562-39-4	
Dioxins (Polychlorodibenzofurans)		70648-26-9	
Dioxins (Polychlorodibenzofurans)  Dioxins	[S04088] 1,2,3,7,8,9-Hexachloro dibenzofuran [S01969] 2,3,7,8-Tetrachlorodibenzo-p-dioxin(PCDDs)	72918-21-9 1746-01-6	
(Polychlorodibenzodioxins)	[SO1369] 2,3,7,8-Tetrachiorodipenzo-p-dioxin(PCDDS)	1/40-01-6	
Dioxins (Polychlorodibenzodioxins)	[S01955] 1,2,3,7,8,9-Hexachlorodibenzo[b,e][1,4]dioxin(PCDDs)	19408-74-3	
Dioxins (Polychlorodibenzodioxins)	[S01975] Octachlorodibenzo-p-dioxin(PCDDs)	3268-87-9	
Dioxins (Polychlorodibenzodioxins)	[S03435] 2,7-Dichlorodibenzo-p-dioxin	33857-26-0	
Dioxins (Polychlorodibenzodioxins)	[S03445] Hexachlorodibenzodioxin	34465-46-8	
Dioxins (Polychlorodibenzodioxins)	[S01948] 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin(PCDDs)	35822-46-9	
Dioxins (Polychlorodibenzodioxins)	[S01951] 1,2,3,4,7,8-Hexachlorodibenzo[b,e][1,4]dioxin(PCDDs)	39227-28-6	
Dioxins (Polychlorodibenzodioxins)	[S01957] 1,2,3,7,8-Pentachlorodibenzo[b,e][1,4]dioxen(PCDDs)	40321-76-4	
Dioxins (Polychlorodibenzodioxins)	[S01953] 1,2,3,6,7,8-Hexachlorodibenzo[b,e][1,4]dioxin(PCDDs)	57653-85-7	
Dioxins (Coplanar- Polychlorobiphenyls)	[S01965] 2,3',4,4',5-Pentachlorobiphenyl; PCB-118(Co-PCBs)	31508-00-6	
Dioxins (Coplanar- Polychlorobiphenyls)	[S01973] 3,3',4,4'-Tetrachlorobiphenyl; PCB-77(Co-PCBs)	32598-13-3	
Dioxins (Coplanar- Polychlorobiphenyls)	[S01962] 2,3,3',4,4'-Pentachlorobiphenyl; PCB-105(Co-PCBs)	32598-14-4	
Dioxins (Coplanar- Polychlorobiphenyls)	[S01971] 3,3',4,4',5,5'-Hexachlorobiphenyl; PCB-169(Co-PCBs)	32774-16-6	
Dioxins (Coplanar- Polychlorobiphenyls)	[S01961] 2,3,3',4,4',5-Hexachlorobiphenyl; PCB-156(Co-PCBs)	38380-08-4	
Dioxins (Coplanar- Polychlorobiphenyls)	[S01959] 2,3,3',4,4',5,5'-Heptachlorobiphenyl; PCB-189(Co-PCBs)	39635-31-9	
Dioxins (Coplanar- Polychlorobiphenyls)	[S01963] 2,3',4,4',5,5'-Hexachlorobiphenyl; PCB-167(Co-PCBs)	52663-72-6	
Dioxins (Coplanar- Polychlorobiphenyls)	[S01972] 3,3',4,4',5-Pentachlorobiphenyl; PCB-126(Co-PCBs)	57465-28-8	
Dioxins (Coplanar- Polychlorobiphenyls)	[S01964] 2',3,4,4',5-Pentachlorobiphenyl; PCB-123(Co-PCBs)	65510-44-3	
Dioxins (Coplanar- Polychlorobiphenyls)	[S01960] 2,3,3',4,4',5'-Hexachlorobiphenyl; PCB-157(Co-PCBs)	69782-90-7	
Dioxins (Coplanar- Polychlorobiphenyls)	[S01974] 3,4,4',5-Tetrachlorobiphenyl; PCB-81(Co-PCBs)	70362-50-4	
Dioxins (Coplanar- Polychlorobiphenyls)	[S01966] 2,3,4,4',5-Pentachlorobiphenyl; PCB-114(Co-PCBs)	74472-37-0	
Mirex	[S02047] Mirex; Dodecachloropentacyclo[5.2.1.02,6.03,9.05,8]decane	2385-85-5	
Dimethylfumarate	[S05931] Dimethylfumarate	624-49-7 20	09/251/EC
Perfluorooctanesulfonate (PFOS) and its salts	[S02489] 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2- [ethyl[[heptadecafluorooctyl]sulphonyl]amino]ethyl 2-methyl-2-propenoi [ethyl[[nonafluorobutyl]sulphonyl]amino]ethyl 2-methyl-2-propenoate, 2 [ethyl[[pentadecafluoroheptyl]sulphonyl]amino]ethyl 2-methyl-2-propen [ethyl[[tridecafluorohexyl]sulphonyl]amino]ethyl 2-methyl-2-propenoate propenoic acid	- oate, 2-	
Perfluorooctanesulfonate (PFOS) and its salts	[S02511] Other perfluorooctane sulphonate and its related compounds	-	
Perfluorooctanesulfonate (PFOS) and its salts	[S02490] Polymethylenepolyphenylene isocyanate and bis{4-NCO-phenyl reaction products with 2-ethyl-1-hexanol, 2-butanone, oxime, N-ethyl-N-hydroxyethyl)-1-C4-C8 perfluoroalkanesulphonamide		

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Substance Group Name	Example Substances	CAS No.	Remarks
Perfluorooctanesulfonate (PFOS) and its salts	[S02481] 2-Propenoic acid, 2-methyl-, polymers with Bu methacrylate, lauryl methacrylate and 2-[methyl[(perfluoro-C4-8-alkyl)sulphonyl]amino]ethyl methacrylate	127133-66-8	
Perfluorooctanesulfonate (PFOS) and its salts	[S02482] Sulphonamides, C4-8-alkane, perfluoro, N-methyl-N-(oxiranylmethyl)	129813-71-4	
Perfluorooctanesulfonate (PFOS) and its salts	[S02433] 1-Octanesulphonamide, N-[3-(dimethylamino)propyl]-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-	13417-01-1	
Perfluorooctanesulfonate (PFOS) and its salts	[S02434] 2-Propenoic acid, 2-methyl-, 2- [[(heptadecafluorooctyl)sulphonyl]methylamino]ethyl ester	14650-24-9	
Perfluorooctanesulfonate (PFOS) and its salts	[S02483] Fatty acids, C18-unsatd., trimers, 2- [[heptadecafluorooctyl)sulphonyl]methylamino]ethyl esters	148240-78-2	
Perfluorooctanesulfonate (PFOS) and its salts	[S02484] Sulphonamides, C4-8-alkane, perfluoro, N-(hydroxyethyl)-N-methyl, reaction products with 1,6-diisocyanatohexane homopolymer and ethylene glycol	148684-79-1	
Perfluorooctanesulfonate (PFOS) and its salts	[S02485] Sulphonamides, C4-8-alkane, perfluoro, N-ethyl-N-(hydroxyethyl), reaction products with 2-ethyl-1-hexanol and polymethylenepolyphenylene isocyanate	160901-25-7	
Perfluorooctanesulfonate (PFOS) and its salts	[S02421] 1-Propanaminium, 3-[[(heptadecafluorooctyl)sulphonyl]amino]-N,N,N-trimethyl-, iodide	1652-63-7	
Perfluorooctanesulfonate (PFOS) and its salts	[S02422] 1-Octanesulphonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-hydroxyethyl)-	1691-99-2	
Perfluorooctanesulfonate (PFOS) and its salts	[S02423] 1-Octanesulphonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-	1763-23-1	
Perfluorooctanesulfonate (PFOS) and its salts	[S02486] 1-Octanesulphonamide, N-[3-(dimethyloxidoamino)propyl]-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-,potassium salt	178094-69-4	
Perfluorooctanesulfonate (PFOS) and its salts	[S02487] Sulphonamides, C4-8-alkane, perfluoro, N-ethyl-N-(hydroxyethyl)-, polymers with 1,1'-methylenebis[4-isocyanatobenzene] and polymethylenepolyphenylene isocyanate, 2-ethylhexyl esters, Me Et ketone oxime-blocked	178535-22-3	
Perfluorooctanesulfonate (PFOS) and its salts	[S02488] 1-Octanesulphonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-methyl-, reaction products with benzene-chlorine-sulphur chloride (S2Cl2) reaction products chlorides	182700-90-9	
Perfluorooctanesulfonate (PFOS) and its salts	[S02424] Glycine, N-ethyl-N-[(heptadecafluorooctyl)sulphonyl]-, ethyl ester	1869-77-8	
Perfluorooctanesulfonate (PFOS) and its salts	[S02491] Sulphonamides, C4-8-alkane, perfluoro, N-[3-{dimethylamino}propyl], reaction products with acrylic acid	192662-29-6	
Perfluorooctanesulfonate (PFOS) and its salts	[S02425] 1-Octanesulphonamide, N,N',N''-[phosphinylidynetris(oxy-2,1-ethanediyl)]tris[N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-	2250-98-8	
Perfluorooctanesulfonate (PFOS) and its salts	[S02426] 1-Octanesulphonamide, N-butyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-hydroxyethyl)-	2263-09-4	
Perfluorooctanesulfonate (PFOS) and its salts	[S02435] 1-Octanesulphonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-hydroxyethyl)-N-methyl-	24448-09-7	
Perfluorooctanesulfonate (PFOS) and its salts	[S02436] 1-Octanesulphonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-2-propenyl-	24924-36-5	
Perfluorooctanesulfonate (PFOS) and its salts	[S02492] 1-Decanaminium, N-decyl-N,N-dimethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulphonic acid (1:1)	251099-16-8	
Perfluorooctanesulfonate (PFOS) and its salts	[S02437] 2-Propenoic acid, 2-[[(heptadecafluorooctyl)sulphonyl]methylamino]ethyl ester	25268-77-3	
Perfluorooctanesulfonate (PFOS) and its salts	[S02427] 1-Octanesulphonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, potassium salt	2795-39-3	
Perfluorooctanesulfonate (PFOS) and its salts	[S02438] 1-Octanesulphonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, ammonium salt	29081-56-9	
Perfluorooctanesulfonate (PFOS) and its salts	[S02439] Poly(oxy-1,2-ethanediyl), .alpha[2- [ethyl[(heptadecafluorooctyl)sulphonyl]amino]ethyl]omegahydroxy-	29117-08-6	
Perfluorooctanesulfonate (PFOS) and its salts	[S02440] 1-Octanesulphonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, lithium salt	29457-72-5	
Perfluorooctanesulfonate (PFOS) and its salts	[S02428] Glycine, N-ethyl-N-[(heptadecafluorooctyl)sulphonyl]-	2991-50-6	
Perfluorooctanesulfonate (PFOS) and its salts	[S02429] Glycine, N-ethyl-N-[(heptadecafluorooctyl)sulphonyl]-, potassium salt	2991-51-7	
Perfluorooctanesulfonate (PFOS) and its salts	[\$02441] 1-Octanesulphonamide, N-[3-(dimethyloxidoamino)propyl]-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-	30295-51-3	
Perfluorooctanesulfonate (PFOS) and its salts	$\label{eq:condition} [S02442] \ 1-Octane sulphonamide, N,N'-[phosphinicobis(oxy-2,1-ethane diyl)] bis[N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptade cafluoro-, ammonium salt$	30381-98-7	
Perfluorooctanesulfonate (PFOS) and its salts	[\$02493] Fatty acids, linseed-oil, dimers, 2- [[(heptadecafluorooctyl sulphonyl]methylamino]ethyl esters	306973-46-6	

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	<ul> <li>Shindengen Electric Manufacturing Co.</li> </ul>	Ltd	Prohibited Substances in Products	page 55/68
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Substance Group Name	Example Substances	CAS No.	Remarks
Perfluorooctanesulfonate (PFOS) and its salts	[\$02494] Sulphonamides, C4-8-alkane, perfluoro, N-{hydroxyethyl}-N-methyl, reaction products with 12-hydroxystearic acid and 2,4-TDI, ammonium salts	306973-47-7	
Perfluorooctanesulfonate (PFOS) and its salts	[S02495] Sulphonamides, C4-8-alkane, perfluoro, N-methyl-N-[(3-octadecyl-2-oxo-5-oxazolidinyl)methyl]	306974-19-6	
Perfluorooctanesulfonate (PFOS) and its salts	[S02496] Siloxanes and Silicones, di-Me, mono[3-[(2-methyl-1-oxo-2-propenyl)oxy]propylgroup] -terminated, polymers with 2-[methyl[(perfluoro-C4-8-alkyl)sulphonyl]amino]ethyl acrylate and stearyl methacrylate	306974-28-7	
Perfluorooctanesulfonate (PFOS) and its salts	[S02497] Sulphonic acids, C6-8-alkane, perfluoro, compounds with polyethylene- polypropylene glycol bis(2-aminopropyl) ether	306974-45-8	
Perfluorooctanesulfonate (PFOS) and its salts	[S02498] Fatty acids, C18-unsatd.,dimers, 2-[methyl[(perfluoro-C4-8-alkyl)sulphonyl]amino] ethyl esters	306974-63-0	
Perfluorooctanesulfonate (PFOS) and its salts	[S02499] Propanoic acid, 3-hydroxy-2- (hydroxymethyl)-2-methyl-, polymer with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol and N,N',2-tris(6-isocyanatohexyl)imidodicarbonic diamide, reaction products with N-ethyl-1,1,2,2,3,3,4,5,5,6,6,7,7,8,8-heptadecafluoro-N-(2-hydroxyethyl)-1-octanesulphonamide and N-ethyl-1,1,2,2,3,3,4,5,5,6,6,7,7,7-pentadecafluoro-N-(2-hydroxyethyl)-1-heptanesulphonamide, compounds with triethylamine	306975-56-4	
Perfluorooctanesulfonate (PFOS) and its salts	[S02500] Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl-, polymer with 1,1'-methylenebis[4- isocyanatobenzene] and 1,2,3-propanetriol, reaction products with Nethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-N-(2-hydroxyethyl)-1-octanesulphonamide and N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-N-(2-hydroxyethyl)-1-heptanesulphonamide, compounds with morpholine	306975-57-5	
Perfluorooctanesulfonate (PFOS) and its salts	[S02501] 2-Propenoic acid, 2-methyl-, dodecyl ester, polymers with 2- [methyl[(perfluoro-C4-8-alkyl)sulphonyl]amino]ethyl acrylate and vinylidene chloride	306975-62-2	
Perfluorooctanesulfonate (PFOS) and its salts	[S02502] Poly(oxy-1,2-ethanediyl), .alphahydroomegahydroxy-, polymer with 1,6-diisocyanatohexane, N-(hydroxyethyl)-N-methyl perfluoro C4-8-alkane sulphonamides-blocked	306975-84-8	
Perfluorooctanesulfonate (PFOS) and its salts	[S02503] 2-Propenoic acid, 2-methyl-, dodecyl ester, polymers with N-(hydroxymethyl)-2-propenamide, 2-[methyl]([perfluoro-C4-8-alkyl)sulphonyl]amino]ethyl methacrylate, stearyl methacrylate and vinylidene chloride	306975-85-9	
Perfluorooctanesulfonate (PFOS) and its salts	[S02504] 1-Hexadecanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, bromide, polymers with Bu acrylate, Bu methacrylate and 2-[methyl[(perfluoro-C4-8-alkyl)sulphonyl]amino]ethyl acrylate	306976-25-0	
Perfluorooctanesulfonate (PFOS) and its salts	[S02505] 2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with 2,4-diisocyanato-1-methylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol and 2-propenoic acid, N-ethyl-N-(hydroxyethyl)perfluoro-C4-8-alkanesulphonamides-blocked	306976-55-6	
Perfluorooctanesulfonate (PFOS) and its salts	[S02506] 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymers with acrylic acid, 2-[methyl[(perfluoro-C4-8-alkyl]sulphonyl]amino]ethyl acrylate and propylene glycol monoacrylate, hydrolysed, compounds with 2,2'- (methylimino)bis[ethanol]	306977-58-2	
Perfluorooctanesulfonate (PFOS) and its salts	[S02507] 2-Propenoic acid, butyl ester, polymers with acrylamide, 2-[methyl](perfluoro-C4-8-alkyl)sulphonyl]amino]ethyl acrylate and vinylidene chloride	306978-04-1	
Perfluorooctanesulfonate (PFOS) and its salts	[S02508] Hexane, 1,6-diisocyanato-, homopolymer, N-(hydroxyethyl)-N-methyl perfluoro-C4-8-alkane sulphonamides- and stearyl alcblocked	306978-65-4	
Perfluorooctanesulfonate (PFOS) and its salts	[S02509] Poly(oxy-1,2-ethanediyl), .alpha[2-(methylamino)ethyl]omega[(1,1,3,3-tetramethylbutyl)phenoxy]-, N-[(perfluoro-C4-8-alkyl)sulphonyl]	306979-40-8	
Perfluorooctanesulfonate (PFOS) and its salts	[S02510] Sulphonamides, C4-8-alkane, perfluoro, N,N'-[1,6-hexanediylbis[(2-oxo-3,5-oxazolidinediyl)methylene]]bis[N-methyl-	306980-27-8	
Perfluorooctanesulfonate (PFOS) and its salts	[S02415] 1-Octanesulphonyl fluoride, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-	307-35-7	
Perfluorooctanesulfonate (PFOS) and its salts	[\$02443] 1-Octanesulphonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-methyl-	31506-32-8	
Perfluorooctanesulfonate (PFOS) and its salts	[S02416] 2-Propenoic acid, 2-methyl-, 2- [ethyl[(heptadecafluorooctyl)sulphonyl]amino]ethyl ester	376-14-7	
Perfluorooctanesulfonate (PFOS) and its salts	$[SO2444] \ 1-Propanaminium, \ 3-[[(heptadecafluorooctyl)sulphonyl]amino]-N,N',N''-trimethyl-, chloride$	38006-74-5	
Perfluorooctanesulfonate (PFOS) and its salts	[S02430] 1-Octanesulphonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-[2-(phosphonooxy)ethyl]-	3820-83-5	
Perfluorooctanesulfonate (PFOS) and its salts	[S02417] 2-Propenoic acid, 2-[butyl[(heptadecafluorooctyl)sulphonyl]amino]ethyl ester	383-07-3	
Perfluorooctanesulfonate (PFOS) and its salts	[S02431] Glycine, N-ethyl-N-[(heptadecafluorooctyl)sulphonyl]-, sodium salt	3871-50-9	
Perfluorooctanesulfonate (PFOS) and its salts	[S04874] Sodium 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonate (C8F17NaO3S)	4021-47-0	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

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Cubstance Croup Name	Evample Cubstances	CACNO	page 56/68 Remarks
Substance Group Name	Example Substances	CAS No.	Kemarks
Perfluorooctanesulfonate (PFOS) and its salts	[\$02432] 1-Octanesulphonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-	4151-50-2	
Perfluorooctanesulfonate (PFOS) and its salts	[S02418] 2-Propenoic acid, 2-[ethyl[(heptadecafluorooctyl)sulphonyl]amino]ethyl ester	423-82-5	
Perfluorooctanesulfonate (PFOS) and its salts	[S02419] 1-Octanesulphonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-2-propenyl-	423-86-9	
Perfluorooctanesulfonate (PFOS) and its salts	[S02512] Perfluorooctane sulfonate anion	45298-90-6	
Perfluorooctanesulfonate (PFOS) and its salts	[S02445] 1-Octanesulphonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(phenylmethyl)-	50598-29-3	
Perfluorooctanesulfonate (PFOS) and its salts	[S02446] Poly(oxy-1,2-ethanediyl), alpha-[2- [[(heptadecafluorooctyl)sulphonyl]propylamino]ethyl]-omega-hydroxy-	52550-45-5	
Perfluorooctanesulfonate (PFOS) and its salts	[S02447] Ethanaminium, N,N',N"-triethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulphonic acid (1:1)	56773-42-3	
Perfluorooctanesulfonate (PFOS) and its salts	[S02448] Benzoic acid, 2,3,4,5-tetrachloro-6-[[[3- [[(heptadecafluorooctyl)sulphonyl]oxy]phenyl]amino]carbonyl]-, monopotassium salt	57589-85-2	
Perfluorooctanesulfonate (PFOS) and its salts	[S02449] 2-Propenoic acid, 4-[[(heptadecafluorooctyl)sulphonyl]methylamino]butyl ester	58920-31-3	
Perfluorooctanesulfonate (PFOS) and its salts	[S02450] 2-Propenoic acid, 2-methyl-, 4- [[(heptadecafluorooctyl)sulphonyl]methylamino]butyl ester	61577-14-8	
Perfluorooctanesulfonate (PFOS) and its salts	[S02451] 1-Octanesulphonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-[3-(trimethoxysilyl)propyl]-	61660-12-6	
Perfluorooctanesulfonate (PFOS) and its salts	[S02452] 1-Octanesulphonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-[3-{trichlorosilyl)propyl}-	67939-42-8	
Perfluorooctanesulfonate (PFOS) and its salts	[S02454] 1-Octanesulphonamide, N-[3-(dimethylamino)propyl]-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, monohydrochloride	67939-88-2	
Perfluorooctanesulfonate (PFOS) and its salts	[S02453] 1-Octanesulphonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-[2-(phosphonooxy)ethyl]-, diammonium salt	67969-69-1	
Perfluorooctanesulfonate (PFOS) and its salts	[\$02455] Carbamic acid, (4-methyl-1,3-phenylene)bis-, bis[2-[ethyl[(perfluoro-C4-8-alkyl)sulphonyl]amino]ethyl] ester	68081-83-4	
Perfluorooctanesulfonate (PFOS) and its salts	[\$02458] 1-Octanesulphonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(4-hydroxybutyl)-N-methyl-	68239-73-6	
Perfluorooctanesulfonate (PFOS) and its salts	[S02456] 1-Propanaminium, 3-[[(heptadecafluorooctyl)sulphonyl](3-sulphopropyl)amino]-N-(2-hydroxyethyl)-N,N-dimethyl-, hydroxide, inner salt	68298-11-3	
Perfluorooctanesulfonate (PFOS) and its salts	[\$02459] 1-Propanaminium, 3-[[(heptadecafluorooctyl)sulphonyl]amino]-N,N',N"-trimethyl-, iodide, ammonium salt	68310-75-8	
Perfluorooctanesulfonate (PFOS) and its salts	[S02457] 2-Propenoic acid, eicosyl ester, polymer with 2- [[(heptadecafluorooctyl)sulphonyl] methylamino]ethyl 2-propenoate, hexadecyl 2- propenoate, 2-[methyl[(nonafluorobutyl)sulphonyl]amino]ethyl 2-propenoate, 2- [methyl[(pentadecafluorohexyl)sulphonyl]amino]ethyl 2-propenoate, 2- [methyl[(medcafluoropentyl)sulphonyl]amino]ethyl 2-propenoate and octadecyl 2- propenoate	68329-56-6	
Perfluorooctanesulfonate (PFOS) and its salts	[S02460] 2-Propenoic acid, polymer with 2- [ethyl][(heptadecafluorooctyl)sulphonyl]amino]ethyl 2-methyl-2-propenoate and octadecyl 2-propenoate	68541-80-0	
erfluorooctanesulfonate (PFOS) ind its salts	[S02461] 2-Propenoic acid, butyl ester,polymer with 2- [[(heptadecafluorooctyl)sulphonyl]methylamino]ethyl 2-propenoate, 2- [methyl[(nonafluorobutyl)sulphonyl]amino]ethyl 2-propenoate, 2- [methyl[(rentadecafluoroheptyl)sulphonyl]amino]ethyl 2-propenoate and 2- [methyl[(tridecafluorohexyl)sulphonyl]amino]ethyl 2-propenoate	68555-90-8	
Perfluorooctanesulfonate (PFOS) and its salts	[S02462] 2-Propenoic acid, 2-methyl-, 2- [ethyl[(naptadecafluorooctyl)sulphonyl]amino]ethyl ester, polymer with 2- [ethyl[(naptadecafluorobetyl)sulphonyl]amino] ethyl 2-methyl-2-propenoate, 2- [ethyl[([pentadecafluoroheptyl)sulphonyl]amino]ethyl 2-methyl-2-propenoate, 2- [ethyl[(Itridecafluoropentyl)sulphonyl]amino]ethyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate	68555-91-9	

chemical substances restricted by laws and regulations. Not all chemical substances are covered.

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<sup>-</sup> The [Sxxxxx (the x's being a 5 digit number)] on example substances are the Shindengen substance management codes.

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and chemical substances restricted by laws and regulations. Not all chemical substances are covered.

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Substance Group Name	Example Substances	CAS No.	Remarks
Perfluorooctanesulfonate (PFOS) and its salts	[S02463] 2-Propenoic acid, 2-methyl-, 2- [[(heptadecafluorooctyl)sulphonyl]methylamino]ethyl ester, polymer with 2- [methyl[(nonafluorobutyl]sulphonyl]amino]ethyl 2-methyl-2-propenoate, 2- [methyl[(pentadecafluoroheptyl)sulphonyl]amino]ethyl 2-methyl-2-propenoate, 2- [methyl[(tridecafluorohexyl]sulphonyl]amino]ethyl 2-methyl-2-propenoate, 2- [methyl[(undecafluoropentyl)sulphonyl]amino]ethyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate	68555-92-0	
Perfluorooctanesulfonate (PFOS) and its salts	[S02464] Sulphonamides, C4-8-alkane, perfluoro, N-ethyl-N-(hydroxyethyl), reaction products with 1,1'-methylenebis[4-isocyanatobenzene]	68608-14-0	
Perfluorooctanesulfonate (PFOS) and its salts	[S02465] N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-{2-hydroxyethyl}-1-octanesulfonamide, reaction products with N-ethyl-1,1,2,2,3,3,4,4-nonafluoro-N-{2-hydroxyethyl}-1-butanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-N-{2-hydroxyethyl}-1-heptanesulfonamide, N-ethyl-1,1,2,2,3,3,4,5,5,6,6,6-tridecafluoro-N-{2-hydroxyethyl}-1-hexanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,5-undecafluoro-N-{2-hydroxyethyl}-1-pentanesulfonamide, octadecan-1-ol and polymethylenepolyphenylene polyisocyanate	68649-26-3	
Perfluorooctanesulfonate (PFOS) and its salts	[S02466] 2-Propenoic acid, 2-[[(heptadecafluorooctyl)sulphonyl]methylamino]ethyl ester, polymer with 2-[methyl[(nonafluorobutyl)sulphonyl]amino]ethyl 2-propenoate, 2-[methyl[(pentadecafluorohetyl)sulphonyl]amino]ethyl 2-propenoate, 2-[methyl[(tridecafluorohexyl)sulphonyl]amino]ethyl 2-propenoate, 2-[methyl[(undecafluoropentyl)sulphonyl]amino]ethyl 2-propenoate and alpha(1-oxo-2-propenyl)-omegamethoxypoly(oxy-1,2-ethanediyl)	68867-60-7	
Perfluorooctanesulfonate (PFOS) and its salts	[S02467] 2-Propenoic acid, 2-methyl-, 2- [ethyl[(heptadecafluoroocty) sulphonyl]amino]ethyl ester, polymer with 2- [ethyl[(nonafluorobutyl)sulphonyl]amino]ethyl 2-methyl-2-propenoate, 2- [ethyl[(pentadecafluoroheptyl)sulphonyl]amino]ethyl 2-methyl-2-propenoate, 2- [ethyl[(Itridecafluoro-hexyl)sulphonyl]amino]ethyl 2-methyl-2-propenoate, 2- [ethyl[(undecafluoro-pentyl)sulphonyl]amino]ethyl 2-methyl-2-propenoate and 2- methyl-1,3-butadiene	68877-32-7	
Perfluorooctanesulfonate (PFOS) and its salts	[S02468] Chromium, diaquatetrachloro[.mu[N-ethyl-N- [(heptadecafluorooctyl)sulphonyl] glycinatokappa.O:.kappa.O']]muhydroxybis(2-methylpropanol)di-	68891-96-3	
Perfluorooctanesulfonate (PFOS) and its salts	[S02469] 2-Propenoic acid, eicosyl ester, polymers with branched octylacrylate, 2- [[[heptadecafluorooctyl]sulphonyl]methylamino]ethyl acrylate, 2- [methyl[[pentadecafluoroheptyl]sulphonyl]amino]ethyl acrylate, 2- [methyl[[tridecafluoroheptyl]sulphonyl]amino]ethyl acrylate, 2- [methyl[[tridecafluorohexyl]sulphonyl]amino]ethyl acrylate, 2- [methyl[[undecafluoropentyl]sulphonyl]amino]ethyl acrylate, polyethylene glycol acrylate Me ether and stearyl acrylate	68909-15-9	
Perfluorooctanesulfonate (PFOS) and its salts	[S02470] Poly(oxy-1,2-ethanediyl), .alpha[2- [ethyl[(heptadecafluorooctyl)sulphonyl]amino]ethyl]omegamethoxy-	68958-61-2	
Perfluorooctanesulfonate (PFOS) and its salts	[S02471] 1-Octanesulphonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, compd. with 2,2'-iminobis[ethanol] (1:1)	70225-14-8	
Perfluorooctanesulfonate (PFOS) and its salts	[S02472] 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with 1,1-dichloroethene, 2-[[(heptadecafluorooctyl)sulphonyl]methylamino]ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, 2-[methyl[(nonafluorobutyl)sulphonyl]amino]ethyl 2-propenoate, 2-[methyl[(pentadecafluoroheptyl)sulphonyl]amino]ethyl 2-propenoate, 2-[methyl[(tridecafluorohexyl)sulphonyl]amino]ethyl 2-propenoate and 2-[methyl[(undecafluoropentyl)sulphonyl]amino]ethyl 2-propenoate	70776-36-2	
Perfluorooctanesulfonate (PFOS) and its salts	[S05954] 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate; piperidine	71463-74-6	
Perfluorooctanesulfonate (PFOS) and its salts	[S02473] Phosphonic acid, [3-[ethyl[(heptadecafluorooctyl)sulphonyl]amino]propyl]-	71463-78-0	
Perfluorooctanesulfonate (PFOS) and its salts	$[SO2474]\ Phosphonic\ acid,\ [3-[ethyl[(heptadecafluorooctyl)sulphonyl]amino]propyl]-,\ diethyl\ ester$	71463-80-4	
Perfluorooctanesulfonate (PFOS) and its salts	[S02475] 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, 2- [[(heptadecafluorooctyl)sulphonyl]methylamino]ethyl 2-propenoate, 2- [methyl[(nonafluorobutyl)sulphonyl]amino]ethyl 2-propenoate, 2- [methyl[(tridecafluoroheptyl)sulphonyl]amino]ethyl 2-propenoate, 2- [methyl[(undecafluoropentyl)sulphonyl]amino]ethyl 2-propenoate and 2-propenoic acid	71487-20-2	
Perfluorooctanesulfonate (PFOS) and its salts	[S02420] 1-Octanesulphonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-	754-91-6	
Perfluorooctanesulfonate (PFOS) and its salts	[\$05955] Bis(1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonic acid)magnesium salt	91036-71-4	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

Substance Group Name	Example Substances	CAS No.	Remarks
Perfluorooctanesulfonate (PFOS) and its salts	[S02476] Sulphonamides, C4-8-alkane, perfluoro, N-(hydroxyethyl)-N-methyl, reaction products with epichlorohydrin, adipates (esters)	91081-99-1	nemana
Perfluorooctanesulfonate (PFOS) and its salts	So2477  Ethanaminium, N.N.N-trimethyl-2-{[(2-mthyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-ethoxyethyl 2-propenoate, 2- [[(heptadecafluorooctyl)sulphonyl]methylamino]ethyl 2-propenoate and oxiranylmethyl 2-methyl-2-propenoate	92265-81-1	
Perfluorooctanesulfonate (PFOS) and its salts	[S02478] 1-Propanesulphonic acid, 3-[[3- (dimethylamino)propyl][(heptadecafluorooctyl) sulphonyl]amino]-2-hydroxy-, monosodium salt	94133-90-1	
Perfluorooctanesulfonate (PFOS) and its salts	[S02479] Carbamic acid, [5-[[[2- [[(heptadecafluorooctyl)sulphonyl]methylamino]ethoxy]carbonyl]amino]-2- methylphenyl]-, 9-octadecenyl ester, (Z)-	94313-84-5	
Perfluorooctanesulfonate (PFOS) and its salts	[S02480] Sulphonamides, C7-8-alkane, perfluoro, N-methyl-N-[2-[(1-oxo-2-propenyl)oxy]ethyl], polymers with 2-ethoxyethyl acrylate, glycidyl methacrylate and N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethanaminium chloride	98999-57-6	
Tri-substituted organostannic compounds	[S02050] Copolymer of alkyl acrylate, methyl methacrylate and tributyltin methacrylate	-	
Tri-substituted organostannic compounds	[S05031] Tricyclohexyl Tin Compounds	-	
Tri-substituted organostannic compounds	[S05032] Triethyl Tin Compounds	-	
Tri-substituted organostannic compounds	[S05033] Trihexyl Tin Compounds	-	
Tri-substituted organostannic compounds	[S05034] Trimethyl Tin Compounds	-	
Tri-substituted organostannic compounds	[S05035] Trioctyl Tin Compounds	-	
Tri-substituted organostannic compounds	[S08993] Triorganotin compounds	-	
Tri-substituted organostannic compounds	[S05036] Tripentyl Tin Compounds	-	
Tri-substituted organostannic compounds	[S05037] Triphenyl Tin Compounds	-	
Tri-substituted organostannic compounds	[S05038] Tripropyl Tin Compounds	-	
Tri-substituted organostannic compounds	[S07398] Stannane, tributyl(butylphenoxy)-	100835-88-9	
Tri-substituted organostannic compounds	[S02618] Bromotrimethylstannane	1066-44-0	
Tri-substituted organostannic compounds	[S02619] Trimethyltin chloride	1066-45-1	
Tri-substituted organostannic compounds	[S02622] Tributyltin methoxide	1067-52-3	
Tri-substituted organostannic compounds	[S02623] Tributyltin hydroxide	1067-97-6	
Tri-substituted organostannic compounds	[S07402] 2-Propenoic acid, ethyl ester, polymer with octyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]stannane	108189-00-0	
Tri-substituted organostannic compounds	[S07404] 2-Propenoic acid, butyl ester, polymer with ethyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]stannane	109298-02-4	
Tri-substituted organostannic compounds	[S07405] 2-Propenoic acid, pentyl ester, polymer with tributyl[[2-methyl-1-oxo-2-propenyl]oxy]stannane	110586-22-6	
Tri-substituted organostannic compounds	$[SO7406] \hbox{ $2$-Propenoic acid, $2$-ethylhexyl ester, polymer with tributyl [(2-methyl-1-oxo-2-propenyl)oxy] stannane} \\$	110586-23-7	
Tri-substituted organostannic compounds	[S02658] Trimethyltin azide	1118-03-2	
Tri-substituted organostannic compounds	[S02659] Trimethyltin acetate	1118-14-5	
Tri-substituted organostannic compounds	[S07407] 2-Propenoic acid, octyl ester, polymer with tributyl[(2-methyl-1-oxo-2-propenyl)oxy]stannane	112492-63-4	
Tri-substituted organostannic compounds	[S07410] Stannane, tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with 2-methylpropyl 2-propenoate	124873-62-7	
Tri-substituted organostannic compounds	[S07411] Stannane, tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with 1,1-dimethylethyl 2-propenoate	124873-63-8	

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Substance Group Name	Example Substances	CAS No.	Remarks
Tri-substituted organostannic compounds	[S07412] Bis(triphenyltin) oxide	1262-21-1	
Tri-substituted organostannic compounds	[S07826] Tricyclohexylstannanol	13121-70-5	
Tri-substituted organostannic compounds	[S07827] Bis(tricyclohexyltin)sulfide	13121-76-1	
Tri-substituted organostannic compounds	[S02903] TRIBUTYLTIN METHANESULPHONATE	13302-06-2	
Tri-substituted organostannic compounds	[S02907] Tributyltin Acrylate	13331-52-7	
Tri-substituted organostannic compounds	[S07413] [(Aminosulfonyl)oxy]triphenylstannane	13362-00-0	
Tri-substituted organostannic compounds	[S07832] 5,5,9,9-tetrabutyl-7-[(tributylstannyl)oxy]-6,8-dioxa-7-phospha-5,9-distannatridecane 7-oxide	13435-05-7	
Tri-substituted organostannic compounds	[S07916] (TB-5-11)-N,N,N-Tributyl-1-butanaminium difluorotriphenylstannate	139353-88-1	
Tri-substituted organostannic compounds	[S02069] Bis(tributyltin)maleate	14275-57-1	
Tri-substituted organostannic compounds	[S02062] Tributyltin chloride	1461-22-9	
Tri-substituted organostannic compounds	[S03050] Tributyltin bromide	1461-23-0	
Fri-substituted organostannic compounds	[S03090] Triethyltin phenoxide	1529-30-2	
Tri-substituted organostannic	[S07420] (Z)-3,6-dioxo-1,1,1,8,8,8-hexaphenyl-2,7-dioxa-1,8-distannaoct-4-ene	16122-27-3	
Tri-substituted organostannic	[S07422] 4-Methyl-N-phenyl-N-(triphenylstannyl)benzenesulfonamide	172777-09-2	
Tri-substituted organostannic	[S02298] Triphenyltin=N,N'-dimethyldithiocarbamate	1803-12-9	
Tri-substituted organostannic compounds	[S02056] Triphenyltin fatty acid salts(C=9-11)(2,2,4,4-Tetramethylpentanoic acid triphenyltin(IV) salt)	18380-71-7	
Tri-substituted organostannic compounds	[S02057] Triphenyltin fatty acid salts(C=9-11)(2-Isopropyl-2,4-dimethylbutanoic acid triphenyltin(IV) salt)	18380-72-8	
Tri-substituted organostannic	[S03206] Triethyltin acetate	1907-13-7	
Tri-substituted organostannic	[S07811] [1,2-Phenylenebis(carbonyloxy)]bis[triphenylstannane]	1954-36-5	
Tri-substituted organostannic	[S02065] Tributyltin fluoride	1983-10-4	
Tri-substituted organostannic	[S03221] Tributyltin dimethyldithiocarbamate	20369-63-5	
Tri-substituted organostannic	[S02066] Tributyltin methacrylate	2155-70-6	
Tri-substituted organostannic	[S03247] TRIBUTYLTIN CYANIDE	2179-92-2	
Tri-substituted organostannic compounds	[S03265] Tripropyltin chloride	2279-76-7	
Tri-substituted organostannic	[S03278] Tributyltin linoleate	24124-25-2	
Tri-substituted organostannic	[S06143] 5,5,12,12-Tetrabutyl-7,10-dioxo-6,11-dioxa-5,12-distanna-8-hexadecene	24291-45-0	
Tri-substituted organostannic	[S03314] BIS(TRIBUTYLTIN) ITACONATE	25711-26-6	
Tri-substituted organostannic	[S07434] 2,7-Dioxa-1,8-distannaoctane, 4-dodecyl-3,6-dioxo-1,1,1,8,8,8-hexaphenyl-	2591-32-4	
Tri-substituted organostannic	[S02309] Tributan-1-ylstannyl (1R,4aR,4bR,10aR)-7-isopropyl-1,4a-dimethyl-1,2,3,4,4a,4b,5,6,10,10a-decahydrophenanthrene-1-carboxylate	26239-64-5	
Tri-substituted organostannic compounds	[S03342] Tributyltin cinnamate	27147-18-8	

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- Shindengen Electric Manufa		Substances in Products	page 60/6
Substance Group Name	Example Substances	CAS No.	Remarks
Tri-substituted organostannic compounds	[S03363] Stannane, bromotriethyl-	2767-54-6	
Tri-substituted organostannic compounds	[S03364] Tripropyltin bromide	2767-61-5	
Tri-substituted organostannic compounds	[S03372] Tributyl(neodecanoyloxy)stannane	28801-69-6	
Tri-substituted organostannic compounds	[S03383] Triethyltin iodide	2943-86-4	
Tri-substituted organostannic compounds	[S03401] Tributyl(oleoyloxy)stannane	3090-35-5	
Tri-substituted organostannic compounds	[S02314] Tributyltin laurate	3090-36-6	
Tri-substituted organostannic compounds	[S07814] Chlorotricyclohexylstannane	3091-32-5	
Tri-substituted organostannic compounds	[S02315] Bis(tributyltin)2,3-dibromosuccinate	31732-71-5	
Tri-substituted organostannic compounds	[S03417] Tripropyltin acetate	3267-78-5	
Tri-substituted organostannic compounds	[S07815] Tripentyltin chloride	3342-67-4	
Tri-substituted organostannic compounds	[S03427] TRIBUTYLTIN GAMMA-CHLOROBUTYRATE	33550-22-0	
Tri-substituted organostannic compounds	[S07817] Tributylphenoxystannane	3587-18-6	
Tri-substituted organostannic compounds	[S07450] Tributyltin ethoxide	36253-76-6	
Tri-substituted organostannic compounds	[S07451] [(1-Oxododecyl)oxy]triphenylstannane	3644-29-9	
Tri-substituted organostannic compounds	[S03486] P-NITROPHENOXYTRIBUTYLTIN	3644-32-4	
Tri-substituted organostannic compounds	[S03487] (2-BIPHENYLOXY)TRIBUTYLTIN	3644-37-9	
Tri-substituted organostannic compounds	[S07452] Tributyl(pentachlorophenoxy)stannane	3644-38-0	
Tri-substituted organostannic compounds	[\$03491] Stannane, tributyl(naphthalenyloxy)- ; Tributyltin naphthalate ; Tribut naphtholate	yltin 36631-23-9	
Tri-substituted organostannic compounds	[S07807] Tricyclohexylfluorostannane	379-51-1	
Tri-substituted organostannic compounds	[S02055] Triphenyltin fluoride	379-52-2	
Tri-substituted organostannic compounds	[S03526] Tributyltin nonanoate	4027-14-9	
Tri-substituted organostannic compounds	[S03527] TRIBUTYLTIN CYANATE	4027-17-2	
Tri-substituted organostannic compounds	[S03528] 2-BUTENOIC ACID, 4-OXO-4-[ (TRIBUTYLSTANNYL)OXY]-	4027-18-3	
Tri-substituted organostannic compounds	[S08850] 1-(tricyclohexylstannyl)-1H-1,2,4-triazole	41083-11-8	
Tri-substituted organostannic compounds	[S03536] Tripropyltin methacrylate	4154-35-2	
Tri-substituted organostannic compounds	[S03548] Tri-n-butyl tin salicylate	4342-30-7	
Tri-substituted organostannic compounds	[S03549] Tributyltin benzoate	4342-36-3	
Tri-substituted organostannic compounds	[S03559] Trimethyltin thiocyanate	4638-25-9	
Tri-substituted organostannic compounds	[S07476] [(terephthaloylbis(oxy)]bis(tributylstannane)	4756-53-0	
Tri-substituted organostannic compounds	[S02059] Triphenyltin fatty acid salts(C=9-11)(Decanoic acid triphenyltin(IV) salt	t) 47672-31-1	
Tri-cubstituted organostannia	[CO2067] Bic/tributultin labthalato	4792 20 0	

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Tri-substituted organostannic [S02067] Bis(tributyltin)phthalate

compounds

4782-29-0

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- Shindengen Electric Manufacturing Co., Ltd	Prohibited Substances in Products	page 61/68
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Substance Group Name	Example Substances	CAS No.	Remarks
Tri-substituted organostannic	[S03580] TRIBUTYLTIN 2-ETHYLHEXANOATE	5035-67-6	Weiliai K3
compounds			
Tri-substituted organostannic compounds	[S03640] TRIBUTYLTIN ISOPROPYLSUCCINATE	53404-82-3	
Tri-substituted organostannic compounds	[S03642] Tributyltin monopropylene glycol maleate	53466-85-6	
Tri-substituted organostannic compounds	[S03682] Trimethyltin hydroxide	56-24-6	
Tri-substituted organostannic compounds	[S06144] Bis(tributyltin) 2,3-dibromosuccinate	56323-17-2	
Tri-substituted organostannic compounds	[S07480] 4,5-Dibromo-3,6-dioxo-1,1,1,8,8,8-hexaphenyl-2,7-dioxa-1,8-distannaoctane	56323-19-4	
Tri-substituted organostannic compounds	[S02336] Bis(tri-n-butyltin)oxide	56-35-9	1st SVHC (Oct/28/2008), Order for Enforcement of the Act on the Regulation of Manufacture and Evaluation of Chemical Substances (Class I Specified Chemical Substances)
Tri-substituted organostannic compounds	[S02060] Tributyltin acetate	56-36-0	
Tri-substituted organostannic compounds	[S03687] Tributyltin	56573-85-4	
Tri-substituted organostannic compounds	[S03703] Tripropyltin laurate	57808-37-4	
Tri-substituted organostannic compounds	[S07483] Tributyl(formyloxy)stannane	5847-51-8	
Tri-substituted organostannic compounds	[S03713] TRIBUTYLTIN CHLOROACETATE	5847-52-9	
Tri-substituted organostannic compounds	[S07484] Tributyl[(diethylthiocarbamoyl)thio]stannane	5847-53-0	
Tri-substituted organostannic compounds	[S07486] Stannane, [(4-nitrobenzoyl)oxy]triphenyl-	61057-41-8	
Tri-substituted organostannic compounds	[S07488] Bis(triisobutyltin) oxide	6208-26-0	
Tri-substituted organostannic compounds	[S03821] Trimethyltin sulphate	63869-87-4	
Tri-substituted organostannic compounds	[S02053] Triphenyltin chloride	639-58-7	
Tri-substituted organostannic compounds	[S02068] Bis(tributyltin)fumarate	6454-35-9	
Tri-substituted organostannic compounds	[S02064] Tributyltin sulfamate	6517-25-5	
Tri-substituted organostannic compounds	[S07492] Stannylium, triphenyl-	668-34-8	
Tri-substituted organostannic compounds	[S07493] Tributyl[(dimethylthiocarbamoyl)thio]stannane	67057-32-3	
Tri-substituted organostannic compounds	[S02049] Copolymer of alkyl acrylate, methyl methacrylate and tributyltin methacrylate(alkyl;C=8)	67772-01-4	
Tri-substituted organostannic compounds	[S03909] Tributyltin isothiocyanate	681-99-2	
Tri-substituted organostannic compounds	[S07885] Tri-n-butyltin trifluoromethanesulfonate	68725-14-4	
Tri-substituted organostannic compounds	[S01868] Tributylstannane	688-73-3	
Tri-substituted organostannic	[S03984] TRIBUTYLTIN UNDECYLENATE	69226-47-7	

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Prohibited Substances in Products

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Substance Group Name	Example Substances	CAS No.	Remarks
Tri-substituted organostannic	[S02054] Triphenyltin chloroacetate	7094-94-2	
ompounds	featron) a fift than beautiful and a single first than the single featron in the single	720 - 07 0	
ri-substituted organostannic compounds	[S07502] 2-[[(Triphenylstannyl)oxy]carbonyl]benzoate	7224-27-3	
ri-substituted organostannic ompounds	[S06145] Fluorotriisobutyltin(IV)	7304-48-5	
ri-substituted organostannic compounds	[S02061] Triisobutyltin chloride	7342-38-3	
ri-substituted organostannic	[S04111] Tripropyltin iodide	7342-45-2	
ri-substituted organostannic	[S04112] Tributyltin iodide	7342-47-4	
ri-substituted organostannic	[S04121] Tributyltin iodoacetate	73927-91-0	
ri-substituted organostannic	[S04122] Tripropyltin iodoacetate	73927-92-1	
ri-substituted organostannic	[S04123] TRIBUTYLTIN O-IODOBENZOATE	73927-93-2	
ri-substituted organostannic	[S04124] Tributyltin .betaiodopropionate	73927-95-4	
Fri-substituted organostannic	[S04125] Tributyltin isooctylthioacetate	73927-97-6	
ri-substituted organostannic	[S04126] TRIBUTYLTIN P-IODOBEMZOATE	73940-88-2	
ri-substituted organostannic	[S04127] Tributyltin .alpha(2,4,5-trichlorophenoxy) propionate	73940-89-3	
ri-substituted organostannic	[S07505] 2-Propenoic acid, butyl ester, polymer with tributyl[(2-methyl-1-oxo-2-propenyl)oxy]stannane	74774-66-6	
ri-substituted organostannic	[S07509] Tributyl(D-gluconoyloxy)stannane	75113-35-8	
ri-substituted organostannic	[S04148] 1,3,5-TRIS(TRIBUTYLTIN)-S-TRIAZINE-2,4,6-TRIONE	752-58-9	
ri-substituted organostannic	[S07512] Pyridine, 3-[[(triphenylstannyl)oxy]carbonyl]-	7552-16-1	
ri-substituted organostannic	[S07513] (4E)-3,6-Dioxo-1,1,1,8,8,8-hexaphenyl-2,7-dioxa-1,8-distannaoct-4-ene	7552-19-4	
ri-substituted organostannic	[S02362] Triphenyltin hydroxide	76-87-9	
ri-substituted organostannic	[S04219] Trimethyltin iodide	811-73-4	
ri-substituted organostannic	[S07518] Stannane, [(2-nitrobenzoyl)oxy]triphenyl-	83500-88-3	
ri-substituted organostannic	[S07519] Stannane, [(3-nitrobenzoyl)oxy]triphenyl-	83514-66-3	
Fri-substituted organostannic	[S01468] Mixture of tributyltin cyclopentanecarboxylate and its analogs(Tributyltin naphthenate)	85409-17-2	
Fri-substituted organostannic	[S07525] Octyl acrylate-Methyl methacrylate-Triphenyltin itaconate copolymer	85424-96-0	
ri-substituted organostannic	[S04341] Triphenyltin hydride	892-20-6	
ri-substituted organostannic	[S04342] Triphenyltin iodide	894-09-7	
ri-substituted organostannic	[S02052] Triphenyltin acetate	900-95-8	
ri-substituted organostannic	[S07529] (Benzoyloxy)triphenylstannane	910-06-5	
ri-substituted organostannic	[S02058] Triphenyltin fatty acid salts(C=9-11)(Undecanoic acid triphenyltin(IV) salt)	94850-90-5	
ri-substituted organostannic	[S07531] [1,4-Phenylenebis(carbonyloxy)]bis[triphenylstannane]	97922-83-3	
ri-substituted organostannic	[S07532] 2-Propenoic acid, butyl ester, polymer with 2-ethylhexyl 2-propenoate and	98358-14-6	
compounds	tributyl[(2-methyl-1-oxo-2-propenyl)oxy]stannane		

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- Shindengen Electric Manufacturing Co., Ltd	Prohibited Substances in Products	page 63/68
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Substance Group Name	Example Substances	CAS No.	Remarks
ri-substituted organostannic ompounds	[S04503] Triethyltin chloride	994-31-0	
ri-substituted organostannic compounds	[S04504] Triethyltin hydroxide	994-32-1	
Dibutyltin (DBT) compounds	[S02551] Dibutyl tin	1002-53-5	
Dibutyltin (DBT) compounds	[S02586] Dibutyltin dimaleate	10192-92-4	
ibutyltin (DBT) compounds	[S07399] Dibutyltin di(nonylmaleate)	10584-97-1	
ibutyltin (DBT) compounds	[S07400] 8-Oxa-3,5-dithia-4-stannatetradecanoic acid, 4,4-dibutyl-10-ethyl-7-oxo-, 2-ethylhexyl ester	10584-98-2	
ibutyltin (DBT) compounds	[S02621] Dibutyltin diacetate	1067-33-0	
ibutyltin (DBT) compounds	[S07401] Dibutyldimethoxystannane	1067-55-6	
ibutyltin (DBT) compounds	[S07910] 3,3,7,7-Tetrabutyl-2,4,6,8,9-pentaoxa-3,7-distanna-1,5-diborabicyclo[3.3.1]nonane	112309-68-9	
bibutyltin (DBT) compounds	[S07912] 2,2-Dibutyl-1,3-dioxa-7,8-dithia-2-stannacycloundecane-4,11-dione	113289-90-0	
ibutyltin (DBT) compounds	[S02668] Dibutyltin dilauryl mercaptide	1185-81-5	
ibutyltin (DBT) compounds	[S02890] 3,8,10-Trioxa-9-stannatetradeca-5,12-dien-14-oic acid, 9,9-dibutyl-4,7,11-trioxo-, ethyl ester, (Z,Z)-	13173-04-1	
ibutyltin (DBT) compounds	[S02904] Dibutyltin dioleate	13323-62-1	
ibutyltin (DBT) compounds	[S02905] Dibutyltin dipalmitate	13323-63-2	
ibutyltin (DBT) compounds	[S07414] Tetrabutyl 2,2'-[(dibutylstannylene)dithio]disuccinate	13497-25-1	
Dibutyltin (DBT) compounds	[S07914] 5,5,7,7-Tetrabutyl-11-oxo-6,12-dioxa-4,8-dithia-5,7-distannaeicosanoic acid, octylester	136482-55-8	
Dibutyltin (DBT) compounds	[S03018] Dibutyltin disalicylate	14214-24-5	
ibutyltin (DBT) compounds	[S07415] Dibutylthioxostannane, trimer	15220-82-3	
ibutyltin (DBT) compounds	[S00328] Di-n-butyltin bis(methyl maleate)	15546-11-9	
ibutyltin (DBT) compounds	[S03101] Dibutytin di(2-ethylhexyl maleate)	15546-12-0	
ibutyltin (DBT) compounds	[S03102] Di-n-butyltin di(monobutyl)maleate	15546-16-4	
Dibutyltin (DBT) compounds	[S07836] (Z,Z)-8,8,10,10-Tetrabutyl-3,6,12-trioxo-2,7,9,11-tetraoxa-8,10-distannapentadeca-4,13-dien-15-oic acid, methyl ester	15785-44-1	
ibutyltin (DBT) compounds	[S07419] (Z,Z)-dibutylbis[(3-propoxycarbonylacryloyl)oxy]stannane	15853-77-7	
ibutyltin (DBT) compounds	[S03147] Tin, dibutyl(1,2-ethanediamine-N,N')bis(monoisooctyl 2-butenedioato-O')-	163206-28-8	
ibutyltin (DBT) compounds	[S07421] Octyl (Z,Z)-6,6-dibutyl-4,8,11-trioxo-5,7,12-trioxa-6-stannaicosa-2,9-dienoate	17036-31-6	
ibutyltin (DBT) compounds	[S03173] Bis(acetato)dibutyltin	17523-06-7	
ibutyltin (DBT) compounds	[S03219] Dibutyltin dihexanoate	19704-60-0	
bibutyltin (DBT) compounds	[S07425] Hexadecyl (Z,Z)-6,6-dibutyl-4,8,11-trioxo-5,7,12-trioxa-6-stannahexacosa-2,9-dienoate	19706-58-2	
ibutyltin (DBT) compounds	[S07426] Dodecyl 4,4-dibutyl-7-oxo-8-oxa-3,5-dithia-4-stannaicosanoate	20004-12-0	
ibutyltin (DBT) compounds	[S07427] Stannane, dibutylbis[(3-carboxyacryloyl)oxy]-, bis(alpha-methylbenzyl) ester	20258-69-9	
ibutyltin (DBT) compounds	[S07428] Dibutylbis[(p-tert-butylbenzoyl)oxy]stannane	20556-89-2	
Dibutyltin (DBT) compounds	[S03260] 3,8,10-Trioxa-9-stannatetradeca-5,12-dien-14-oic acid, 9,9-dibutyl-2-methyl-4,7,11-trioxo-, 1-methylethyl ester, (Z,Z)-	22535-42-8	
Dibutyltin (DBT) compounds	[S03263] Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4	23rd Candidate List of SVHC (Jun./25/2020)
ibutyltin (DBT) compounds	[S07842] 1,3,2,4-Dioxathiastannetane, 4,4-dibutyl-, 2-oxide	22709-77-9	
ibutyltin (DBT) compounds	[S07847] Decyl (Z,Z)-6,6-dibutyl-4,8,11-trioxo-5,7,12-trioxa-6-stannadocosa-2,9-dienoate	24660-23-9	
ibutyltin (DBT) compounds	[S07432] 1,1,3,3-tetrabutyl-1,3-bis(dodecyloxy)distannoxane	25150-98-5	
ibutyltin (DBT) compounds	[S08837] Diisooctyl 4,4'-[(dibutylstannylene)bis(oxy)]bis[4-oxoisocrotonate]	25168-21-2	
ibutyltin (DBT) compounds	[S07849] Tetrabutylbis[mu-(hydrogen maleato)]-mu-oxoditin, diisooctyl ester	25168-23-4	
ibutyltin (DBT) compounds	[S03302] Dibutyltin bis(isooctyl mercaptoacetate)	25168-24-5	
ibutyltin (DBT) compounds	[S07850] Tetrabutylbis[mu-(hydrogen maleato)]-mu-oxoditin, dipropyl ester	25248-71-9	
ibutyltin (DBT) compounds	[S03335] Dibutyltin di(isooctyl 3-mercaptopropionate)	26761-46-6	
Dibutyltin (DBT) compounds	[S02533] Dibutyltin bis(octylthioglycolate)	2781-09-1	
ibutyltin (DBT) compounds	[S02534] Di-n-butyltin di-2-ethylhexanoate	2781-10-4	
ibutyltin (DBT) compounds	[S07438] Dibutyldiiodostannane	2865-19-2	
Dibutyltin (DBT) compounds	[S08840] Dibutylbis(myristoyloxy)stannane	28660-67-5	

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- Shindengen Electric Manufacturing Co., Ltd. -

**Prohibited Substances in Products** 

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Substance Group Name **Example Substances** CAS No. Remarks [S07440] 3-methoxybutyl 11,11-dibutyl-3-methyl-7-oxo-2,6-dioxa-10,12-dithia-11-29492-49-7 Dibutyltin (DBT) compounds stannapentadecan-15-oate Dibutyltin (DBT) compounds [S03392] Dibutyltin bis(oleyl maleate) 29881-72-9 Dibutyltin (DBT) compounds [S07444] 2,2'-[(Dibutylstannylene)dithio]dipropionic acid, bis(2-butoxyethyl) ester 31781-13-2 Dibutyltin (DBT) compounds [S03409] Acetate, S,S'-bisoctylmercapto-, dibutyltin 32011-18-0 Dibutyltin (DBT) compounds [S03410] Tin, dibutylbis(methyl 3-mercaptopropanoato-O,S)-32011-19-1 [S07445] 9,9-Dibutyl-6-oxo-2,5-dioxa-8,10-dithia-9-stannadodecan-12-oic acid, 2-32509-49-2 Dibutyltin (DBT) compounds methoxyethyl ester Dibutyltin (DBT) compounds [S03425] 5,7,12-Trioxa-6-stannatetracosa-2,9-dienoic acid, 6,6-dibutyl-4,8,11-trioxo-, 33466-31-8 dodecyl ester, (Z,Z)-Dibutyltin (DBT) compounds [S03426] Dibutyltin dibutoxide 3349-36-8 [S07447] Dibutylbis(octyloxy)stannane 3349-38-0 Dibutyltin (DBT) compounds Dibutyltin (DBT) compounds [S07448] 2-methoxyethyl (Z,Z)-11,11-dibutyl-6,9,13-trioxo-2,5,10,12-tetraoxa-11-34349-21-8 stannahexadeca-7,14-dien-16-oate Dibutyltin (DBT) compounds [S07454] 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]distannoxane 3669-02-1 Dibutyltin (DBT) compounds [S07469] Dibutylthioxostannane 4253-22-9 4401-37-0 Dibutyltin (DBT) compounds [S07473] 2,2'-[(Dibutylstannylene)bis(thio)]bis(acetic acid) Dibutyltin (DBT) compounds 4731-77-5 [S03561] Dibutyltin dioctanoate Dibutyltin (DBT) compounds [S07822] 2,2-Dibutyl-1,3,7,2-dioxathiastannecane-4,10-dione 4981-24-2 51287-83-3 Dibutyltin (DBT) compounds [S03595] Dibutyltin bis(lauryl β-mercaptopropionate) 52628-34-9 Dibutyltin (DBT) compounds [S07866] Diisooctyl 2,2'-[(1,1,3,3-tetrabutyl-1,3-distannathianediyl)bis(thio)]diacetate [S07867] Bis([1,1'-biphenyl]-2-yloxy)dibutylstannane Dibutyltin (DBT) compounds 52722-81-3 Dibutyltin (DBT) compounds [S03638] Dibutyltin bis(2-ethylhexyl-3-mercaptopropionate) 53202-61-2 Dibutyltin (DBT) compounds 54581-65-6 [S03660] Dibutylbis(ethyl 3-oxobutyrato-O1',O3)tin Dibutyltin (DBT) compounds [S07477] 3,3'-[(1,1,3,3-Tetrabutyl-1,3-distannoxanediyl)bis(thio)]bis(propanoic acid), 55348-64-6 diisooctyl ester Dibutyltin (DBT) compounds [S07478] 2,2'-[(Dibutylstannylene)bis(oxycarbonyl)]bis(benzoic acid), didodecyl ester 55568-37-1 5587-52-0 Dibutyltin (DBT) compounds [S03677] Dibutyltin bis(cyclohexyl maleate) Dibutyltin (DBT) compounds [S07479] 1H-Imidazole, 1,1'-(dibutylstannylene)bis-56149-55-4 [S03714] Dibutyltin dibenzoate 5847-54-1 Dibutyltin (DBT) compounds Dibutyltin (DBT) compounds [S03715] Dibutyltin distearate 5847-55-2 [S07485] Isobutyl (Z,Z)-10,10-dibutyl-2-methyl-5,8,12-trioxo-4,9,11-trioxa-10-59571-08-3 Dibutyltin (DBT) compounds stannapentadeca-6,13-dien-15-oate Dibutyltin (DBT) compounds 5967-09-9 [S07823] 1,3-diacetoxy-1,1,3,3-tetrabutyldistannoxane Dibutyltin (DBT) compounds [S08858] Dibutylbis[(1-oxoisooctadecyl)oxy]stannane 59963-28-9 Dibutyltin (DBT) compounds [S07487] Octadecyl (Z,Z)-6,6-dibutyl-4,8,11-trioxo-5,7,12-trioxa-6-stannatriaconta-2,9-61813-52-3 dienoate 61947-30-6 Dibutyltin (DBT) compounds [S03782] Diisobutyltin oxide Dibutyltin (DBT) compounds [S07879] (Z,Z)-8,8-Dibutyl-1-[(1-methylethyl)phenyl]-3,6,10-trioxo-2,7,9-trioxa-8-62044-47-7 stannatrideca-4,11-dien-13-oic acid, [(1-methylethyl)phenyl]methyl ester Dibutyltin (DBT) compounds [S07490] 9-Octadecen-7-ol, 18,18'-[(dibutylstannylene)bis(oxy)]bis[18-oxo-, [R-[R\*,R\*-65540-76-3  $[S07881] \ (Z,Z)-4,4'-[(1,1,3,3-Tetrabutyl-1,3-distannox anediyl)] bis (oxy) bis [4-oxo-2-distannox anediyl] bis (oxy) bis (oxy) bis [4-oxo-2-distannox anediyl] bis (oxy) bis (oxy)$ 67708-87-6 Dibutyltin (DBT) compounds butenoic acid], diisooctyl ester Dibutyltin (DBT) compounds [S07882] 2.2-dibutyl-6-oxo-1.3.2-oxathiastanninane-4-carboxylic acid 67859-55-6 [S03877] Tin, dibutylbis(N,N-diethylethanamine)difluoro-Dibutyltin (DBT) compounds 67924-24-7 Dibutyltin (DBT) compounds [S07495] Dibenzyl (Z,Z,Z)-6,6,13,13-tetrabutyl-4,8,11,15-tetraoxo-5,7,12,14-tetraoxa-68109-87-5 6 13-distannoctadeca-2 9 16-trienedinate Dibutyltin (DBT) compounds [S03913] Tin, dibutyl[N-(carboxymethyl)-N-(2-hydroxyethyl)glycinato(2-)]-68239-46-3 Dibutyltin (DBT) compounds [S01339] Di-N-butyl tin(IV)dichloride 683-18-1 8th SVHC (Dec/19/2012) Dibutyltin (DBT) compounds [S07496] Dibenzyl (,,Z)-6,6,13,13-tetrabutyl-4,8,11,15-tetraoxo-5,7,12,14-tetraoxa-68460-06-0 6,13-distannoctadeca-2,9,16-trienedioate Dibutyltin (DBT) compounds [S07824] 2,2,7,7-Tetrabutyl-1,6,3,8,2,7-dioxadithiadistannecane-5,10-dione 6931-76-6 [S07501] 2-Butenoic acid, 4-[(dibutylmethoxystannyl)oxy]-4-oxo-, methyl ester, (2Z)-6995-92-2 Dibutyltin (DBT) compounds Dibutyltin (DBT) compounds [S07886] 5,5,7,7-Tetrabutyl-14-ethyl-11-oxo-6,12-dioxa-4,8-dithia-5,7-71510-19-5 distannaoctadecanoic acid, 2-ethylhexyl ester

A list of examples of chemical substances which have been used electrical and electronic equipment and chemical substances restricted by laws and regulations. Not all chemical substances are covered.

<sup>-</sup> All possible efforts have been made to ensure the accuracy of CAS number and other information, but the accuracy of such details is not guaranteed.

The [Sxxxxx (the x's being a 5 digit number)] on example substances are the Shindengen substance management codes.

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			P-0
Substance Group Name	Example Substances	CAS No.	Remarks
Dibutyltin (DBT) compounds	[S07887] (Z,Z)-6,6,8,8-Tetrabutyl-4,10,13-trioxo-5,7,9,14-tetraoxa-6,8-distannaoctadeca-2,11-dienoic acid, butyl ester	71599-08-1	
Dibutyltin (DBT) compounds	[S07503] Dibutyltin lauratemaleat	73246-84-1	
ibutyltin (DBT) compounds	[S04105] Dibutyltin bis(benzyl maleate)	7324-74-5	
ibutyltin (DBT) compounds	[S07507] 4,9,11-Trioxa-10-stannapentadeca-6,13-dien-15-oic acid, 1,2-dibromo-10,10-dibutyl-5,8,12-trioxo-, 2,3-dibromopropyl ester, (Z,Z)-	75113-33-6	
ibutyltin (DBT) compounds	[S04143] Dibutyltin hydrogen borate	75113-37-0	
ibutyltin (DBT) compounds	[S07510] 5,5-Dibutyl-9-oxo-10,13-dioxa-4,6-dithia-5-stannaheptadecanoic acid, 2-butoxyethyl ester	75113-44-9	
ibutyltin (DBT) compounds	[S07511] [R-[R*,R*-(Z,Z)]]-1,1,3,3-tetrabutyl-1,3-bis[(12-hydroxy-1-oxooctadec-9-enyl)oxy]distannoxane	75149-37-0	
ibutyltin (DBT) compounds	[S07514] Stannane, dibutylbis(3-chloro-1-oxopropoxy)-	7580-74-7	
ibutyltin (DBT) compounds	[S04176] Dibutyltin dilaurate	77-58-7	
ibutyltin (DBT) compounds	[S00555] Dibutyltin maleate	78-04-6	
ibutyltin (DBT) compounds	[S02527] Dibutyltin mercaptopropionate	78-06-8	
ibutyltin (DBT) compounds	[S04200] Dibutyltin mercaptoacetate	78-20-6	
ibutyltin (DBT) compounds	[S07893] (Z,Z)-6,6,8,8-Tetrabutyl-4,10,13-trioxo-5,7,9,14-tetraoxa-6,8-distannadocosa-2,11-dienoic acid, octyl ester	78917-85-8	
ibutyltin (DBT) compounds	[S01340] Dibutyloxostannane	818-08-6	
ibutyltin (DBT) compounds	[S07520] Tetradecyl 4,4-dibutyl-7-oxo-8-oxa-3,5-dithia-4-stannadocosanoate	83833-21-0	
ibutyltin (DBT) compounds	[S07896] Decyl 5,5-dibutyl-9-oxo-10-oxa-4,6-dithia-5-stannaicosanoate	83833-25-4	
ibutyltin (DBT) compounds	[S07522] Acetoxy[2-[(2-aminoethyl)amino]propoxy]dibutyltin	84051-94-5	
ibutyltin (DBT) compounds	[S07523] Hexadecyl 6,6-dibutyl-4,8,11-trioxo-5,7,12-trioxa-6-stannaoctacosa-2,9-dienoate	84787-79-1	
ibutyltin (DBT) compounds	[\$07898] 8,8,14,14,20,20-hexabutyl-5,23-diethyl-10,18-dioxo-7,9,19,21-tetraoxa- 13,15-dithia-8,14,20-tristannaheptacosane	84787-80-4	
ibutyltin (DBT) compounds	[S04315] Dibutyltin linoleate	85391-79-3	
ibutyltin (DBT) compounds	[S07524] Dipropyl (Z,Z,Z)-6,6,13,13-tetrabutyl-4,8,11,15-tetraoxo-5,7,12,14-tetraoxa-6,13-distannoctadeca-2,9,16-trienedioate	85391-80-6	
ibutyltin (DBT) compounds	[S07526] 3-methoxybutyl (Z,Z)-12,12-dibutyl-3-methyl-7,10,14-trioxo-2,6,11,13-tetraoxa-12-stannaheptadeca-8,15-dien-17-oate	85665-63-0	
ibutyltin (DBT) compounds	[S04331] Dibutyltin isooctanoate	85702-74-5	
ibutyltin (DBT) compounds	[S07527] 1,1,3,3-tetrabutyl-1,3-bis[(1-oxoisodecyl)oxy]distannoxane	85702-76-7	
ibutyltin (DBT) compounds	[S07528] 4,4-Dibutyl-7-oxo-8,11-dioxa-3,5-dithia-4-stannatridecanoic acid, 2-ethoxyethyl ester	90264-80-5	
Dibutyltin (DBT) compounds	[508875] Silicic acid (H4SiO4), tetraethyl ester, reaction products with bis(acetyloxy)dibutylstannane	93925-42-9	
ibutyltin (DBT) compounds	[S07530] Bis(2-ethylhexyl) o,o'-[(dibutylstannylene)bis(oxycarbonyl)]dibenzoate	94023-65-1	
ibutyltin (DBT) compounds	[S07905] 1,1,3,3-tetrabutyl-1,3-bis[(1-oxoisooctadecyl)oxy]distannoxane	94279-11-5	
ibutyltin (DBT) compounds	[S07906] (9Z,12Z)-1,1,3,3-tetrabutyl-1,3-bis(octadeca-9,12-dienoyloxy)distannoxane	94349-26-5	
ibutyltin (DBT) compounds	[S04477] Dibutyltin linolenate	95873-60-2	
ibutyltin (DBT) compounds	[507907] (Z,Z)-9,9,11,11-Tetrabutyl-4,7,13-trioxo-3,8,10,12-tetraoxa-9,11-distannahexadeca-5,14-dien-16-oic acid, ethyl ester	96407-98-6	
Dibutyltin (DBT) compounds	[\$07908] (Z,Z)-9,9,11,11-Tetrabutyl-2-methyl-4,7,13-trioxo-3,8,10,12-tetraoxa-9,11-distannahexadeca-5,14-dien-16-oic acid, 1-methylethyl ester	96407-99-7	
ibutyltin (DBT) compounds	[S07533] Dibromodibutylstannane	996-08-7	
ioctyltin (DOT) compounds	[S08995] Dioctyltin compounds (DOT)		
Dioctyltin (DOT) compounds	[S09322] dioctyltin dilaurate; stannane, dioctyl-, bis(coco acyloxy) derivs.	-	24th Candidate List of SVHC (Jan./19/2021)
Dioctyltin (DOT) compounds	[S09321] Dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety	-	24th Candidate List of SVHC (Jan./19/2021) JAMP-SN0108
ioctyltin (DOT) compounds	[\$07397] Bis(2-ethane-1-ylhexan-1-yl) 4,4'-[(dioctan-1-ylstannylene)bisoxy]bis(4-oxobut-2-enoate)	10039-33-5	
ioctyltin (DOT) compounds	[S07909] 4-Hydroxy-2,2-dioctyl-1,3,2,4-dioxastannaboretane	102667-32-3	
ioctyltin (DOT) compounds	[S07911] 2,2-Dioctyl-1,3-dioxa-7,8-dithia-2-stannacycloundecane-4,11-dione	113289-87-5	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

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Shindengen Electric Manufact	turing Co., Ltd Prohibited Substa	nces in Products	page 66/68
Substance Group Name	Example Substances	CAS No.	Remarks
Dioctyltin (DOT) compounds	[S07416] 2,2-dioctyl-1,3,2-oxathiastannolan-5-one	15535-79-2	
Dioctyltin (DOT) compounds	[S03103] Dioctyltin bis(2-ethylhexyl thioglycolate); 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	12th SVHC (Dec/17/2014)
Dioctyltin (DOT) compounds	[S07418] Isobutyl (Z,Z)-2-methyl-10,10-dioctyl-5,8,12-trioxo-4,9,11-trioxa-10- stannapentadeca-6,13-dien-15-oate	15571-59-2	
Dioctyltin (DOT) compounds	[S07835] 4,4'-[(Dioctylstannylene)bis(oxy)]bis[4-oxoisocrotonic]acid	15571-60-5	
Dioctyltin (DOT) compounds	[S03144] Dioctyltin maleate	16091-18-2	

Substance Group Name	Example Substances	CAS ING.	Remarks
Dioctyltin (DOT) compounds	[S07416] 2,2-dioctyl-1,3,2-oxathiastannolan-5-one	15535-79-2	
Dioctyltin (DOT) compounds	[S03103] Dioctyltin bis(2-ethylhexyl thioglycolate); 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	12th SVHC (Dec/17/2014)
Dioctyltin (DOT) compounds	[S07418] Isobutyl (Z,Z)-2-methyl-10,10-dioctyl-5,8,12-trioxo-4,9,11-trioxa-10-stannapentadeca-6,13-dien-15-oate	15571-59-2	
Dioctyltin (DOT) compounds	[S07835] 4,4'-[(Dioctylstannylene)bis(oxy)]bis[4-oxoisocrotonic]acid	15571-60-5	
Dioctyltin (DOT) compounds	[S03144] Dioctyltin maleate	16091-18-2	
Dioctyltin (DOT) compounds	[S07423] Dioctyltin di(acetate)	17586-94-6	
Dioctyltin (DOT) compounds	[S07837] 4,4-Dioctyl-1,3,2,4-dioxaphosphastannetane-2-oxide	19269-42-2	
Dioctyltin (DOT) compounds	[S07838] Dioctylbis(1-oxopropoxy)stannane	21619-67-0	
Dioctyltin (DOT) compounds	[S07840] Dioctylbis(stearoyloxy)stannane	22205-26-1	
Dioctyltin (DOT) compounds	[S07429] Bis(dodecylthio)dioctylstannane	22205-30-7	
Dioctyltin (DOT) compounds	[S07844] Bis(benzoyloxy)dioctylstannane	23519-66-6	
Dioctyltin (DOT) compounds	[S07846] Bis[(2-ethyl-1-oxohexyl)oxy]dioctylstannane	24577-34-2	
Dioctyltin (DOT) compounds	[S03325] Dioctyl tin	26401-97-8	
Dioctyltin (DOT) compounds	[S07435] Dioctyltin-S,S'-bis(butyl mercaptoacetate)	27107-88-6	
Dioctyltin (DOT) compounds	[S07441] Butyl 6,6-dioctyl-4,8,11-trioxo-5,7,12-trioxa-6-stannahexadeca-2,9-dienoate	29575-02-8	
Dioctyltin (DOT) compounds	[S07442] Dihydro-2,2-dioctyl-6H-1,3,2-oxathiastannin-6-one	3033-29-2	
Dioctyltin (DOT) compounds	[S03429] Dioctyltin bis(isooctyl maleate)	33568-99-9	
Dioctyltin (DOT) compounds	[S03464] Dioctyltin dichloride	3542-36-7	
Dioctyltin (DOT) compounds	[S07820] 2,2-Dioctyl-1,3,7,2-dioxathiastannecane-4,10-dione	3594-15-8	
Dioctyltin (DOT) compounds	[S07453] Dioctyltin dilaurate	3648-18-8	24th Candidate List of SVHC (Jan./19/2021) PRTR1
Dioctyltin (DOT) compounds	[S07864] Bis[[4-(1,1-dimethylethyl)benzoyl]oxy]dioctylstannane	51541-60-7	
Dioctyltin (DOT) compounds	[S08853] Dioctylbis(pentane-2,4-dionato-O,O')tin	54068-28-9	
Dioctyltin (DOT) compounds	[S07482] 2,2-dioctyl-1,3-dioxa-6,9-dithia-2-stannacycloundecane-4,11-dione	56875-68-4	
Dioctyltin (DOT) compounds	[S07872] 2-ethylhexyl 12-ethyl-5,5-dioctyl-9-oxo-10-oxa-4,6-dithia-5-stannahexadecanoate	59185-95-4	
Dioctyltin (DOT) compounds	[S07873] (Z,Z)-4,4'-[(Dioctylstannylene)bis(oxy)]bis[4-oxo-2-butenoic acid], dicyclohexyl ester	59849-87-5	
Dioctyltin (DOT) compounds	[S07489] Octadecyl (Z,Z)-6,6-dioctyl-4,8,11-trioxo-5,7,12-trioxa-6-stannatriaconta-2,9-dienoate	62480-03-9	
Dioctyltin (DOT) compounds	[S07880] (Z,Z)-6,6,8,8-Tetraoctyl-4,10,13-trioxo-5,7,9,14-tetraoxa-6,8-distannaoctadeca-2,11-dienoic acid, butyl ester	67704-30-7	
Dioctyltin (DOT) compounds	[S07883] Ethyl 9,9-dioctyl-4,7,11-trioxo-3,8,10-trioxa-9-stannatetradeca-5,12-dien-14-oate	68109-88-6	
Dioctyltin (DOT) compounds	[S08864] Bis(neodecanoyloxy)dioctylstannane	68299-15-0	
Dioctyltin (DOT) compounds	[S07497] (2)-octadec-9-enyl (,,z)-6,6-dioctyl-4,8,11-trioxo-5,7,12-trioxa-6-stannatriaconta-2,9,21-trienoate	68538-86-3	
Dioctyltin (DOT) compounds	[S07499] Dioctyltin di(1,2-propyleneglycolmaleate)	69226-45-5	
Dioctyltin (DOT) compounds	[S07500] Dioctyltin-S,S'-(1,4-butanediol-bis-mercaptoacetate)	69226-46-6	
Dioctyltin (DOT) compounds	[S07504] Dodecyl 4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannaicosanoate	73246-85-2	
Dioctyltin (DOT) compounds	[S07825] Dodecyl (Z,Z)-6,6-dioctyl-4,8,11-trioxo-5,7,12-trioxa-6-stannatetracosa-2,9-dienoate	7324-77-8	
Dioctyltin (DOT) compounds	[S07888] (Z)-9,9,16,16-Tetraoctyl-11,14-dioxo-10,15-dioxa-9,16-disatnnatetracos-12-ene	75113-32-5	
Dioctyltin (DOT) compounds	[S07508] (Z,Z)-13,13-Dioctyl-8,11,15-trioxo-2,7,12,14-tetraoxa-13-stannaoctadeca-9,16-dien-18-oic acid, 4-methoxybutyl ester	75113-34-7	
Dioctyltin (DOT) compounds	[S07889] 4,4-Dioctyl-1,3,2,4-dioxathiastannane-2,2-dioxide	75113-38-1	
Dioctyltin (DOT) compounds	[S07890] 2-Hydroxy-4,4-dioctyl-1,3,2,4-dioxaphosphastannetane-2-oxide	75113-40-5	
Dioctyltin (DOT) compounds	[S07891] 1-Hydroxy-8,8-dioctyl-4-oxo-3-oxa-7,9-dithia-5-stannadodecan-12-oic acid, 2-hydroxyethyl ester	75113-43-8	
Dioctyltin (DOT) compounds	[S07894] Tetradecyl 4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannadocosanoate	79330-84-0	
Dioctyltin (DOT) compounds	[S07521] Tetradecyl (Z,Z)-6,6-dioctyl-4,8,11-trioxo-5,7,12-trioxa-6-stannahexacosa-2,9-dienoate	84029-77-6	
Dioctyltin (DOT) compounds	[S07899] Bis(isooctanoyloxy)dioctylstannane	85702-78-9	
		85938-42-7	

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Substance Group Name	Example Substances	CAS No.	Remarks
Dioctyltin (DOT) compounds	[S07901] 1,1,3,3-tetraoctyl-1,3-bis[(1-oxohexadecyl)oxy]distannoxane	85938-47-2	
Dioctyltin (DOT) compounds	[S04546] Di-n-octyltin oxide	870-08-6	
Dioctyltin (DOT) compounds	[S09323] Stannane, dioctyl-, bis(coco acyloxy) derivs.	91648-39-4	24th Candidate List of SVHC (Jan./19/2021)
Dioctyltin (DOT) compounds	[S08876] Silicic acid (H4SiO4), tetraethyl ester, reaction products with bis(acetyloxy)dioctylstannane	93925-43-0	
Endosulfan	[S01186] 6,7,8,9,10,10-Hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepine 3-oxide; Endosulfan	115-29-7	
Endosulfan	[S08844] beta-Benzoepin	33213-65-9	
Endosulfan	[S08877] alpha-Benzoepin	959-98-8	
Hexabromocyclododecane	[S09207] 1,2,3,4,5,6-Hexabromocyclododecane	1027045-74-4	
Hexabromocyclododecane	[S09208] 1,3,5,7,9,11-Hexabromocyclododecane	1093632-34-8	
Hexabromocyclododecane	[S09209] 1,1,2,2,3,3-Hexabromocyclododecane	1235106-66-7	
Hexabromocyclododecane	[S04525] rel-{1R,2R,5S,6R,9R,10S}-1,2,5,6,9,10-Hexabromocyclododecane	134237-50-6	1st SVHC (Oct/28/2008), Authorisation List, Order for Enforcement of the Act on the Regulation of Manufacture and Evaluation of Chemical Substances (Class I Specified Chemical Substances)
Hexabromocyclododecane	[S04524] rel-(1R,2S,5R,6R,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane	134237-51-7	1st SVHC (Oct/28/2008), Authorisation List, Order for Enforcement of the Act on the Regulation of Manufacture and Evaluation of Chemical Substances (Class I Specified Chemical Substances)
Hexabromocyclododecane	[S04526] rel-(1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane	134237-52-8	1st SVHC (Oct/28/2008), Authorisation List, Order for Enforcement of the Act on the Regulation of Manufacture and Evaluation of Chemical Substances (Class I Specified Chemical Substances)
Hexabromocyclododecane	[S09210] (1S,2S,5S,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane	1380399-84-7	
Hexabromocyclododecane	[S09211] (1R,2R,5S,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane	1380399-85-8	
Hexabromocyclododecane	[S09212] (1R,2R,5S,6R,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane	1380399-86-9	
Hexabromocyclododecane	[S09213] (1R,2S,5S,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane	1380399-87-0	
Hexabromocyclododecane	[S08999] (1R,2R,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane	138257-17-7	
Hexabromocyclododecane	[S09000] (1R,2R,5R,6S,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane	138257-18-8	
Hexabromocyclododecane	[S09001] (1R,2S,5S,6R,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane	138257-19-9	·
Hexabromocyclododecane	[S09214] rel-(1R,2R,5R,6R,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane	1392102-29-2	
Hexabromocyclododecane	[S09215] rel-(1R,2R,5R,6R,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane	1392102-30-5	
Hexabromocyclododecane	[S09216] rel-(1R,2R,5R,6R,9R,10R)-1,2,5,6,9,10-Hexabromocyclododecane	1392102-31-6	
Hexabromocyclododecane	[S09002] (1R,2S,5S,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane	169102-57-2	

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and

Prohibited Substances in Products

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Substance Group Name	Example Substances	CAS No.	Remarks
Hexabromocyclododecane	[S03310] Hexabromocyclododecane	25637-99-4	
			(Oct/28/2008), Authorisation List Order for Enforcement of the Act on the Regulation of Manufacture and Evaluation of Chemical Substances (Class Specified Chemica Substances)
· dexabromocyclododecane	[S02088] 1,2,5,6,9,10-Hexabromocyclododecane	3194-55-6	1st SVHC (Oct/28/2008), Authorisation List Order for Enforcement of the Act on the Regulation of Manufacture and Evaluation of Chemical Substances (Class Specified Chemica Substances)
Hexabromocyclododecane	[S03563] rel-(1R,2S,5R,6S,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane	4736-49-6	
lexabromocyclododecane	[S08998] rel-(1R,2S,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane	65701-47-5	
Hexabromocyclododecane	[S09201] 1,2,4,5,8,9-Hexabromocyclododecane	673456-49-0	
Hexabromocyclododecane	[S09003] (1R,2R,5S,6R,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane	678970-15-5	
Hexabromocyclododecane	[S09004] (1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane	678970-16-6	
Hexabromocyclododecane	[S09005] (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane	678970-17-7	
Hexabromocyclododecane	[S09200] 1,2,4,6,9,10-Hexabromocyclododecane	74398-41-7	
Hexabromocyclododecane	[S09202] (1R,2R,5R,6R,9R,10R)-1,2,5,6,9,10-Hexabromocyclododecane	878049-04-8	
Hexabromocyclododecane	[S09203] (1S,2S,5R,6R,9R,10R)-1,2,5,6,9,10-Hexabromocyclododecane	878049-05-9	
Hexabromocyclododecane	[S09204] rel-(1R,2S,5R,6R,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane	878049-06-0	
Hexabromocyclododecane	[S09205] rel-(1R,2S,5S,6S,9R,10R)-1,2,5,6,9,10-Hexabromocyclododecane	878049-07-1	
Hexabromocyclododecane	[S09206] (1R,2S,5R,6R,9R,10R)-1,2,5,6,9,10-Hexabromocyclododecane	878049-08-2	
Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds	[S03277] Potassium pentadecafluorooctanoate	2395-00-8	
Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds	[S03428] Perfluorooctanoic acid; Pentadecafluorooctanoic acid	335-67-1	9th SVHC (Jun/20/2013)
Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds	[S03430] Silver(1+) pentadecafluorooctanoate	335-93-3	
Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds	[S03431] Sodium pentadecafluorooctanoate	335-95-5	
Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds	[S01611] Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	9th SVHC (Jun/20/2013)
Dechlorane Plus	[S09292] 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"™), covering any of its individual anti- and syn-isomers or any combination thereof	-	18th Candidate List of SVHC (Jan./15/2018)
Dechlorane Plus	[S00408] 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- (Dechlorane Plus)	13560-89-9	18th Candidate List of SVHC (Jan./15/2018)
Dechlorane Plus	[S09288] 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- (syn-Dechlorane plus)	135821-03-3	18th Candidate List of SVHC (Jan./15/2018)
Dechlorane Plus	[\$09287] 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-dodecahlydro-, (1R,4S,4aS,6aS,7S,10R,10aR,12aR)-rel- (anti-Dechlorane plus)	135821-74-8	18th Candidate List of SVHC (Jan./15/2018)

<sup>-</sup> A list of examples of chemical substances which have been used electrical and electronic equipment and chemical substances restricted by laws and regulations. Not all chemical substances are covered.

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