Shindengen Group Green Procurement Standard

Version 13.0

March 2019

Shindengen Electric Manufacturing Co.,Ltd.

Change Tracking

Version	Revision Date	Main Revision
9	Oct. 2008	 Revised the list of Shindengen environment management materials: adding "PFOS and PFOS related chemical compound" and deleting Formaldehyde. Revised the list of Shindengen environment management materials: deleting item (3) recycling materials. Revised IV. 4-2, the usage status of environmentally hazardous substances: deleing the investigation of environmentally hazardous substance. Revised VI: Adding the investigation of the management system for chemicals in a product.
10.0	Dec. 2010	 Adding "III. Definition" and specifying the meaning of the terminology to be used. Reviewing managed chemical substances (called environment hazardous substances). Changing the treatment of "the environment management system investigation table" to an attached table.
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 1 st , 2017. Details such as maximum tolerated concentration value is described in an attached document).
13.0	Mar. 2019	 Adding chemSHERPA and an integrated JAMA/JAPIA standard material datasheet as information transfer tool of chemicals in a product. Update for Exemption list to the latest information.

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 (Excluding NAPINO AUTO & ELECTRONICS LTD.).

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 refer to the Annex or the exemption)

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 https://chemsherpa.net/

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

It is an information transfer sheet of chemicals in product (CiP), which completes SDS.

- chemSHERPA-AI

It is a sheet of information on transfer of chemicals in product and/or compliance assessment for articles.

- JAMA/JAPIA standard material datasheet

It is a sheet for information-transfer which is developed based on the agreement of JAMA and 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.

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*If you have any questions about this document, please contact us through the above details.

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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	
Chemical Substance Control Law (Class I Specified	LR01	
Chemical Substance) - Japan		
TSCA (The Toxic Substance Control Act) (Materials	LR02	
prohibited or restricted to use) - USA	21102	
ELV Directive (End of Life Vehicle Directive) - EU	LR03	
RoHS Directive (Restriction of the use of certain hazardous	LR04	
substances in electrical and electronic equipment) -EU	LK04	
POPs Regulation (Stockholm Convention on Persistent	LR05	
Organic Pollutants) Annex I - EU	LKUJ	
REACH Regulation (Registration, Evaluation, Authorization		
and Restriction of Chemicals) SVHC (Substance of Very	LR06	
High Concern, Authorization candidate materials) and Annex	LK00	
XIV (Authorized materials) - EU		
REACH Regulation Annex XVII (Restricted materials)	LR07	
GADSL (Global Automotive Declarable Substance List)	IC01	
IEC (International Electrotechnical Commission) 62474	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)	0.1
Butyl benzyl phthalate (BBP)	***
Dibutyl phthalate (DBP)	Applied from April 1 st , 2017 ⁵⁾
Diisobutyl phthalate (DIBP)	1,2017
Ozone depleting substances	Prohibited

Asbestos	intentional addition ²⁾
Azo dye and pigment which form certain aromatic amines ¹⁾	
Polychlorinated biphenyls(PCBs) and Polychlorinated	
terphenyls(PCTs)	
Polychlorinated naphthalenes (more than 2 chlorine atoms)	
Radioactive substances	
Short chain chlorinated paraffins(10-13 carbon atoms)	
Tributyltin oxide	
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	Prohibited
Hexabromocyclododecane (HBCDD)	intentional addition ²⁾

- 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"

3) Exemptions of prohibited substances in product

The reference of the exemption list of ELV Directive and RoHS Directive is placed. This is the list of exemption in each Directive at the time of publication of this document. We made every possible effort to enrich the contents but we do not guarantee it. In the event of discrepancy between the original list and our description, the original list shall prevail. (The list is placed at the end of this document.)

Prohibited substances in products

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	[\$06351] 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	[S02762] Cadmium chloride phosphate (CdSCI(PO4)3)	12135-23-0	
Cadmium and its compounds	[502770] Cadmium niobium oxide (Cd2Nb2O7)	12187-14-3	
Cadmium and its compounds	[S02777] Cadmium Hibbum Oxide (Cd2Nb2O7)	12213-70-6	
Cadmium and its compounds	[S02777] Cadmium selenide sulfide (Cd2SeS)	12213-70-0	
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		12626-36-7	
Cadmium and its compounds	[S02848] Cadmium selenide sulfide (Cd(Se,S)) [S02851] C.I. Pigment Orange 20; Cadmium sulfoselenide orange	12656-57-4	
Caumium and its compounds	[502051] C.i. Figirient Orange 20, Caumum Sunoseieniue Orange	14030-37-4	

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.

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

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Prohibited Substances in Products

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Substance Group Name	Example Substances	CAS No.	Remarks
admium and its compounds	[S00159] Cadmium oxide	1306-19-0	
· · · · · · · · · · · · · · · · · · ·			(Jun/20/2013)
admium and its compounds	[S00160] Cadmium sulfide	1306-23-6	10th SVHC (Dec/16/2013)
admium and its compounds	[S01359] Cadmium selenide	1306-24-7	
admium and its compounds	[S01442] Cadmium telluride	1306-25-8	
admium and its compounds	[S06587] Cadmium mercury sulfide	1345-09-1	
admium and its compounds	[S01806] Cadmium bromide tetrahydrate	13464-92-1	
admium and its compounds	[S02939] Phosphoric acid, cadmium salt (2:3)	13477-17-3	
admium and its compounds	[S02940] Silicic acid (H2SiO3), cadmium salt (1:1)	13477-19-5	
admium and its compounds	[S01924] Cadmium sulfate tetrahydrate	13477-21-9	
admium and its compounds	[S02941] Cadmium sulphite	13477-23-1	
admium and its compounds	[S06612] Fatty acids, C6-12, cadmium salts	135742-32-4	
admium and its compounds	[S06623] Cadmium selenide (Cd0.95Se)	136543-49-2	
admium and its compounds	[S06624] Cadmium selenide (Cd0.98Se)	136543-50-5	
admium and its compounds	[S06625] Cadmium selenide (CdSe0.97)	136543-51-6	
admium and its compounds	[S02962] Diboron tricadmium hexaoxide	13701-66-1	
admium and its compounds	[S02968] Dicadmium hexakis(cyano-C)ferrate(4-)	13755-33-4	
admium and its compounds	[S06638] Cadmium diperchlorate	13760-37-7	
admium and its compounds	[S02974] Selenious acid, cadmium salt (1:1)	13814-59-0	
admium and its compounds	[S02975] Selenic acid, cadmium salt (1:1)	13814-62-5	
admium and its compounds	[S02976] Cadmium diricinoleate	13832-25-2	
admium and its compounds	[S01674] Phosphoric acid, cadmium salt	13847-17-1	
admium and its compounds	[S06655] Cadmium chloride (CdCl)	13966-86-4	
admium and its compounds	[S02991] Cadmium molybdenum oxide (CdMoO4)	13972-68-4	
admium and its compounds	[S02993] Sulfamic acid, cadmium salt (2:1)	14017-36-8	
admium and its compounds	[S03003] Cadmium hydrogen phosphate	14067-62-0	
admium and its compounds	[\$03006] Cadmium succinate	141-00-4	
admium and its compounds	[S06662] Cadmium iodide (CdI)	14184-47-5	
admium and its compounds	[S04974] Cadmium bis(diethyldithiocarbamat)	14239-68-0	
admium and its compounds	[S01283] Cadmium chromate	14312-00-6	
admium and its compounds	[S01418] Cadmium dipotassium tetracyanide	14402-75-6	
admium and its compounds	[S06668] Potassium trichlorocadmate	14429-85-7	
admium and its compounds	[S03040] Cadmium fluoborate	14486-19-2	
admium and its compounds	[S06674] Cadmium bromate	14518-94-6	
admium and its compounds	[S03043] Phosphoric acid, ammonium cadmium salt (1:1:1)	14520-70-8	
admium and its compounds	[S06675] Bis(dibutyldithiocarbamato-S,S')cadmium	14566-86-0	
admium and its compounds	[S01483] Cadmium 2,4-pentanedionate	14689-45-3	
admium and its compounds	[S06680] Tris(ethylenediamine)cadmium dihydroxide	14874-24-9	
admium and its compounds	[S03068] Cadmium diicosanoate	14923-81-0	
admium and its compounds	[S06684] Cadmium bis(piperidine-1-carbodithioate)	14949-59-8	
admium and its compounds	[S06685] Bis(dimethyldithiocarbamato-S,S')cadmium	14949-60-1	
admium and its compounds	[S06694] Cadmium sulfate hydrate	15244-35-6	
admium and its compounds	[S06695] (OC-6-11)-Tetrapotassium hexachlorocadmate	15276-40-1	
admium and its compounds	[S03093] Cadmium-barium laurate	15337-60-7	
admium and its compounds	[S03106] Diphosphoric acid, cadmium salt (1:2)	15600-62-1	
		15743-19-8	
admium and its compounds	[S03112] Cadmium acrylate [S03128] Telluric acid (H2TeO3), cadmium salt (1:1)	15743-19-8	
admium and its compounds			
admium and its compounds	[S03131] Telluric acid (H2TeO4), cadmium salt (1:1)	15852-14-9	
admium and its compounds	[S06720] Cadmium dilactate	16039-55-7	
admium and its compounds	[S03141] Cadmium vanadium oxide (CdV2O6)	16056-72-7	
admium and its compounds	[S06721] 5-oxo-L-proline, cadmium salt	16105-06-9	
admium and its compounds	[S06726] Rubidium tribromocadmate	16593-57-0	
admium and its compounds	[S03163] Cadmium propionate	16986-83-7	

⁻ 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.

chemical substances restricted by laws and regulations, not an oriented 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.

⁻ 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 dichlorate	22750-54-5	
Cadmium and its compounds	[S06782] Cadmium p-toluate	2420-97-5	
Cadmium and its compounds	[S06783] Cadmium bis(2-ethylhexanoate)	2420-98-6	
Cadmium and its compounds	[S06787] Cadmium methacrylate	24345-60-6	
Cadmium and its compounds	[S06807] Cadmium dilaurate	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 socialm salt (2:1:2)	28038-25-7	
Cadmium and its compounds	[S06825] Sulfuric acid, cadmium potassium sait (2:1:2)	28041-77-2	
		28302-54-7	
Cadmium and its compounds	[S06830] Potassium trichlorocadmate monohydrate		
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	
		4167-05-9 4390-97-0	
Cadmium and its compounds	[S06925] Cadmium cinnamate		
Cadmium and its compounds Cadmium and its compounds	[\$06925] Cadmium cinnamate [\$04973] cadmium(+2) cation diformate	4390-97-0 4464-23-7	
Cadmium and its compounds Cadmium and its compounds Cadmium and its compounds	[S06925] Cadmium cinnamate [S04973] cadmium(+2) cation diformate [S06927] Cadmium sebacate	4390-97-0 4464-23-7 4476-04-4	
Cadmium and its compounds Cadmium and its compounds	[\$06925] Cadmium cinnamate [\$04973] cadmium(+2) cation diformate	4390-97-0 4464-23-7	

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Substance Group Name	Example Substances	CAS No.	Remarks
Cadmium and its compounds	[S06936] Cadmium nonan-1-oate	5112-16-3	
Cadmium and its compounds	[S03591] Boric acid, cadmium salt	51222-60-7	
Cadmium and its compounds	[S01871] Cadmium carbonate	513-78-0	
Cadmium and its compounds	[S06949] Cadmium o-toluate	52337-78-7	
Cadmium and its compounds	[S01308] Cadmium cyanide	542-83-6	
Cadmium and its compounds	[S01842] Cadmium acetate	543-90-8	
Cadmium and its compounds	[S06986] Sodium trichlorocadmate	55425-74-6	
Cadmium and its compounds	[S06990] Cadmium bis(4-cyclohexylbutyrate)	55700-14-6	
Cadmium and its compounds	[S06994] Cadmium divalerate	56982-42-4	
Cadmium and its compounds	[S01843] Cadmium acetate, dihydrate	5743-04-4	
Cadmium and its compounds	[S04970] Cadmium sulfoselenide red	58339-34-7	
Cadmium and its compounds	[S01315] Cadmium, diethyl-	592-02-9	
Cadmium and its compounds	[S07031] Naphthenic acids, cadmium salts	61789-34-2	
Cadmium and its compounds	[S07033] Cadmium neodecanoate	61951-96-0	
Cadmium and its compounds	[S07034] Cadmium bis(heptadecanoate)	62149-56-8	
Cadmium and its compounds	[S07043] Cadmium pentadecanoate	63400-09-9	
Cadmium and its compounds	[S07055] Cadmium dipalmitate	6427-86-7	
Cadmium and its compounds	[S07058] (S)-dichloro[2-[[(2,3-	64681-08-9	
	dihydroxypropoxy)hydroxyphosphinyl]oxy]triethylmethylammoniumato]cadmium		
Cadmium and its compounds	[S07073] Bis(propane-1,2-diyldiamine-N,N')cadmium(2+) bis[bis(cyano-C)aurate(1-)]	67906-19-8	
Cadmium and its compounds	[S07074] Cadmium dilinoleate	67939-62-2	
Cadmium and its compounds	[S07076] Cadmium m-toluate	68092-45-5	
Cadmium and its compounds	[S07077] Fatty acids, C10-18, cadmium salts	68131-58-8	
Cadmium and its compounds	[S07078] Fatty acids, C12-18, cadmium salts	68131-59-9	
Cadmium and its compounds	[S07082] Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper and lead-doped	68332-81-0	
Cadmium and its compounds	[S07083] Fatty acids, C14-18, cadmium salts	68409-82-5	
Cadmium and its compounds	[S07088] Benzenediazonium, 4-(phenylamino)-, sulfate (1:1), polymer with formaldehyde, cadmium chloride complexes	68441-39-4	
Cadmium and its compounds	[S07091] Cadmium, benzoate p-tert-butylbenzoate complexes	68478-53-5	
Cadmium and its compounds	[S07092] Pyrochlore, bismuth cadmium ruthenium	68479-13-0	
Cadmium and its compounds	[S07093] Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper chloride-doped	68512-49-2	
Cadmium and its compounds	[S07094] Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper and manganese-doped	68512-50-5	
Cadmium and its compounds	[S07095] Cadmium sulfide (CdS), solid soln. with zinc sulfide, aluminum and copper- doped	68512-51-6	
Cadmium and its compounds	[S07102] Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper and silver-doped	68583-43-7	
Cadmium and its compounds	[S07103] Cadmium sulfide (CdS), solid soln. with zinc sulfide, nickel and silver-doped	68583-44-8	
Cadmium and its compounds	[S07104] Cadmium sulfide (CdS), solid soln. with zinc sulfide, silver chloride-doped	68583-45-9	
Cadmium and its compounds	[S07105] Cadmium sulfide (CdS), solid soln. with zinc sulfide, aluminum and silver-doped	68584-41-8	
Cadmium and its compounds	[S07106] Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper and nickel-doped	68584-42-9	
Cadmium and its compounds	[S07113] Cadmium sulfide (CdS), solid soln. with zinc sulfide, aluminum and cobalt and copper and silver-doped	68784-10-1	
Cadmium and its compounds	[S07115] Barium cadmium calcium chloride fluoride phosphate, antimony and manganese-doped	68784-55-4	
Cadmium and its compounds	[S07116] Cadmium borate oxide (Cd3(BO2)4O), manganese-doped	68784-58-7	
Cadmium and its compounds	[S07122] Fatty acids, tall-oil, cadmium salts	68855-80-1	
Cadmium and its compounds	[S07123] Fatty acids, C8-18 and C18-unsatd., cadmium salts	68876-84-6	
Cadmium and its compounds	[S07124] Barium cadmium zinc sulfide (Ba2(Cd,Zn)S3), manganese-doped	68876-90-4	
Cadmium and its compounds	[S07125] Cadmium sulfide (CdS), aluminum and copper-doped	68876-98-2	
Cadmium and its compounds	[S07126] Cadmium sulfide (CdS), aluminum and silver-doped	68876-99-3	
Cadmium and its compounds	[S07127] Cadmium sulfide (CdS), copper chloride-doped	68877-00-9	
Cadmium and its compounds	[S07128] Cadmium sulfide (CdS), silver chloride-doped	68877-01-0	
Cadmium and its compounds	[S07129] Cadmium sulfide (CdS), sover another depend	68891-87-2	
Cadmium and its compounds	[S07135] Fatty acids, tallow, hydrogenated, cadmium salts	68953-39-9	
Cadmium and its compounds	[S07138] Cadmium, laurate palmitate stearate complexes	68954-18-7	
caaa.ii aiia ita compodilaa	(507 250) edulinarii, ladrate parimette stearate complexes	20224 10 /	

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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	
	dihydroxypropoxy)hydroxyphosphinyl]oxy]triethylmethylammoniumato]tricadmium,		
	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	[500157] 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 isonorialioate	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(octylphenolate)	84878-51-3	
Cadmium and its compounds	[S07284] Flue dust, lead-manufg., cadmium-rich	85117-02-8	
Cadmium and its compounds	[S07285] Waste solids, cadmium-electrolysis, thallium-rich	85117-20-0	
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,O2)cadmium	85958-86-7	
Cadmium and its compounds	[S07295] Bis(5-oxo-DL-prolinato-N1,O2)cadmium	85994-31-6	
	[S07295] Bis(5-oxo-DL-prolinato-N1,O2)cadmium [S01392] Cadmium thiocyanate	85994-31-6 865-38-3	
Cadmium and its compounds			
Cadmium and its compounds Cadmium and its compounds	[S01392] Cadmium thiocyanate	865-38-3	
Cadmium and its compounds Cadmium and its compounds Cadmium and its compounds	[S01392] Cadmium thiocyanate [S07297] Cadmium bis(2-propylpentanoate)	865-38-3 87835-30-1	

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Shindengen Electric Manufacturing Co., Ltd	Prohibited Substances in Products	page 6/67
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- Shindengen Electric Manufa	engen Electric Manufacturing Co., Ltd Prohibited Substances in Products		page 6/6
Substance Group Name	Example Substances	CAS No.	Remarks
Cadmium 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	
Cadmium and its compounds	[S07308] Propanoic acid, cadmium salt, basic	90529-78-5	
Cadmium and its compounds	[S04971] Cadmium Zinc litophone Yellow	90604-89-0	
Cadmium and its compounds	[S04969] Cadmium Litophone Yellow	90604-90-3	
Cadmium and its compounds	[S07311] Leach residues, cadmium cake	91053-44-0	
Cadmium and its compounds	[S07312] Leach residues, zinc ore-calcine, cadmium-copper ppt.	91053-46-2	
Cadmium and its compounds	[S07320] Fatty acids, castor-oil, hydrogenated, cadmium salts	91697-35-7	
Cadmium and its compounds	[S07325] Fatty acids, C8-10-branched, cadmium salts	92257-06-2	
Cadmium and its compounds	[S07326] Leach residues, zinc refining flue dust, cadmium-thallium ppt.	92257-11-9	
Cadmium and its compounds	[S07327] Fatty acids, C9-13-neo-, cadmium salts	92704-12-6	
Cadmium and its compounds	[S07328] Fatty acids, olive-oil, cadmium salts	92704-15-9	
Cadmium and its compounds	[S07329] Fatty acids, peanut-oil, cadmium salts	92704-19-3	
Cadmium and its compounds	[S07330] Fatty acids, rape-oil, cadmium salts	92704-24-0	
Cadmium and its compounds	[S07332] Fatty acids, C14-18 and C18-unsatd., branched and linear, hydrogenated, cadmium salts	92797-28-9	
Cadmium and its compounds	[S05010] Nonanoic acid, branched, cadmium salt	93686-40-9	
Cadmium and its compounds	[S04420] Carbonic acid, cadmium salt	93820-02-1	
Cadmium and its compounds	[S07341] Bis(2-ethylhexyl mercaptoacetato -0',5)cadmium	93858-50-5	
Cadmium and its compounds	[S07342] Cadmium bis(o-nonylphenolate)	93894-07-6	
Cadmium and its compounds	[S07343] Cadmium bis(p-nonylphenolate)	93894-08-7	
Cadmium and its compounds	[S07344] Cadmium bis[p-(1,1,3,3-tetramethylbutyl)phenolate]	93894-09-8	
Cadmium and its compounds	[S07345] Cadmium (Z)-hexadec-9-enoate	93894-10-1	
Cadmium and its compounds	[S07346] Cadmium (2)-nexadec-9-enoate	93965-24-3	
Cadmium and its compounds	[S07347] Cadmium isouecandate [S07347] Cadmium bis(isoundecanoate)	93965-30-1	
		93983-65-4	
Cadmium and its compounds Cadmium and its compounds	[S07348] Cadmium dimethylhexanoate [S07352] Cadmium tetrapentyl bis(phosphate)	94232-49-2	
Cadmium and its compounds	[S07355] Cadmium isooctyl phthalate (1:2:2)	94247-16-2	
Cadmium and its compounds	[S07356] Cadmium (1-ethylhexyl) phthalate (1:2:2)	94275-93-1	
Cadmium and its compounds	[S07357] Cadmium octyl phthalate (1:2:2)	94275-94-2	
Cadmium and its compounds	[S07362] Leach residues, cadmium-contg. flue dust	94551-70-9	
Cadmium and its compounds	[S07372] Cadmium diisohexadecanoate	95892-12-9	
Cadmium and its compounds	[S07374] Cadmium diisobutyl dimaleate	97259-82-0	
Cadmium and its compounds	[S07396] Zircon, cadmium orange	99749-34-5	
Hexavalent chromium compounds	[S06170] Acids generated from chromium trioxide and their oligomers	-	4th SVHC (Dec/15/2010), JAMP-SN0071
Hexavalent chromium compounds	[S02217] Other hexavalent chromium compounds	-	
Hexavalent chromium compounds	[S06173] Dilithium dichromate (Li2Cr2O7) dihydrate	10022-48-7	
Hexavalent chromium compounds	[S07719] Disodium chromate tetrahydrate	10034-82-9	
Hexavalent chromium compounds	[S02561] Nitric acid, copper(2+) salt, reaction products with ammonia, chromic aci (H2CrO4) diammonium salt and manganese(2+) dinitrate, kilned		
Hexavalent chromium compounds	[S01284] Calcium chromate dihydrate	10060-08-9	
Hexavalent chromium compounds	[S02594] Chromium cobalt iron oxide	102262-19-1	
Hexavalent chromium compounds	[S02595] Chromium cobalt copper iron manganese oxide	102262-21-5	
Hexavalent chromium compounds	[S02596] Chromium cobalt iron manganese oxide	102262-22-6	
Hexavalent chromium compounds	[S02215] Barium chromate	10294-40-3	
Hexavalent chromium compounds	[S02218] Sodium dichromate; Disodium heptaoxidodichromate	10588-01-9	1st SVHC (Oct/28/2008)

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Substance Group Name	Example Substances	CAS No.	Remarks
lexavalent chromium ompounds	[S02638] Zinc potassium chromate	11103-86-9	6th SVHC (Dec/19/2011)
lexavalent chromium ompounds	[S04994] Dihydroxy-dioxo-chromium; Chromic acid (H2CrO4); Chromic(VI) acid	11115-74-5	
lexavalent chromium ompounds	[S06356] Chromium lead oxide (Cr2Pb4O7)	119801-45-5	
lexavalent chromium ompounds	[S02707] Chromium nickel oxide (Cr2NiO4); Dichromium nickel tetraoxide	12018-18-7	
lexavalent chromium ompounds	[S02708] Dichromium zinc tetraoxide	12018-19-8	
exavalent chromium ompounds	[S06494] (Dioxochromium)di-mu-oxodioxouranium (CrUO6)	12433-30-6	
exavalent chromium ompounds	[S05018] Dipotassium heptadecaoxotetrazincatetetrachromate(2-)	12433-50-0	
exavalent chromium ompounds	[S02852] C.I. Pigment Red 104; Molybdate orange (Lead chromate pigment)	12656-85-8	2nd SVHC (Jan/13/2010)
exavalent chromium ompounds	[S06542] Chromium lead oxide (Cr2PbO4)	128976-28-3	
exavalent chromium ompounds	[S02900] Chromic acid (H2CrO4), zinc salt (1:1)	1328-67-2	
exavalent chromium ompounds	[S02266] Chromium trioxide	1333-82-0	4th SVHC (Dec/15/2010)
exavalent chromium ompounds	[S02914] Magnesium chromate; Chromic acid (H2CrO4), magnesium salt (1:1)	13423-61-5	
exavalent chromium ompounds	[S02916] C.I. Pigment Orange 21; Basic lead chromate orange	1344-38-3	
exavalent chromium ompounds	[S01287] Mercury(II) chromate	13444-75-2	
exavalent chromium ompounds	[S06584] Rubidium chromate	13446-72-5	
exavalent chromium ompounds	[S06585] Dirubidium dichromate	13446-73-6	
exavalent chromium ompounds	[S02922] Dithallium dichromate	13453-35-5	
exavalent chromium ompounds	[S02927] Dicesium chromate	13454-78-9	
exavalent chromium ompounds	[S01285] Cobalt chromate	13455-25-9	
exavalent chromium ompounds	[S02937] Dithallium chromate	13473-75-1	
exavalent chromium ompounds	[S06604] Disodium chromate decahydrate	13517-17-4	
exavalent chromium ompounds	[S02216] Zinc chromate	13530-65-9	
exavalent chromium ompounds	[S07720] Caesium dichromate	13530-67-1	
exavalent chromium ompounds	[S02947] Chromic acid (H2Cr2O7); Dihydrogen(heptaoxidodichromate)	13530-68-2	4th SVHC (Dec/15/2010), JAMP-SN0071
exavalent chromium ompounds	[S02948] Copper chromate	13548-42-0	
exavalent chromium ompounds	[S02960] Copper dichromate	13675-47-3	
exavalent chromium ompounds	[S02278] Calcium chromate	13765-19-0	
exavalent chromium	[S06646] Chromium hexafluoride	13843-28-2	
exavalent chromium	[S06647] Lithium dichromate	13843-81-7	
exavalent chromium	[S02995] Zinc dichromate	14018-95-2	

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- Shindengen	Electric	Manufacturing	Co	Ltd

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Substance Group Name	Example Substances	CAS No.	Remarks
Hexavalent chromium compounds	[S03007] Magnesium dichromate	14104-85-9	
Hexavalent chromium compounds	[S06665] Calcium dichromate	14307-33-6	
Hexavalent chromium compounds	[S03030] Lithium chromate	14307-35-8	
Hexavalent chromium compounds	[S01283] Cadmium chromate	14312-00-6	
Hexavalent chromium compounds	[S03036] Chromic acid, ammonium salt	14445-91-1	
Hexavalent chromium compounds	[S06673] Iron chromate (FeCrO4)	14507-18-7	
Hexavalent chromium compounds	[S03057] Nickel chromate; Chromic acid nickel(II) salt	14721-18-7	
Hexavalent chromium compounds	[S01899] Chromium oxychloride; Chromyl dichloride	14977-61-8	
Hexavalent chromium compounds	[S03074] Chromium (VI) chloride	14986-48-2	
Hexavalent chromium compounds	[S03104] Nickel dichromate; Chromic acid (H2Cr2O7), nickel(2+) salt (1:1)	15586-38-6	
Hexavalent chromium compounds	[S03136] Zinc chromate oxide (Zn2(CrO4)O), hydrate (1:1)	15930-94-6	
Hexavalent chromium compounds	[S03138] Potassium chlorotrioxochromate	16037-50-6	
Hexavalent chromium compounds	[S03156] Chromic acid (H2CrO4), lanthanum(3+) salt (3:2)	16565-94-9	
Hexavalent chromium compounds	[S07721] Magnesium chromate pentahydrate	16569-85-0	
Hexavalent chromium compounds	[S06724] Chromic acid, lanthanum(3+) salt (3:2), heptahydrate	16569-86-1	
Hexavalent chromium compounds	[S06725] Chromic acid (H2CrO4), neodymium(3+) salt (3:2), heptahydrate	16569-87-2	
Hexavalent chromium compounds	[S03188] Lead chromate oxide; Dilead chromate oxide	18454-12-1	
Hexavalent chromium compounds	[S02219] Chromium(6+)	18540-29-9	
Hexavalent chromium compounds	[S07722] Pyridinium dichromate	20039-37-6	
Hexavalent chromium compounds	[S03293] Dichromium(III) tris(chromate); Chromium(III) chromate	24613-89-6	6th SVHC (Dec/19/2011)
Hexavalent chromium compounds	[S03341] Chromic acid, barium potassium salt	27133-66-0	
Hexavalent chromium compounds	[S06875] Magnesium dichromate (MgCr2O7) hexahydrate	34448-20-9	
Hexavalent chromium compounds	[S06885] Chromic acid (H2CrO4), lanthanum (3+) salt (3:2), octahydrate	36563-89-0	
Hexavalent chromium compounds	[S06892] Dibismuth dichromium nonaoxide	37235-82-8	
Hexavalent chromium compounds	[S03499] C.I. Pigment Yellow 36	37300-23-5	
Hexavalent chromium compounds	[S06912] Sodium uranium chromate oxide (Na2U2(CrO4)3O4) hexahydrate	39400-35-6	
Hexavalent chromium compounds	[S03533] Chromic acid, potassium zinc salt	41189-36-0	
Hexavalent chromium compounds	[S05012] Pentazinc(II) chromate octahydroxide	49663-84-5	6th SVHC (Dec/19/2011)
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	[S06960] Chromic acid (H2CrO4), praceodymium(3+) salt (3:2)	53206-40-9	

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

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

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Substance Group Name	Example Substances	CAS No.	Remarks
Lead and its compounds	[S02575] Lead arsenate (Pb3(AsO4)2)	10102-48-4	
Lead and its compounds	[S01653] Lead molybdate	10102 40 4	
Lead and its compounds	[S06192] Phosphoric acid, calcium salt (1:1), solid soln. with calcium chloride, calcium	102047-25-6	
	fluoride, calcium oxide, phosphorus oxide (P2O5) and strontium oxide, lead and		
	manganese-doped		
Lead and its compounds	[S06193] Barium oxide (BaO), solid soln. with calcium oxide, strontium oxide and tungsten oxide (WO3), lead-doped	102110-24-7	
Lead and its compounds	[S06194] Boric acid (H3B03), solid soln. with barium oxide, calcium oxide and strontium oxide, lead and manganese-doped	102110-26-9	
Lead and its compounds	[S02592] Silicic acid, calcium salt, lead and manganese-doped	102110-36-1	
Lead and its compounds	[S06200] Lead ores, concs., leached	102110-30-1	
Lead and its compounds	[S02593] Residues, copper-iron-lead-nickel matte, sulfuric acid-insol.	102110-49-6	
Lead and its compounds	[S06201] Slimes and Sludges, battery scrap, antimony- and lead-rich	102110-49-0	
Lead and its compounds	[S06202] Slimes and Sludges, copper conc. roasting off gas scrubbing, lead-mercury- selenium-contg.	102110-61-2	
Load and its compounds	[S06203] Slimes and Sludges, copper-lead ore roasting off gas scrubbing, arsenic-contg.	102110-62-3	
Lead and its compounds Lead and its compounds	[S01635] Lead(II)metaborate	102110-62-3	
Lead and its compounds	[S06206] Lead dichlorate	10214-39-8	
Lead and its compounds	[S01618] Lead hypophosphite	10294-47-0	
Lead and its compounds	[S06207] Lead hypophosphite [S06207] Lead bis(2-hydroxy-1-propanesulfonate)	10294-58-3	
Lead and its compounds	[S06218] Lead fluoride (PbF2.01)	103427-19-6	
Lead and its compounds	[S02620] Plumbane, chlorotriethyl-	106496-45-1	
Lead and its compounds	[S02624] Lead methacrylate	1067-14-7	
Lead and its compounds	[S02070] Lead(II) distearate; Lead stearate	1072-35-1	
Lead and its compounds	[S06239] Lead molybdenum oxide (Pb0.51Mo0.4901.98)	1072-33-1	
Lead and its compounds	[S06240] Lead molybdenum oxide (Pb0.49-0.51Mo0.49-0.51O1.98-2.02)	108424-14-2	
Lead and its compounds	[S06241] Lead molybdenum oxide (Pb0.49-0.5101.04-9-0.5101.38-2.02)	108424-15-3	
Lead and its compounds	[S02632] Diamyldithiocarbamate, lead	109707-90-6	
Lead and its compounds	[S02641] Lead chromate silicate	11113-70-5	
Lead and its compounds	[S02644] Dibismuth dilead tetraruthenium tridecaoxide	11116-83-9	
Lead and its compounds	[S02645] Chromium lead oxide	11119-70-3	
Lead and its compounds	[S02646] Silicic acid, lead salt	11120-22-2	8th SVHC
			(Dec/19/2012)
Lead and its compounds	[S02661] Lead oleate	1120-46-3	
Lead and its compounds	[S06297] 2-Hydroxy-1-propanesulfonic acid, lead salt (1:?)	114601-64-8	
Lead and its compounds	[S06303] Cyclotetrasiloxane-2,2,4,4,6,6,8,8-octol, lead(2+) salt (1:2)	114830-97-6	
Lead and its compounds	[S02663] Chlorotriphenylplumbane	1153-06-6	
Lead and its compounds	[S02664] Acetoxytriphenylplumbane	1162-06-7	
Lead and its compounds	[S02665] Lead sulfomolybdochromate, silica encapsulated	116565-73-2	
Lead and its compounds	[S0266] Chromium lead oxide sulfate, silica-modified	116565-74-3	
Lead and its compounds	[\$06316] Lead silicon oxide (Pb0.18Si0.82O1.82)	116666-25-2	
Lead and its compounds	[S02670] Lead succinate	1191-18-0	
Lead and its compounds	[S06356] Chromium lead oxide (Cr2Pb407)	119801-45-5	
Lead and its compounds	[S02691] Plumbate (Pb044-), calcium (1:2), (T-4)-	12013-69-3	
Lead and its compounds	[S02706] Dilead chromate dihydroxide	12017-86-6	
Lead and its compounds	[S02710] Iron lead oxide (Fe12Pb019)	12023-90-4	
Lead and its compounds	[S02712] Hafnium lead trioxide	12029-23-1	
Lead and its compounds	[S02714] Plumbate (Pb022-), disodium	12034-30-9 12034-88-7	
Lead and its compounds	[S02716] Lead neobate		
Lead and its compounds	[S02722] Lead tin oxide (PbSn03)	12036-31-6 12036-76-9	O+P C//FIC
Lead and its compounds	[S02723] Lead oxide sulfate (Pb2O(SO4)); Dilead oxide sulfate		(Dec/19/2012)
Lead and its compounds	[S02740] Bismuth, compound with lead (1:1)	12048-28-1	
Lead and its compounds	[S02749] Lead oxide (Pb2O)	12059-89-1	
Lead and its compounds	[S02239] Lead(II) titanate; Lead titanium trioxide	12060-00-3	8th SVHC (Dec/19/2012)
Lead and its compounds	[S02750] Lead zirconate	12060-01-4	

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Substance Group Name	Example Substances	CAS No.	Remarks
	·		Remarks
ead and its compounds	[S02751] Lead tantalate	12065-68-8	
ead and its compounds	[S02752] Lead oxide sulfate (Pb5O4(SO4)); Pentalead tetraoxide sulfate	12065-90-6	8th SVHC (Dec/19/2012)
ead and its compounds	[S02240] Lead selenide	12069-00-0	
ead and its compounds	[S06434] Lead oxide (PbO1-2)	121054-00-0	
ead and its compounds	[S06435] Lead molybdenum oxide (PbMo508)	121072-42-2	
ead and its compounds	[S06437] Lead sulfide (Pb(SH)2)	12135-36-3	
ead and its compounds	[S02760] Lead disulphide	12137-74-5	
ead and its compounds	[S06439] Plumbate (PbO32-), calcium (1:1)	12138-48-6	
ead and its compounds	[S02763] Lead oxide phosphonate (Pb3O2(HPO3)); Trilead dioxide phosphonate	12141-20-7	8th SVHC (Dec/19/2012)
ead and its compounds	[S02077] Lead sulphate, tribasic	12202-17-4	8th SVHC (Dec/19/2012)
ead and its compounds	[S02776] Lead chloride oxide	12205-72-0	
ead and its compounds	[S06448] Plumbate (PbO42-), calcium (1:1), (T-4)-	12213-74-0	
ead and its compounds	[S06449] Lead oxide (PbO3)	12214-45-8	
ead and its compounds	[S06450] Lead oxide (PbO1.62)	122162-56-5	
ead and its compounds	[S02783] Phenol, tetrapropylene-, lead(2+) salt	122332-23-4	
ead and its compounds	[S02798] Lead antimonide	12266-38-5	
ead and its compounds	[S02800] Lead hydroxide nitrate	12268-84-7	
ead and its compounds	[S02802] 1,3,5,7,9-Pentaoxa-2.lambda.2,4.lambda.2,6.lambda.2,8.lambda.2-tetraplumbacyclotridec-11-ene-10,13-dione, (Z)-	12275-07-9	
ead and its compounds	[S06484] Lead molybdenum oxide (Pb0.05Mo0.3100.64)	123517-46-4	
ead and its compounds	[S06485] 1,3,5,2,4,6-Trioxatriplumbin-2,4,6-triylidene	12359-22-7	
ead and its compounds	[S02810] Potassium pentadecaoxodiplumbatepentaniobate(1-)	12372-45-1	
ead and its compounds	[S02814] Lead sulfate, tribasic	12397-06-7	
ead and its compounds	[S02816] Lead, dihydroxy[2,4,6-trinitro-1,3-benzenediolato(2-)]di-	12403-82-6	
ead and its compounds	[S02823] Lead germanate	12435-47-1	
ead and its compounds	[S06502] Silicic acid (H4SiO4), lead(2+) salt (2:3)	124826-86-4	
ead and its compounds	[S02832] Fatty acids, C4-20-branched, lead salts	125328-49-6	
ead and its compounds	[S06505] 1,3,2,4-Dioxadiplumbetane, 2,4-dioxide	125454-11-7	
ead and its compounds	[S02839] Lead, C9- 28-neocarboxylate 2-ethylhexanoate complexes, basic	125494-56-6	
ead and its compounds	[S02840] Lead, bis(octadecanoato)dioxotri-	12565-18-3	
ead and its compounds	[S02841] Lead, bis(octadecanoato)dioxotri-	12578-12-0	8th SVHC (Dec/19/2012)
ead and its compounds	[S02843] Basic lead sulfite	12608-25-2	(DCC/15/2012)
ead and its compounds	[S02845] Lead chloride (V.A.N.)	12612-47-4	
ead and its compounds	[S01354] Lead titolide (V.A.N.)	12626-81-2	9th SV/UC
ead and its compounds	[301334] Lead titaliidii Zircollidii tiloxide, Lead Zircollidii titaliate	12020-01-2	(Dec/19/2012)
ead and its compounds	[S02852] C.I. Pigment Red 104; Molybdate orange (Lead chromate pigment)	12656-85-8	
ead and its compounds	[S06524] Boric acid, lead salt	12676-62-9	
ead and its compounds	[S06525] Lead iodide	12684-19-4	
ead and its compounds	[S06526] Benzenesulfonic acid, 2-hydroxy-, lead(2+) salt (2:1)	126857-68-9	
ead and its compounds	[S02858] Lead silicate sulfate	12687-78-4	
ead and its compounds	[S02863] Lead tungsten oxide	12737-98-3	
ead and its compounds	[S02864] Lead oxide sulfate	12765-51-4	
ead and its compounds	[S06533] Calcium lead oxide	12774-29-7	
ead and its compounds	[S06539] Lead oxalate trihydrate	128226-81-3	
ead and its compounds	[S06542] Chromium lead oxide (Cr2PbO4)	128976-28-3	
ead and its compounds	[S06554] Hexanoic acid, 3,5-dimethyl-, lead(2+) salt	130596-72-4	
ead and its compounds	[S06555] Lead oxide (Pb01.37)	130596-72-4	
ead and its compounds	[S02877] Lead(2+) (R)-12-hydroxyoleate	13094-04-7	
ead and its compounds	[S02251] Lead dioxide	1309-60-0	
ead and its compounds ead and its compounds	[S01596] Lead hexafluorosilicate [S06556] Lead hydroxide oxide (Pb2(OH)2O)	1310-03-8 1311-11-1	

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Shindengen Electric Manura			page 12/0
Substance Group Name	Example Substances	CAS No.	Remarks
ead and its compounds	[S02255] Lead(II,IV)oxide	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] Lead(II) carbonate basic; Dicarbonato(dihydroxy)trilead	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	
ad and its compounds	[S06569] Lead oxide (PbO1.57)	133315-99-8	
ad and its compounds	[S02908] Lead oxide	1335-25-7	
ad and its compounds	[S02909] Lead subacetate	1335-32-6	
ad and its compounds	[S06581] 1-Hydroxy-2-propanesulfonic acid, lead salt (1:?)	133988-90-6	
ad and its compounds	[S02912] Lead(2+) 2,4-dinitroresorcinolate	13406-89-8	
ad and its compounds	[S01262] Lead azide	13424-46-9	6th SVHC (Dec/19/2011)
ad and its compounds	[S06582] Lead carbonate	13427-42-4	. ,
ad 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)
ad and its compounds	[S02916] C.I. Pigment Orange 21; Basic lead chromate orange	1344-38-3	. , .,,
ad and its compounds	[S01619] Lead phosphite dibasic	1344-40-7	
ad and its compounds	[S06588] Lead dichlorite	13453-57-1	
ad and its compounds	[S01757] Lead(II)perchlorate trihydrate	13453-62-8	
ad and its compounds	[S02925] Phosphonic acid, lead(2+) salt (1:1)	13453-65-1	
ad and its compounds	[S02926] Lead pyrophosphate	13453-66-2	
ead and its compounds	[S08795] Plumbane, tetrachloro- (9CI)	13463-30-4	
ad and its compounds	[S02943] Lead thiosulfate	13478-50-7	
ad and its compounds	[S02946] Lead antimonate	13510-89-9	
ad and its compounds	[S06602] Lead hydrogenarsenate	13510-91-3	
ead and its compounds	[S06603] Lead dichlorate monohydrate	13510-96-8	
ad and its compounds	[S02949] Lead silicate	13566-17-1	
ad and its compounds	[S06613] Lead molybdenum oxide (Pb3Mo16O24)	135849-93-3	
ead and its compounds	[S01756] Lead perchlorate	13637-76-8	
		13698-55-0	
ead and its compounds	[S02961] 2-Butenedioic acid (E)-, lead salt		
ad and its compounds	[S06632] Tetrabromolead	13701-91-2 13703-85-0	
ead and its compounds	[S06635] Diboric acid, lead(2+) salt (1:2)		
ead and its compounds	[S02970] Lead disulphamidate	13767-78-7	
ead and its compounds	[\$06642] Lead iodide (PbI)	13779-93-6 13814-96-5	0+P C//PC
ead and its compounds	[S01436] Lead bis(tetrafluoroborate); Lead fluoborate		(Dec/19/2012)
ad and its compounds	[S01038] Nitrous acid, lead(II) salt	13826-65-8	
ad and its compounds	[S02978] Lead tellurite	13845-35-7	
ad and its compounds	[S06653] Lead chloride (PbCl)	13931-84-5	
ad and its compounds	[S03008] Lead, isotope of mass 205; Lead-205	14119-28-9	
ad and its compounds	[S03009] Lead 209	14119-30-3	
ad and its compounds	[S03025] Lead, isotope of mass 210; Lead-210	14255-04-0	
ad and its compounds	[S03038] 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, lead salt	14450-60-3	
ad and its compounds	[S03039] Lead acrylate	14466-01-4	
ad and its compounds	[S06677] Lead molybdenum oxide (Pb2MoO5)	14648-48-7	
ad and its compounds	[S03056] Lead 203	14687-25-3	
ead and its compounds	[S01636] Lead borate	14720-53-7	
ead and its compounds	[S03062] Plumbane, tetrakis(1-methylethyl)-	14846-40-3	
ead and its compounds	[S06686] Lead fluoride (PbF)	14986-72-2	
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Substance Group Name	Example Substances	CAS No.	Remarks
Lead and its compounds	[S03079] Lead 212	15092-94-1	
Lead and its compounds	[S03083] Lead, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, (SP-4-1)-	15187-16-3	
Lead and its compounds	[S03087] Chlorotrimethylplumbane	1520-78-1	
Lead and its compounds	[S03089] 1,3-Benzenediol, 2,4,6-trinitro-, lead salt	15245-44-0	6th SVHC (Dec/19/2011)
Lead and its compounds	[S01487] Bis(pentane-2,4-dionato-O,O')lead; Lead(II)2,4-pentanedionate	15282-88-9	
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	[S03095] Lead acetate	15347-57-6	
ead and its compounds	[S06699] 4-Methylbenzoic acid, lead(4+) salt (4:1)	15516-84-4	
ead and its compounds	[S03100] Phosphonic acid, lead(2+) salt (2:1)	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	[S03115] Lead(2+) decanoate	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	
ead and its compounds	[S03122] Lead 211	15816-77-0	
ead and its compounds	[S06710] Oxalic acid, lead salt (1:?)	15843-48-8	
		15845-52-0	
ead and its compounds	[\$03127] Phosphoric acid, lead(2+) salt (1:1)		
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	[S03218] 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	
Lead 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	
	[S03224] Lead myristate	20403-41-2	

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Prohibited Substances in Products

page 14/67 Substance Group Name **Example Substances** CAS No. Remarks 20403-42-3 Lead and its compounds [S03225] Decanoic acid, lead salt 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 20890-10-2 [S03237] Lead cyanamidate 20936-32-7 Lead and its compounds [S03238] Lead 2,4-dihydroxybenzoate Lead and its compounds [S03242] Diphenyllead dichloride 2117-69-3 Lead and its compounds [S06760] Heptanoic acid, lead salt 21180-26-7 22438-69-3 Lead and its compounds [S06775] Disilicic acid, lead(2+) salt (1:3) 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 22904-40-1 Lead and its compounds [S03274] Hexanoic acid, 3,5,5-trimethyl-, lead salt 23621-79-6 2388-00-3 Lead and its compounds [S03276] Diplumbane, hexaethyl-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 [S03312] Lead iodate 25659-31-8 Lead and its compounds 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 25987-03-5 Lead and its compounds [S06806] Phenol, lead salt (1:?) Lead and its compounds [S03323] Thiosulphuric acid, lead salt 26265-65-6 Lead and its compounds [S03348] Lead neodecanoate 27253-28-7 Lead and its compounds [S03349] Isononanoic acid, lead salt 27253-41-4 27486-00-6 Lead and its compounds [S03354] Lead 199 27496-91-9 Lead and its compounds [S06820] Lead bis(methylbenzoate) 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 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 [S03432] Lead dilinoleate 33627-12-2 Lead and its compounds 34018-28-5 Lead and its compounds [S03440] Lead dibromate Lead and its compounds [S06871] 2-Methylbenzoic acid, lead(4+) salt (4:1) 34295-32-4 [S03443] Tetrapropyl lead 3440-75-3 Lead and its compounds 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

[S06908] Lead sulfide

39377-56-5

Lead and its compounds

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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	8th SVHC (Dec/19/2012)
Lead and its compounds	[S03789] Bis(o-acetoxybenzoato)lead	62451-77-8	
Lead and its compounds	[S03794] Cyclohexanebutanoic acid, lead(2+) salt	62637-99-4	
Lead and its compounds	[S03808] Lead(2+) heptadecanoate	63399-94-0	
Lead and its compounds	[S07041] Lead diundecanoate	63400-07-7	
Lead and its compounds	[S07042] Lead dinonanoate	63400-08-8	
Lead and its compounds	[S03813] Naphthalenesulfonic acid, diisononyl-, lead(2+) salt	63568-30-9	
Lead and its compounds	[S07045] Sulfuric acid, lead salt (1:?), basic	63653-42-9	
Lead and its compounds	[S03822] Lead styphnate	63918-97-8	
Lead and its compounds	[S03833] Isooctanoic acid, lead salt	64504-12-7	
Lead and its compounds	[S03837] Lead dipicrate	6477-64-1	6th SVHC (Dec/19/2011)
Lead and its compounds	[S03840] Lead dibutanolate	65119-94-0	
Lead and its compounds	[S03841] Lead(2+) 4,6-dinitro-o-cresolate	65121-76-8	
Lead and its compounds	[S03842] Lead 12-hydroxyoctadecanoate	65127-78-8	
Lead and its compounds	[S03843] Plumbane, tetrakis(1-methylpropyl)-	65151-08-8	
Lead and its compounds	[S03844] Bismuth lead ruthenium oxide	65229-22-3	
Lead and its compounds	[S03861] Petrolatum, petroleum, oxidized, lead salt	67674-14-0	
Lead and its compounds	[S03862] Lead silicate sulfate	67711-86-8	
Lead and its compounds	[S03898] Silicic acid, lead nickel salt	68130-19-8	
Lead and its compounds	[S03899] Fatty acids, C12-18, lead salts	68131-60-2	
Lead and its compounds	[S07079] Resin acids and Rosin acids, calcium salts, polymers with lead resinates and sapond. linseed oil	68139-27-5	
Lead and its compounds	[S03904] Linseed oil, reaction products with lead oxide (Pb3O4) and mastic	68152-99-8	
Lead 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	
Lead and its compounds	[S03906] Lead, 2-ethylhexanoate tall-oil fatty acids complexes	68187-37-1	
Lead and its compounds	[S07082] Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper and lead-doped	68332-81-0	
Lead and its compounds	[S03921] Lead phthalate	6838-85-3	
Lead and its compounds	[S03923] Fatty acids, C8-10-branched, lead salts, basic	68409-79-0	
Lead and its compounds	[S03924] Copper, .betaresorcylate salicylate lead complexes	68411-07-4	
Lead and its compounds	[S07084] 1,3-Benzenediol, 2-nitro-, lead salt, basic	68411-33-6	
Lead and its compounds	[S03925] Lead oxide (PbO), lead-contg.	68411-78-9	
Lead and its compounds	[S07087] Oils, menhaden, lead salts	68424-76-0	
Lead and its compounds	[S07090] Hexanoic acid, dimethyl-, lead(2+) salt, basic	68442-95-5	
Lead and its compounds	[S07096] Hexanoic acid, 2-ethyl-, lead(2+) salt, basic	68515-76-4	
Lead and its compounds	[S07097] Hexanoic acid, 3,5,5-trimethyl-, lead(2+) salt, basic	68515-77-5	
Lead and its compounds	[S03934] Lead, isooctanoate naphthenate complexes	68515-80-0	
Lead and its compounds	[S07098] Linseed oil, lead manganese salt	68553-17-3	
Lead and its compounds	[S07099] Oils, fish, lead salts	68553-63-9	
Lead and its compounds	[S07100] Spinels, boron calcium lead silicon white	68555-05-5	
Lead and its compounds	[S07101] Spinels, lead silicon tin zinc white	68555-07-7	
Lead and its compounds	[S07108] Zinc sulfide (ZnS), copper and lead-doped	68585-90-0	
Lead and its compounds	[S03938] Phenol, dodecyl-, lead(2+) salt	68586-21-0	
Lead and its compounds	[S05000] Fatty acids, C6-19-branched, lead salts, basic	68603-83-8	
Lead and its compounds	[S07109] Carboxylic acids, tall-oil, lead salts, basic	68603-93-0	
Lead and its compounds	[S03939] Castor oil, dehydrated, polymer with rosin, calcium lead zinc salt	68604-05-7	
Lead and its compounds	[S07110] Octanoic acid, branched, lead salts, basic	68604-56-8	
Lead and its compounds	[S07111] Fatty acids, tallow, hydrogenated, lead salts	68605-98-1	
Lead and its compounds	[S03940] Plumbane, ethyl methyl derivitives	68610-17-3	
Lead and its compounds	[S07114] Tungstate (WO42-), calcium (1:1), (T-4)-, lead-doped	68784-53-2	
Lead and its compounds	[S07117] Calcium, acetate coco fatty acids decanoate hydrogenated tallow fatty acids octanoate lead complexes	68784-59-8	

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Substance Group Name	Example Substances	CAS No.	Remarks
Lead and its compounds	[S07118] Silicic acid (H6Si2O7), barium magnesium strontium salt, lead-doped	68784-74-7	
Lead 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	8th SVHC (Dec/19/2012)
Lead and its compounds	[S07120] Silicic acid (H4SiO4), magnesium manganese(2+) zinc salt, arsenic and lead-doped	68784-76-9	
Lead and its compounds	[S07129] Cadmium sulfide (CdS), copper and lead-doped	68891-87-2	
Lead 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	
Lead and its compounds	[S03948] .alphaD-Glucopyranose, 1-(dihydrogen phosphate), lead salt	68901-12-2	
Lead and its compounds	[S07132] Acetic acid, reaction products with lead oxide (PbO), silica and sulfuric acid	68937-05-3	
Lead and its compounds	[S07134] Resin acids and Rosin acids, calcium lead salts	68952-91-0	
Lead and its compounds	[S07137] Benzoic acid, 2,4-dihydroxy-, lead salt, basic	68954-05-2	
Lead and its compounds	[S07140] Gilsonite, polymer with cyclopentadiene, dicyclopentadiene and linseed oil, lead salts	68956-49-0	
Lead and its compounds	[S07145] Barium bismuth lead niobium titanium oxide	68987-33-7	
Lead and its compounds	[S03962] Gilsonite, polymer with linseed oil, lead salt	68989-89-9	
Lead and its compounds	[S03963] Linseed oil, polymer with tung oil, lead salt	68990-75-0	
Lead and its compounds	[S03965] Lead, [1,2-benzenedicarboxylato(2-)]dioxotri-	69011-06-9	8th SVHC (Dec/19/2012)
Lead and its compounds	[S03966] Lead chromate silicate (Pb3(CrO4)(SiO4))	69011-07-0	
Lead and its compounds	[S03968] Lead alloy, dross	69011-59-2	
Lead and its compounds	[S03969] Lead alloy, Pb,Sn, dross	69011-60-5	
Lead and its compounds	[S07156] Flue dust, lead-tin alloy-manufg.	69012-60-8	
Lead and its compounds	[S03972] Lead, dross, antimony-rich	69029-45-4	
Lead and its compounds	[S03973] Lead, dross, bismuth-rich	69029-46-5	
Lead and its compounds	[S03974] Lead, antimonial	69029-50-1	
Lead and its compounds	[S03975] Lead, antimonial, dross	69029-51-2	
Lead and its compounds	[S03976] Lead, dross	69029-52-3	
Lead and its compounds	[S03977] Lead oxide (PbO), retort	69029-53-4	
Lead and its compounds	[S07158] Slags, lead reverbatory smelting	69029-58-9	
Lead and its compounds	[S07159] Bismuth, refinery lead chloride residues	69029-61-4	
Lead and its compounds	[S07161] Flue dust, lead-refining	69029-67-0	
Lead and its compounds	[S03978] Leach residues, lead slag	69029-71-6	
Lead and its compounds	[S07163] Leach residues, precious metal recovery lead refining	69029-72-7	
Lead and its compounds	[S07164] Calcines, lead ore conc.	69029-74-9	
Lead and its compounds	[S07166] Residues, lead roaster	69029-78-3	
Lead and its compounds	[S07167] Residues lead smelting	69029-79-4	
Lead and its compounds	[S07168] Residues, precious metal recovery lead refining	69029-80-7	
Lead and its compounds	[S07169] Slags, lead smelting	69029-84-1	
Lead and its compounds	[S07170] Slags, precious metal recovery lead refining	69029-85-2	
Lead and its compounds	[S07174] Slimes and Sludges, lead refining	69029-93-2	
Lead and its compounds	[S07175] (T-4)-Bis[bis(2-methylproply)carbamodithioato-S,S']lead	69090-73-9	
Lead and its compounds	[S07176] Calcium, acetate candelilla wax oleate tallow lead complexes	69103-03-3	
Lead 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	
Lead and its compounds	[S03985] Lead, dross, copper-rich	69227-11-8	
Lead and its compounds	[S03986] Diacetoxydiphenylplumbane	6928-68-3	
Lead and its compounds	[S07184] Lead bis[(E)-9-octadecenoate]	69637-83-8	
Lead and its compounds	[S03989] Lead, C6-19-branched carboxylate naphthenate complexes	70084-67-2	
Lead and its compounds	[S04000] 1,3-Benzenediol, nitro-, lead(2+) salt (1:1)	70268-38-1	
Lead and its compounds	[S04002] Lead, decanoate octanoate complexes	70321-55-0	
Lead and its compounds	[S04004] Lead, alkyls, manufacturing wastes	70513-89-2	
Lead and its compounds	[S04005] Flue dust, lead blast furnace	70514-05-5	
Lead 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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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	
ead and its compounds	[S04137] Lead stearate	7428-48-0	
Lead and its compounds	[S02075] Lead	7439-92-1	
Lead and its compounds	[S01694] Lead sulfite	7446-10-8	
ead and its compounds	[S02082] Lead(II) sulfate	7446-14-2	
Lead and its compounds	[S01388] Lead selenate	7446-15-3	
ead and its compounds	[S02354] Lead(II) phosphate	7446-27-7	
ead and its compounds	[S04141] Lead selenite	7488-51-9	
ead and its compounds	[S01439] Tetramethyl lead	75-74-1	
ead and its compounds	[S04158] Lead, bis(diphenylcarbamodithioato-S,S')-, (T-4)-	75790-73-7	
ead and its compounds	[S04165] Lead arsenate, unspecified	7645-25-2	
ead and its compounds	[S07236] Lead di(22-tricosenoate)	76835-98-8	
ead and its compounds	[S07237] 2-Methylbenzoic acid, lead salt (1:?)	76925-97-8	
ead and its compounds	[S04169] Lead(4+) stearate	7717-46-6	
ead and its compounds	[S01731] Lead chloride	7758-95-4	
ead and its compounds	[S02364] Lead(II) chromate; Lead(II) tetraoxidochromate	7758-97-6	2nd SVHC (Jan/13/2010)
ead and its compounds	[S02543] Lead tungsten oxide	7759-01-5	
ead and its compounds	[S01566] Lead difluoride	7783-46-2	
ead and its compounds	[S01567] Lead(IV) fluoride	7783-59-7	
ead 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)
ead and its compounds	[S05017] Pigment Lightfast Lead-Molybdate Orange OS (9CI)	78690-68-3	
ead and its compounds	[S04206] Lead, (2-methyl-4,6-dinitrophenolato-O1)(nitrato-O)muoxodi-, monohydrate	79357-62-3	
ead and its compounds	[S04209] Lead, C3-13-fatty acid naphthenate complexes	79803-79-5	
ead and its compounds	[S07261] Pyrochlore, antimony lead yellow; C.I. Pigment Yellow 41	8012-00-8	8th SVHC (Dec/19/2012)
ead and its compounds	[S04217] Lead formate	811-54-1	
ead and its compounds	[S04223] Fatty acids, C9-11-branched, lead salts	81412-57-9	
ead and its compounds	[S04224] Lead dipropionate	814-70-0	
ead and its compounds	[S01353] Lead oxalate	814-93-7	
ead and its compounds	[S04225] Butanedioic acid, 2,3-dihydroxy- [R-(R*,R*)]-, lead(2+) salt (1:1)	815-84-9	
ead and its compounds	[S04226] Lead malate	816-68-2	
Lead and its compounds	[S04227] Lead dibutyrate	819-73-8	
ead and its compounds	[S07268] Benzenesulfonic acid, 4-hydroxy-, lead(2+) salt (2:1)	825-91-2	
ead 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	
ead 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	
ead and its compounds	[S04248] Lead, C5-23-branched carboxylate naphthenate octanoate complexes	83711-47-1	
ead and its compounds	[S04276] Lead, C5-23-branched carboxylate C4-10-fatty acid complexes	84066-98-8	
ead 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	

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Substance Group Name	Example Substances	CAS No.	Remarks
Lead and its compounds	[S07272] Matte, lead	84195-51-7	Remarks
Lead and its compounds	[S07273] Slimes and Sludges, lead, electrolytic	84195-60-8	
Lead and its compounds	[S07274] Speiss, lead	84195-61-9	
Lead and its compounds	[S04290] Lead bis(p-octylphenolate)	84394-98-9	
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	
Lead and its compounds	[S04296] [.mu(4,6-Dinitroresorcinolato(2-)-01,03)]dihydroxydilead	84837-22-9	
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	
Lead and its compounds	[S04305] Lead, naphthenate neodecanoate complexes, basic	84929-96-4	
Lead and its compounds	[S04306] Lead, isononanoate naphthenate complexes	84929-97-5	
Lead and its compounds	[S04307] Benzenesulfonic acid, 4-C10-13-sec-alkyl derivitives, lead(2+) salts	84961-75-1	
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	
Lead and its compounds	[S04313] Lead(2+) 4-(1,1-dimethylethyl)benzoate	85292-77-9	
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	
Lead and its compounds	[S04325] Lead uranate pigment	85536-79-4	
Lead and its compounds	[S04332] Lead bis(tetracosylbenzenesulphonate)	85865-91-4	
Lead and its compounds	[S04333] Lead bis[didodecylbenzenesulphonate]	85865-92-5	
Lead and its compounds	[S04336] Lead(2+) acrylate	867-47-0	
Lead and its compounds	[S04338] Lead dibenzoate	873-54-1	
Lead and its compounds	[S07298] Lead bis(2-propylpentanoate)	87835-32-3	
Lead and its compounds	[S04339] Lead hydroxysalicylate	87903-39-7	
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	90193-83-2	
Lead and its compounds	[S04344] 2-Butenedioic acid (E)-, lead(2+) salt, basic	90268-66-9	
Lead and its compounds Lead and its compounds	[S04346] Decanoic acid, branched, lead salts [S04347] Dodecanoic acid, lead salt, basic	90342-24-8 90342-56-6	
		90342-56-6	
Lead and its compounds	[S04348] Hexadecanoic acid, lead salt, basic		
Lead and its compounds	[S04349] Hexadecanoic acid, lead(2+) salt, basic	90388-10-6	
Lead and its compounds	[S04350] 9-Hexadecenoic acid, lead(2+) salt, (Z)-, basic	90388-15-1	
Lead and its compounds	[S04351] Isodecanoic acid, lead salt, basic	90431-14-4	
Lead and its compounds	[S04352] Isononanoic acid, lead salt, basic	90431-21-3	
Lead and its compounds	[S04353] Isooctanoic acid, lead salt, basic	90431-26-8	
Lead and its compounds	[S04354] Lead, C8-10-branched fatty acids C9-11-neofatty acids naphthenate complexes, overbased	90431-27-9	
Lead and its compounds	[504355] Lead, C8-10-branched fatty acids C9-11-neofatty acids naphthenate complexes	90431-28-0	
Lead and its compounds	[S04356] Lead, 2-ethylhexanoate isodecanoate complexes, basic	90431-30-4	
Lead and its compounds	[S04357] Lead, 2-ethylhexanoate isononanoate complexes, basic	90431-31-5	
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	
Lead and its compounds	[S04362] Lead, isodecanoate isononanoate complexes, basic	90431-36-0	
Lead and its compounds	[S04363] Lead, isodecanoate isooctanoate complexes, basic	90431-37-1	
Lead and its compounds	[S04364] Lead, isodecanoate naphthenate complexes	90431-38-2	
Lead and its compounds	[S04365] Lead, isodecanoate neodecanoate complexes, basic	90431-39-3	
Lead and its compounds	[S04366] Lead, isononanoate naphthenate complexes, basic	90431-40-6	
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	

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Substance Group Name	Example Substances	CAS No.	Remarks
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	
ead 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
ceda dila its compounds	[50+552] Fatty delta, C10-10, Icaa satts	31031 02 0	(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	
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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	
Lead and its compounds	[S04426] Lead(2+) (Z)-hexadec-9-enoate	93858-24-3	
Lead and its compounds	[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+) neoundecanoate	93894-49-6	
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	[S04445] Linu[[5,5-Azobis[1H-tetrazolato]](z-)]Jumyaroxyallead [S04453] Lead diundec-10-enoate	94015-57-3	
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	
Lead and its compounds	[SO4458] (Isodecanoato-O)(isononanoato-O)lead	94246-86-3	

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Substance Group Name	Example Substances	CAS No.	Remarks
ead and its compounds	[S04460] (2-Ethylhexanoato-O)(isooctanoato-O)lead	94246-90-9	
ead and its compounds	[S04461] (2-Ethylhexanoato-O)(isononanoato-O)lead	94246-91-0	
ead and its compounds	[S04462] (2-Ethylhexanoato-O)(isodecanoato-O)lead	94246-92-1	
ead and its compounds	[S04463] (2-Ethylhexanoato-O)(neodecanoato-O)lead	94246-93-2	
ead and its compounds	[S04464] Lead icosanoate (1:2)	94266-31-6	
ead and its compounds	[S04465] Lead icosanoate	94266-32-7	
ead and its compounds	[S04470] Fatty acids, tallow, reaction products with lead oxide	94349-78-7	
ead and its compounds	[S07358] Poplar, Populus gileadensis, ext.	94350-03-5	
ead and its compounds	[S04472] (Isononanoato-O)(neodecanoato-O)lead	94481-58-0	
ead and its compounds	[S04474] Lead, zinc dross	94551-60-7	
ead and its compounds	[S07360] Calcines, lead-zinc ore conc.	94551-62-9	
ead and its compounds	[S07361] Fumes, lead	94551-66-3	
ead and its compounds	[S07363] Leach residues, copper-lead	94551-72-1	
ead and its compounds	[S07364] Matte, copper-lead	94551-74-3	
ead and its compounds	[S07365] Residues, lead smelting wastewater treatment	94551-78-7	
ead and its compounds	[S07366] Residues, lead-zinc smelting wastewater treatment	94551-79-8	
ead and its compounds	[S07367] Wastes, lead battery reprocessing	94551-99-2	
ead and its compounds	[S07368] Waste solids, lead silver anode	94552-05-3	
ead and its compounds	[S07371] Methanesulfonic acid, lead salt (1:?)	95860-12-1	
ead and its compounds	[S04478] Lead(2+) isohexadecanoate	95892-13-0	
ead and its compounds	[S04482] Lead, dimuhydroxy(2-methyl-4,6-dinitrophenolato-O1)(nitrato-O)di-	96471-22-6	
ead and its compounds	[S07373] Slimes and Sludges, lead acetate manuf.	96690-46-9	
ead and its compounds	[S04494] Lead, bullion	97808-88-3	
ead and its compounds	[S04495] Lead fluoride hydroxide	97889-90-2	
ead and its compounds	[S04496] 7-Methyloctanoic acid, lead salt	97952-39-1	
ead and its compounds	[S04497] Nitric acid, lead(2+) salt, reaction products with sodium tin oxide	97953-08-7	
ead and its compounds	[S07382] Speiss, lead, nickel-contg.	98246-91-4	
ead and its compounds	[S04502] Sulfuric acid, barium salt (1:1), lead-doped	99328-54-8	
ead and its compounds	[S04507] Perchloric acid, reaction products with lead oxide (pbo) and triethanolamine	99749-31-2	
1ercury and its compounds	[S00764] Alkyl-mercury compounds	-	
1ercury and its compounds	[S02164] Other mercury compounds	-	
1ercury and its compounds	[S02556] Mercury bromide (HgBr)	10031-18-2	
1ercury and its compounds	[S06176] Residues, zinc refining flue dust wastewater, mercury-selenium	100403-63-2	
1ercury and its compounds	[S02223] Mercuric nitrate	10045-94-0	
1ercury and its compounds	[S02563] Barium tetraiodomercurate	10048-99-4	
1ercury and its compounds	[S01288] Chlorophenylmercury	100-56-1	
1ercury and its compounds	[S02564] Phenylmercuric hydroxide	100-57-2	
1ercury and its compounds	[S01901] Mercury chloride	10112-91-1	
1ercury and its compounds	[S01268] Mercuric chloride, ammoniated	10124-48-8	
1ercury and its compounds	[S06202] Slimes and Sludges, copper conc. roasting off gas scrubbing, lead-mercury- selenium-contg.	102110-61-2	
1ercury and its compounds	[S02600] Dihydrogen [orthoborato(3-)-O]phenylmercurate(2-)	102-98-7	
1ercury and its compounds	[S02603] Mercury, phenyl(propanoato-O)-	103-27-5	
1ercury and its compounds	[S02604] Mercury, (2-ethylhexanoato-O)(1-methoxycyclohexyl)-	103332-13-4	
1ercury and its compounds	[S02605] Mercury, (1-methoxycyclohexyl)(neodecanoato-O)-	103369-15-9	
1ercury and its compounds	[S01495] Mercurous nitrate	10415-75-5	
1ercury and its compounds	[S02606] Mercury, (1-methoxyethyl)(9-octadecenoato-0)-,	104325-07-7	
1ercury and its compounds	[S02607] Mercury, (1-methoxycyclohexyl)(9-octadecenoato-0)-,	104325-08-8	
1ercury and its compounds	[S02608] Mercury, (1-methoxyethyl)(neodecanoato-O)-	104335-53-7	
1ercury and its compounds	[S02609] Mercury, (2-ethylhexanoato-O)(1-methoxyethyl)	104339-46-0	
1ercury and its compounds	[S01683] Mercury(II)phosphate	10451-12-4	
1ercury and its compounds	[S02610] Phenylmercury stearate	104-59-6	
	[S02610] Phenylmercury stearate [S02611] Mercury, (9-octadecenoato-O)phenyl-, (2)-	104-59-6 104-60-9	
1ercury and its compounds			

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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
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	
		1310-88-9	
Mercury and its compounds	[S02879] Dimercury amidatenitrate		
Mercury and its compounds	[S02881] 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	
Mercury and its compounds	[S03013] Mercury, iodo(iodomethyl)-	141-51-5	
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	
Mercury and its compounds	[S01668] Mercury, iodomethyl-	143-36-2	
Mercury and its compounds	[S03033] Phenyl(quinolin-8-olato-N1,08)mercury	14354-56-4	

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Substance Group Name	Example Substances	CAS No.	Remarks
Mercury and its compounds	[S06667] (T-4)-Diamminedichloromercury	14376-09-1	
Mercury and its compounds	[S06670] Selenious acid, mercury(2+) salt (1:1)	14459-36-0	
Mercury and its compounds	[S03060] Mercury, bis(phenyldiazenecarbothioic acid 2-phenylhydrazidato-N2,S}-, (T-4)-	14783-59-6	
Mercury and its compounds	[S01496] Mercury(I)nitrate dihydrate	14836-60-3	
Mercury and its compounds	[S03064] 2-(Ethylmercuriothio)benzoic acid	148-61-8	
Mercury and its compounds	[S06688] Mercury azide (Hg(N3))	14990-20-6	
Mercury 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	
Mercury and its compounds	[S03082] Methoxyethylmercuric acetate	151-38-2	
Mercury and its compounds	[S01896] Mercury iodide	15385-57-6	
Mercury and its compounds	[S01903] Mercury bromide	15385-58-7	
Mercury and its compounds	[S03097] Mercury bis(4-chlorobenzoate)	15516-76-4	
Mercury and its compounds	[S06705] Mercury alloy, base, Hg 50,Cs 33,Na 17	156234-43-4	
Mercury and its compounds	[S06706] Mercury alloy, base, Hg 46,Cs 30,Na 24	156234-44-5	
Mercury and its compounds	[S06707] (T-4)-Dithallium tetracyanomercurate	15634-23-8	
Mercury and its compounds	[S03109] Disodium tetra(cyano-C)mercurate(2-)	15682-88-9	
Mercury and its compounds	[S03121] Mercury, chloro[p-(2,4-dinitroanilino)phenyl]-	15785-93-0	
Mercury and its compounds	[S03123] Mercurous oxide	15829-53-5	
Mercury and its compounds	[S01858] Mercuric acetate	1600-27-7	
Mercury and its compounds	[S03154] Otimerate sodium	16509-11-8	
Mercury and its compounds	[S06729] Phenylmercuric thiocyanate	16751-55-6	
Mercury and its compounds	[S06735] Hydroxymercuri-o-nitrophenol	17140-73-7	
Mercury and its compounds	[S06740] Mercury alloy, base, Hg 69,Na 31	175695-12-2	
Mercury and its compounds	[S03180] Mercury, chloro(ethanethiolato)-	1785-43-9	
Mercury and its compounds	[S03184] Trimercury biscitrate	18211-85-3	
Mercury and its compounds	[S03197] Bromo(2-hydroxypropyl)mercury	18832-83-2	
Mercury and its compounds	[S03199] Bis(lactato-O1,O2)mercury	18917-83-4	
Mercury and its compounds	[S03200] (Lactato-O1,O2)mercury	18918-06-4	
1ercury and its compounds	[S01888] Mercury fluoride	18967-25-4	
Mercury and its compounds	[S03214] [.mu[Metasilicato(2-)-O:O]]bis(2-methoxyethyl)dimercury	19367-79-4	
Nercury and its compounds	[S03216] Mercury, (acetato-0)[4-[[4-(dimethylamino)phenyl]azo]phenyl]-	19447-62-2	
Mercury and its compounds	[S03232] Mercurate(2-), tetrachloro-, dipotassium, (T-4)-	20582-71-2	
Mercury and its compounds	[S01376] Mercury(II)selenide	20601-83-6	
Mercury and its compounds	[S03243] Mercaptomerin sodium	21259-76-7	
Mercury and its compounds	[S02167] Mercuric(II) oxide	21908-53-2	
Mercury and its compounds	[S03255] Potassium triiodomercurate(1-)	22330-18-3	
Mercury and its compounds	[S03256] Ethylmercuric phosphate	2235-25-8	
Mercury and its compounds	[S03257] Mercury(1+), amminephenyl-, acetate	22450-90-4	
Mercury and its compounds	[S03264] (Phenylmercurio)urea	2279-64-3	
Mercury and its compounds	[S06781] Phenylmercuric formamide	22894-47-9	
Mercury and its compounds	[S03268] Methylmercury	22967-92-6	
Mercury and its compounds	[S03271] [2,2',2"-Nitrilotri(ethanol)-N,O,O',O"]phenylmercury lactate	23319-66-6	
Mercury and its compounds	[S06788] (4-Methyl-N-phenylbenzenesulfonamidato-N)phenylmercury	2440-34-8	
Mercury and its compounds	[S06789] Chloro(propan-1-yl)mercury	2440-40-6	
Mercury and its compounds	[S03291] Ethyliodomercury	2440-42-8	
Mercury and its compounds	[S06790] Bis(ethylmercury) hydrogen phosphate	2440-45-1	
Mercury and its compounds	[S03292] Mercury, chloro(2-hydroxy-5-nitrophenyl)-	24579-90-6	
Mercury and its compounds	[S06791] Chloro(2-hydroxy-3,5-dinitrophenyl)mercury	24579-91-7	
Mercury and its compounds	[S03297] Mercury, [.mu[dodecylbutanedioato(2-)-O:O']]diphenyldi-	24806-32-4	
Mercury and its compounds	[S06804] Methylmercury 2,3-dihydroxypropylmercaptide	2597-95-7	
Mercury and its compounds	[S06805] Methylmercury nitrile	2597-97-9	
Mercury and its compounds	[S06809] Phenylmercuric-8-quinolinate	26114-17-0	
Mercury and its compounds	[S06812] Bromic acid, mercury(2+) salt dihydrate	26522-91-8	
		26535-94-4	
Mercury and its compounds	[S06813] Ethyl(ureato-kappaN)mercury	20335-94-4	

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Prohibited Substances in Products

- Shindengen Electric Manufa	cturing Co., Ltd Prohi	ibited Substances in Products	page 24/67
Substance Group Name	Example Substances	CAS No.	Remarks
Mercury and its compounds	[S03327] Mercury, (neodecanoato-O)phenyl-	26545-49-3	
Mercury and its compounds	[S03328] Hydrogen [3-[(.alphacarboxylato-o-anisoyl)amino]-2- hydroxypropyl]hydroxymercurate(1-)	26552-50-1	
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-)-O]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	[S03434] Mercury, [2,5-dichloro-3,6-dihydroxy-2,5-cyclohexadiene-1,4-d 01,06]-		
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-)-O:O']]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	502-39-6 506-83-2	
Mercury and its compounds	[S03582] Bromomethylmercury	506-83-2	
Mercury and its compounds	[S06939] Mercury cylfide (Ha2S)	51312-24-4	
Mercury and its compounds	[S06941] Mercury sulfide (Hg2S)	51595-71-2	
Mercury and its compounds	[S06942] Diheptan-1-ylmercury		
Mercury and its compounds	[S03601] N-(Ethylmercuric)-p-toluenesulphonannilide	517-16-8	
Mercury and its compounds	[\$03621] Mercuderamide	525-30-4 52795-88-7	
Mercury and its compounds Mercury and its compounds	[S03629] (2-Carboxy-m-tolyl)hydroxymercury, monosodium salt	52/95-88-7	
iviercury and its compounds	[S06955] Mercury alloy, base, Hg,Ca	53007-72-0	

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Substance Group Name	Example Substances	CAS No.	Remarks
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	[S03655] 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	[S03672] (2',7'-Dibromo-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'- [9H]xanthen]-4'-yllydroxymercury	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	
		584-43-0	
Mercury and its compounds	[S03712] Disuccinimidomercury		
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	
Mercury and its compounds	[S01420] Potassium tetracyanomercurate(II)	591-89-9	
Mercury and its compounds	[S01314] Mercuric cyanide	592-04-1	
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	[S03807] Mercurate(2-), tetraiodo-, (T-4)-, dihydrogen, compound with 5-iodo-2- pyridinamine (1:2)	63325-16-6	
		62460 52.4	
Mercury and its compounds	[S03811] Mercury, (acetato-O)(2-hydroxy-5-nitrophenyl)-	63468-53-1	

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Prohibited Substances in Products		Prohibited	Substances	in	Products	r
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Substance Group Name	Example Substances	CAS No.	Remarks
Mercury and its compounds	[S03823] Mercury gluconate	63937-14-4	
Mercury and its compounds	[S03832] Hydrogen [metasilicato(2-)-O](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-methoxypropyl]hydroxymercurate(1-)	7620-30-6	
Mercury and its compounds	[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	7782-86-7	
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']]dimercu		
Mercury and its compounds	[507276] Mercurate(1-), [3(-1-1;3-subxane-2,3-suyuns;metnyiene;-c-c,5,6,7 jumercu [507296] 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-N1,08)-	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, alkali metal chloride electrolysis, mercury-nee	91081-60-2	
Mercury and its compounds	[S07321] Slimes and Sludges, chlorine manuf. mercury cell process [S07321] Slimes and Sludges, chlorine manuf. mercury cell brine treatment wastewa		
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	93820-97-0	
Mercury and its compounds Mercury and its compounds	[S04421] Dillodo(S-iodopyridin-z-amine-N1)mercury [S04427] [.mu[[4,4'-(Oxydiethylene) bis(dodecenylsuccinato)](2-)]]diphenyldimercu		
Mercury and its compounds	[S04427] [.mu[[4,4-(Oxyalethylene) bis(dodecenylsuccinato)](2-)]]alphenyldimerct [S04446] Mercury thallium dinitrate	93882-20-3 94022-47-6	
Mercury and its compounds	[S04445] Mercury thailium dinitrate [S04447] [.mu[(Oxydiethylene but-2-enedioato)(2-)]]diphenyldimercury	94022-47-6	
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-)-O:O']]diphenyldimercurate(
Mercury and its compounds Mercury and its compounds	[S04471] Phenylmercury benzoate	94-43-9	
	[S04473] Bis(5-oxo-L-prolinato-N1,O2)mercury	94481-62-6	

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Substance Group Name	Example Substances	CAS No.	Remarks
Mercury and its compounds	[S07375] Bis(2,3,4,5,6-pentafluorophenyl)mercury	973-17-1	
Polybrominated biphenyls (PBBs)	[S08282] 2,3-Dibromobiphenyl	115245-06-2	
Polybrominated biphenyls (PBBs)	[S08283] 2,4,5-Tribromobiphenyl	115245-07-3	
Polybrominated biphenyls (PBBs)	[S08284] 3,4,5-Tribromobiphenyl	115245-08-4	
Polybrominated biphenyls (PBBs)	[S08285] 2,3,4,5-Tetrabromobiphenyl	115245-09-5	
Polybrominated biphenyls (PBBs)	[S08286] 2,3,4,6-Tetrabromobiphenyl	115245-10-8	
Polybrominated biphenyls (PBBs)	[S05971] 2,2',3,3',4,6'-Hexabromobiphenyl	119264-50-5	
Polybrominated biphenyls (PBBs)	[S05972] 2,2',3,3',5,6'-Hexabromobiphenyl	119264-51-6	
Polybrominated biphenyls (PBBs)	[S05973] 2,2',3,4,5',6-Hexabromobiphenyl	119264-52-7	
Polybrominated biphenyls (PBBs)	[S05974] 2,2',3,5,5',6-Hexabromobiphenyl	119264-53-8	
Polybrominated biphenyls (PBBs)	[S05975] 2,2',3,4,5,5'-Hexabromobiphenyl	120991-47-1	
Polybrominated biphenyls (PBBs)	[S05976] 2,3,3',4,5,5'-Hexabromobiphenyl	120991-48-2	
Polybrominated biphenyls (PBBs)	[S02870] 1,1'-Biphenyl, 2,2'-dibromo-	13029-09-9	
Polybrominated biphenyls (PBBs)	[S02040] Decabromobiphenyl	13654-09-6	
Polybrominated biphenyls (PBBs)	[S08287] 2,3',4-Tribromobiphenyl	144978-86-9	
Polybrominated biphenyls (PBBs)	[S08288] 2,3,3',4',6-Pentabromobiphenyl	144978-89-2	
Polybrominated biphenyls (PBBs)	[S08289] 2,2',4-Tribromobiphenyl	144978-90-5	
Polybrominated biphenyls (PBBs)	[S03071] 4,4',6,6'-Tetrabromo[1,1'-biphenyl]-2,2'-diol	14957-65-4	
Polybrominated biphenyls (PBBs)	[S08272] 3,5-Dibromobiphenyl	16372-96-6	
Polybrominated biphenyls (PBBs)	[S03150] 1,1'-Biphenyl, 3,3',5,5'-tetrabromo-	16400-50-3	
Polybrominated biphenyls (PBBs)	[S03151] 1,1'-Biphenyl, 3,3'-dibromo-	16400-51-4	
Polybrominated biphenyls (PBBs)	[S02035] 2-Bromobiphenyl	2052-07-5	
Polybrominated biphenyls (PBBs)	[S02036] 3-Bromobiphenyl	2113-57-7	
Polybrominated biphenyls (PBBs)	[S08273] Ar,Ar'-Dibromobiphenyl	27479-65-8	
Polybrominated biphenyls (PBBs)	[S02043] Nonabromobiphenyl	27753-52-2	
Polybrominated biphenyls (PBBs)	[S03366] Octabromobiphenyl	27858-07-7	
Polybrominated biphenyls (PBBs)	[S02045] Heptabromobiphenyl	35194-78-6	
Polybrominated biphenyls (PBBs)	[S02044] Hexabromo-1,1-biphenyl	36355-01-8	
Polybrominated biphenyls (PBBs)	[S05956] 2,2',4,4',5,6'-Hexabromobiphenyl	36402-15-0	
Polybrominated biphenyls (PBBs)	[S03507] 1,1'-Biphenyl, 2,3,4,5,6-pentabromo-	38421-62-4	
Polybrominated biphenyls (PBBs)	[S02041] Tetrabromobiphenyl	40088-45-7	
Polybrominated biphenyls (PBBs)	[\$03569] 1,1'-Biphenyl, 2,3'-dibromo-	49602-90-6	
Polybrominated biphenyls (PBBs)	[\$03570] 1,1'-Biphenyl, 2,4'-dibromo-	49602-91-7	
Polybrominated biphenyls (PBBs)	[S08290] 2,2',6-Tribromobiphenyl	507241-82-9	
Polybrominated biphenyls (PBBs)	[S08274] Tribromobiphenyl	51202-79-0	
Polybrominated biphenyls (PBBs)	[\$03645] 1,1'-Biphenyl, 2,4-dibromo-	53592-10-2	
Polybrominated biphenyls (PBBs)	[\$05957] 2,2',3,3',5,5'-Hexabromobiphenyl	55066-76-7	
Polybrominated biphenyls (PBBs)	[S02046] Pentabromobiphenyl	56307-79-0	
Polybrominated biphenyls (PBBs)	[\$03695] 1,1'-Biphenyl, 3,4'-dibromo-	57186-90-0	
Polybrominated biphenyls (PBBs)	[\$03701] 1,1'-Biphenyl, 2,5-dibromo-	57422-77-2	
Polybrominated biphenyls (PBBs)	[\$03722] 1,1'-Biphenyl, 2,6-dibromo-	59080-32-9	
Polybrominated biphenyls (PBBs)	[\$03723] 1,1'-Biphenyl, 2,4,6-tribromo-	59080-33-0	
Polybrominated biphenyls (PBBs)	[S02042] Tribromobiphenyl	59080-34-1	
Polybrominated biphenyls (PBBs)	[S03724] 1,1'-Biphenyl, 2,3',5-tribromo-	59080-35-2	
Polybrominated biphenyls (PBBs)	[S03725] 1,1'-Biphenyl, 2,4',5-tribromo-	59080-36-3	
Polybrominated biphenyls (PBBs)	[S03726] 1,1'-Biphenyl, 2,2',5,5'-tetrabromo-	59080-37-4	
Polybrominated biphenyls (PBBs)	[S03727] 1,1'-Biphenyl, 2,3',4',5-tetrabromo-	59080-38-5	
Polybrominated biphenyls (PBBs)	[S03728] 1,1'-Biphenyl, 2,2',4,5',6-pentabromo-	59080-39-6	
Polybrominated biphenyls (PBBs)	[S02034] 2,2',4,4',5,5'-Hexabromo-1,1-biphenyl	59080-40-9	
Polybrominated biphenyls (PBBs)	[S05958] 2,2',4,4',6,6'-Hexabromobiphenyl	59261-08-4	
Polybrominated biphenyls (PBBs)	[S02338] Polybrominated biphenyls	59536-65-1	
Polybrominated biphenyls (PBBs)	[S03738] 1,1'-Biphenyl, 3,4,4',5-tetrabromo-	59589-92-3	
Polybrominated biphenyls (PBBs) Polybrominated biphenyls (PBBs)	[S03747] 1,1-Biphenyl, 3,4,4,5-tetrabromo-	60044-24-8	
Polybrominated biphenyls (PBBs)	[S03747] 1,1 -Biphenyl, 2,2,4,5 -tetrabromo-	60044-24-8	
Polybrominated biphenyls (PBBs) Polybrominated biphenyls (PBBs)		60044-26-0	
r oryprominated pipmenyis (PBBS)	[S05959] 3,3',4,4',5,5'-Hexabromobiphenyl	buu44-2b-U	

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 28/67
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Substance Group Name	Example Substances	CAS No.	Remarks
Polybrominated biphenyls (PBBs)	[S03749] 1,1'-Biphenyl, 3,4-dibromo-	60108-72-7	
Polybrominated biphenyls (PBBs)	[S02039] Octabromodiphenyl	61288-13-9	
Polybrominated biphenyls (PBBs)	[S03828] 1,1'-Biphenyl, 2,4,4',6-tetrabromo-	64258-02-2	
Polybrominated biphenyls (PBBs)	[S03829] 1,1'-Biphenyl, 2,4',6-tribromo-	64258-03-3	
Polybrominated biphenyls (PBBs)	[S08270] 2,4,4'-Tribromobiphenyl	6430-90-6	
Polybrominated biphenyls (PBBs)	[S03852] 1,1'-Biphenyl, 2,2',4,4'-tetrabromo-	66115-57-9	
Polybrominated biphenyls (PBBs)	[S08271] 3,4,4'-Tribromobiphenyl	6683-35-8	
Polybrominated biphenyls (PBBs)	[S02345] Firemaster FF-1	67774-32-7	
Polybrominated biphenyls (PBBs)	[S03871] 1,1'-Biphenyl, 2,2',4,5,5'-pentabromo-	67888-96-4	
Polybrominated biphenyls (PBBs)	[S08275] 2,3',4,4',5-Pentabromobiphenyl	67888-97-5	
Polybrominated biphenyls (PBBs)	[S05960] 2,2',3,4,4',5'-Hexabromobiphenyl	67888-98-6	
Polybrominated biphenyls (PBBs)	[S05961] 2,3,4,4',5,5'-Hexabromobiphenyl	67888-99-7	
Polybrominated biphenyls (PBBs)	[S03944] [1,1'-Biphenyl]-ar,ar'-diol, tetrabromo-, polymer with (chloromethyl)oxirane		
Polybrominated bipnenyls (PBBS)	and 4,4'-(1-methylethylidene)bis[phenol]	08/58-/5-8	
Polybrominated biphenyls (PBBs)	[S05962] 2,2',3,4',5',6-Hexabromobiphenyl	69278-59-7	
Polybrominated biphenyls (PBBs)	[S08276] 3,4',5-Tribromobiphenyl	72416-87-6	
Polybrominated biphenyls (PBBs)	[S04102] 1,1'-Biphenyl, 2,2',3,4',5'-pentabromo-	73141-48-7	
Polybrominated biphenyls (PBBs)	[S04129] 1,1'-Biphenyl, 2',3,4,4',5-pentabromo-	74114-77-5	
Polybrominated biphenyls (PBBs)	[S04129] 1,1-Biphenyl, 2,3,4,4,5-pentabromo- [S04168] 1,1'-Biphenyl, 3,3',4,4'-tetrabromo-	77102-82-0	
Polybrominated biphenyls (PBBs)	[S05963] 2,3,3',4,4',5-Hexabromobiphenyl	77102-82-0	
Polybrominated biphenyls (PBBs)	[S04198] 1,1'-Biphenyl, 2,2',3,4,6-pentabromo-	77910-04-4	
Polybrominated biphenyls (PBBs)	[S04215] 1,1'-Biphenyl, 2,2',4,5,6'-pentabromo-	80274-92-6	
Polybrominated biphenyls (PBBs)	[S08277] 2,3',4,5,5'-Pentabromobiphenyl	80407-70-1	
Polybrominated biphenyls (PBBs)	[S05964] 2,2',3,4,4',5-Hexabromobiphenyl	81381-52-4	
Polybrominated biphenyls (PBBs)	[S04222] 1,1'-Biphenyl, 2,2',4,4',5-pentabromo-	81397-99-1	
Polybrominated biphenyls (PBBs)	[S08278] 3,3',4,5,5'-Pentabromobiphenyl	81902-33-2	
Polybrominated biphenyls (PBBs)	[S05965] 2,2',3,3',4,4'-Hexabromobiphenyl	82865-89-2	
Polybrominated biphenyls (PBBs)	[S05966] 2,2',3,3',4,5'-Hexabromobiphenyl	82865-90-5	
Polybrominated biphenyls (PBBs)	[S05967] 2,3,3',4',5',6-Hexabromobiphenyl	82865-91-6	
Polybrominated biphenyls (PBBs)	[S04268] 2,2',3,3',5,5',6,6'-Octabromo-4-phenoxy-1,1'-biphenyl	83929-69-5	
Polybrominated biphenyls (PBBs)	[S04286] 1,1'-Biphenyl, 2,3',4,4'-tetrabromo-	84303-45-7	
Polybrominated biphenyls (PBBs)	[S08279] 3,3',4,4',5-Pentabromobiphenyl	84303-46-8	
Polybrominated biphenyls (PBBs)	[S05968] 2,3,3',4,4',5'-Hexabromobiphenyl	84303-47-9	
Polybrominated biphenyls (PBBs)	[S05969] 2,3,4,4',5',6-Hexabromobiphenyl	84303-48-0	
Polybrominated biphenyls (PBBs)	[S08280] 2,3',4,4',6-Pentabromobiphenyl	86029-64-3	
Polybrominated biphenyls (PBBs)	[S04340] 1,1'-Biphenyl, 2,2',3,5',6-pentabromo-	88700-05-4	
Polybrominated biphenyls (PBBs)	[S02038] 4-Bromobiphenyl	92-66-0	
Polybrominated biphenyls (PBBs)	[S02037] 4,4'-Dibromodiphenyl	92-86-4	
Polybrominated biphenyls (PBBs)	[S05970] 2,2',3,4',6,6'-Hexabromobiphenyl	93261-83-7	
Polybrominated biphenyls (PBBs)	[S04483] 1,1'-Biphenyl, 2,3,4,4',5-pentabromo-	96551-70-1	
Polybrominated biphenyls (PBBs)	[S04484] 1,1'-Biphenyl, 2,2',4,6'-tetrabromo-	97038-95-4	
Polybrominated biphenyls (PBBs)	[S04485] 1,1'-Biphenyl, 2,2',6,6'-tetrabromo-	97038-96-5	
Polybrominated biphenyls (PBBs)	[S04486] 1,1'-Biphenyl, 2,2',4,4',6-pentabromo-	97038-97-6	
Polybrominated biphenyls (PBBs)	[S04487] 1,1'-Biphenyl, 3,3',4,5'-tetrabromo-	97038-98-7	
Polybrominated biphenyls (PBBs)	[S08281] 2,3,3',4-Tetrabromobiphenyl	97038-99-8	
Polybrominated biphenyls (PBBs)	[S04488] 1,1'-Biphenyl, 2,2',4,6,6'-pentabromo-	97063-75-7	
Polybrominated diphenyl ethers (PBDEs)	[S02025] PBDEs	-	
Polybrominated diphenyl ethers (PBDEs)	[S02024] 4-Bromophenyl phenyl ether	101-55-3	
Polybrominated diphenyl ethers (PBDEs)	[S05979] Benzene, 1,1'-oxybis[3,5-dibromo-	103173-66-6	
Polybrominated diphenyl ethers (PBDEs)	[S02027] Decabromodiphenyl ether	1163-19-5	8th SVHC (Dec/19/2012)
Polybrominated diphenyl ethers (PBDEs)	[\$05985] -	116995-32-5	

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Substance Group Name	Example Substances	CAS No.	Remarks
Polybrominated diphenyl ethers (PBDEs)	[S05984] Benzene, 1,2,4,5-tetrabromo-3-(2,4-dibromophenoxy)-	116995-33-6	
Polybrominated diphenyl ethers (PBDEs)	[505986] -	117948-63-7	
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)	[SO2233] 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)

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Prohibited Substances in Products page 30/67

- Shindengen Electric Manufac	turing Co., Ltd	Prohibited Substances in Products	page 30/6
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)
Ozone Depleting Substances (A-I, 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	
Ozone Depleting Substances (B-I, CFC)	[S00120] 1,2,2-Trichloro-1,1,3,3,3-pentafluoropropane (CFC-2	1599-41-3	
Ozone Depleting Substances (B-I, CFC)	[S08817] 1,1,3-Trichloro-1,2,2,3,3-pentafluoropropane	1652-81-9	
Ozone Depleting Substances (B-I, CFC)	[S00032] 1,1,1,3-Tetrachlorotetrafluoropropane	2268-46-4	

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Conce Depleting Substances (8-4,				page 31/07
CFC	Substance Group Name	Example Substances	CAS No.	Remarks
CFC Conce Depleting Substances (8-1, S00104] Tetrachlorotetrafluoropropane (CFC-214) 29255-3 292)		2354-06-5	
CFC Conne Depleting Substances (8-4, S00144] 1,1,1,3,3,3-Hexachloro-2,2-diffuoropropane (CFC-212) 318-2-c CFC Conne Depleting Substances (8-4, S00151] 1,1,1,2,2-Pertachloro-2-fluoropethane (CFC-111) 35-45-c CFC Conne Depleting Substances (8-4, S00147] 1-Fluoroheptachloropropane (CFC-2111) 42-7-c CFC Conne Depleting Substances (8-4, S07468] 1,1,1,2,3,3,3-Heptachloro-2-fluoropropane (CFC-211ba) CFC Conne Depleting Substances (8-4, S00155] 1-Chloro-1,1,2,2,3,3,3-heptafluoropropane (CFC-211ba) CFC CFC		[S01416] Tetrachlorodifluoroethane; CFC-112a	28605-74-5	
CFC Some Depleting Substances (8-1, S00151] 1,1,1,2,2-Pentachloro-2-fluoroethane (CFC-111) 354-5 (CFC)		[S00104] Tetrachlorotetrafluoropropane (CFC-214)	29255-31-0	
CFC Sozne Depleting Substances (8-), [S00147] 1-Fluoroheptachloropropane (CFC-211b) 42.2-7 (CFC) 20.000 eDepleting Substances (8-), [S007468] 1,1,1,2,3,3,3-Heptachloro-2-fluoropropane (CFC-211ba) 42.2-8 (CFC) 42.2-		[S00144] 1,1,1,3,3,3-Hexachloro-2,2-difluoropropane (CFC-212)	3182-26-1	
CFC Sozne Depleting Substances (8-1, S07488] 1,1,1,2,3,3,3-Heptachloro-2-fluoropropane (CFC-211ba) 42-2-8 (CFC) 42-		[S00151] 1,1,1,2,2-Pentachloro-2-fluoroethane (CFC-111)	354-56-3	
CFC		[S00147] 1-Fluoroheptachloropropane(CFC-211)	422-78-6	
CEC) Ozone Depleting Substances (B-I, [S09105] Dichloro(hexafluoro)propane (EFC) Ozone Depleting Substances (B-I, [S00035] 1,1,1-Trichloropentafluoropropane (CFC-216) (ECC) Ozone Depleting Substances (B-I, [S00090] 1,2-Dichloro-1,1,2,3,3,3-hexafluoropropane (CFC-216) (ECC) Ozone Depleting Substances (B-I, [S00090] 1,2-Dichloro-1,1,2,3,3,3-hexafluoropropane (CFC-216) (ECC) Ozone Depleting Substances (B-I, [S002358] Chlorotrifluoromethane (CFC-13) (ECC)		[\$07468] 1,1,1,2,3,3,3-Heptachloro-2-fluoropropane (CFC-211ba)	422-81-1	
Ozone Depleting Substances (B-I, [S09106] Dichloro(hexafluoro)propane 42560-9 CFC) Ozone Depleting Substances (B-I, [S00035] 1,1,1-Trichloropentafluoropropane (CFC-216) 62-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9		[\$00155] 1-Chloro-1,1,2,2,3,3,3-heptafluoropropane(CFC-217)	422-86-6	
Ozone Depleting Substances (B-I, S00035] 1,1,1-Trichloropentafluoropropane 4259-4		[S09106] Dichloro(hexafluoro)propane	42560-98-5	
Ozone Depleting Substances (B-I, S00090] 1,2-Dichloro-1,1,2,3,3,3-hexafluoropropane (CFC-216) 661-9	ne Depleting Substances (B-I,	[S00035] 1,1,1-Trichloropentafluoropropane	4259-43-2	
Ozone Depleting Substances (B-I,	ne Depleting Substances (B-I,	[\$00090] 1,2-Dichloro-1,1,2,3,3,3-hexafluoropropane (CFC-216)	661-97-2	
Ozone Depleting Substances (B-I, [S04929] 1,1,1,2-Tetrachloro-2,2-difluoroethane 76-1	ne Depleting Substances (B-I,	[S02358] Chlorotrifluoromethane (CFC-13)	75-72-9	
Ozone Depleting Substances (B-I, CS00102] 1,1,2,2-Tetrachloro-1,2-difluoroethane (CFC-112) 76-1 CFC) 76-1		[S04929] 1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	
Ozone Depleting Substances (B-I, [S00045] 1,2,3-Trichloropentafluoropropane 76-1 (FC) Ozone Depleting Substances (B-I, [S08870] Propane, 1,1,2-trichloro-1,2,3,3,3-pentafluoro-CFC) Ozone Depleting Substances (B-II, [S00156] Carbon tetrachloride (Tetrachloromethane) 56-2 (Carbon tetrachloride) Ozone Depleting Substances (B-III, [S00156] Carbon tetrachloride (Tetrachloromethane) 71-5 (III, 7 inchloroethane) 71-5 (III,		[S00102] 1,1,2,2-Tetrachloro-1,2-difluoroethane (CFC-112)	76-12-0	
Ozone Depleting Substances (B-I, S00870] Propane, 1,1,2-trichloro-1,2,3,3,3-pentafluoro-CFC) Ozone Depleting Substances (B-II, S00156] Carbon tetrachloride (Tetrachloromethane) Ozone Depleting Substances (B-III, S00156] Carbon tetrachloride (Tetrachloromethane) Ozone Depleting Substances (B-III, Trichloroethane (methylchloroform) and its isomers (except 1,1,2-trichloroethane) Ozone Depleting Substances (C-I, III, Trichloroethane) Ozone Depleting Substances (C-I, III, Trichloroethane) Ozone Depleting Substances (C-I, III, S00015] Chlorotrifluoroethane; HCFC-133 HCFC) Ozone Depleting Substances (C-I, III, IIII, IIIIIIIIIIIIIIIIIIIIIIII	ne Depleting Substances (B-I,	[S00045] 1,2,3-Trichloropentafluoropropane	76-17-5	
Carbon tetrachloride) Ozone Depleting Substances (B- irchloroethane) Ozone Depleting Substances (C-I, irchloroethane) Incred Ozone Depleting Substances (C-I, irchloroethane) Ozone Depleting Substances (C-I, irchloroethane) Incred Ozone Depleting Subst	ne Depleting Substances (B-I,	[\$08870] Propane, 1,1,2-trichloro-1,2,3,3,3-pentafluoro-	812-30-6	
III, Trichloroethane) trichloroethane) Ozone Depleting Substances (C-I, IS06015] Chlorotrifluoroethane; HCFC-133 HCFC-133 HCFC-135 HCFC-1		[S00156] Carbon tetrachloride (Tetrachloromethane)	56-23-5	
HCFC) Ozone Depleting Substances (C-I, [S06047] Dichloropentafluoropropane; HCFC-225 HCFC) Ozone Depleting Substances (C-I, [S09121] Heptachlorofluoropropane HCFC) Ozone Depleting Substances (C-I, [S09121] Trichlorodifluoroethane HCFC) Ozone Depleting Substances (C-I, [S09113] Trichlorodifluoropropane HCFC) Ozone Depleting Substances (C-I, [S00064] 2-Chloro-1,3-difluoropropane HCFC) Ozone Depleting Substances (C-I, [S04978] Chloropentafluoropropane HCFC) Ozone Depleting Substances (C-I, [S04978] Chloropentafluoropropane HCFC) Ozone Depleting Substances (C-I, [S04977] Chloroofluoroethane HCFC) Ozone Depleting Substances (C-I, [S00040] 1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb) H11512-5 HCFC) Ozone Depleting Substances (C-I, [S00040] 1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb) H16867-3 HCFC) Ozone Depleting Substances (C-I, [S04991] Dichlorotrifluoropropane HCFC) Ozone Depleting Substances (C-I, [S04991] Dichlorotrifluoropropane HCFC) Ozone Depleting Substances (C-I, [S04990] Dichlorofluoropropane HCFC) Ozone Depleting Substances (C-I, [S04990] Dichlorofluoropropane HCFC)			71-55-6	
HCFC) Ozone Depleting Substances (C-I, [S09121] Heptachlorofluoropropane HCFC) Ozone Depleting Substances (C-I, [S09113] Trichlorodifluoroethane HCFC) Ozone Depleting Substances (C-I, [S00064] 2-Chloro-1,3-difluoropropane HCFC) Ozone Depleting Substances (C-I, [S00064] 2-Chloro-1,3-difluoropropane HCFC) Ozone Depleting Substances (C-I, [S04978] Chloropentafluoropropane HCFC) Ozone Depleting Substances (C-I, [S04978] Chloropentafluoropropane HCFC) Ozone Depleting Substances (C-I, [S00040] 1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb) H11512-5 HCFC) Ozone Depleting Substances (C-I, [S00040] 1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb) H116867-3 HCFC) Ozone Depleting Substances (C-I, [S05011] Pentachlorodifluoropropane HCFC) Ozone Depleting Substances (C-I, [S04991] Dichlorotrifluoropropane HCFC) Ozone Depleting Substances (C-I, [S04991] Dichlorofluoropropane HCFC) Ozone Depleting Substances (C-I, [S04990] Dichlorofluoropropane HCFC) Ozone Depleting Substances (C-I, [S04991] Tetrachloro(difluoro)propane HCFC)		[S06015] Chlorotrifluoroethane; HCFC-133	-	
HCFC) Ozone Depleting Substances (C-I, [S09113] Trichlorodifluoroethane HCFC) Ozone Depleting Substances (C-I, [S00064] 2-Chloro-1,3-difluoropropane HCFC) Ozone Depleting Substances (C-I, [S04978] Chloropentafluoropropane HCFC) Ozone Depleting Substances (C-I, [S04978] Chloropentafluoropropane HCFC) Ozone Depleting Substances (C-I, [S04977] Chloroofluoroethane HCFC) Ozone Depleting Substances (C-I, [S00040] 1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb) HCFC) Ozone Depleting Substances (C-I, [S00040] 1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb) HCFC) Ozone Depleting Substances (C-I, [S00940] Depleting Substances (C-I, [S04991] Dichlorotrifluoropropane HCFC) Ozone Depleting Substances (C-I, [S04991] Dichlorofluoropropane HCFC) Ozone Depleting Substances (C-I, [S04990] Dichlorofluoropropane HCFC) Ozone Depleting Substances (C-I, [S04990] Dichlorofluoropropane HCFC)		[\$06047] Dichloropentafluoropropane; HCFC-225	-	
HCFC) Ozone Depleting Substances (C-I, E00064] 2-Chloro-1,3-difluoropropane 102738-7 HCFC) Ozone Depleting Substances (C-I, E004978] Chloropentafluoropropane 108662-8 HCFC) Ozone Depleting Substances (C-I, E004977] Chloropentafluoropropane 110587-1 HCFC) Ozone Depleting Substances (C-I, E00040] 1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb) 111512-5 HCFC) Ozone Depleting Substances (C-I, E00040] 1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb) 111512-5 HCFC) Ozone Depleting Substances (C-I, E005011] Pentachlorodifluoropropane 116867-3 HCFC) Ozone Depleting Substances (C-I, E004991) Dichlorotrifluoropropane 116890-5 HCFC) Ozone Depleting Substances (C-I, E004990) Dichlorofluoropropane 127404-1 HCFC) Ozone Depleting Substances (C-I, E008792] Tetrachloro(difluoro)propane 127564-8 HCFC)		[\$09121] Heptachlorofluoropropane	-	
HCFC) Ozone Depleting Substances (C-I, S04978] Chloropentafluoropropane 108662-8 HCFC) Ozone Depleting Substances (C-I, S04977] Chloroofluoroethane 110587-1 HCFC) Ozone Depleting Substances (C-I, S00040] 1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb) 111512-5 HCFC) Ozone Depleting Substances (C-I, S00040] 1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb) 1116867-3 HCFC) Ozone Depleting Substances (C-I, S00040] Depleting Substances (C-I, S00040] Depleting Substances (C-I, S00040] Depleting Substances (C-I, S004991) Dichlorotrifluoropropane 116890-5 HCFC) Ozone Depleting Substances (C-I, S04990) Dichlorofluoropropane 127404-1 HCFC) Ozone Depleting Substances (C-I, S08792) Tetrachloro(difluoro)propane 127564-8 HCFC)		[\$09113] Trichlorodifluoroethane	-	
HCFC) Ozone Depleting Substances (C-I, S00497] Chloroofluoroethane HCFC) Ozone Depleting Substances (C-I, S00040] 1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb) 111512-5 HCFC) Ozone Depleting Substances (C-I, S00040] 1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb) 111512-5 HCFC) Ozone Depleting Substances (C-I, S00491] Pentachlorodifluoropropane HCFC) Ozone Depleting Substances (C-I, S04991] Dichlorotrifluoropropane HCFC) Ozone Depleting Substances (C-I, S04991) Dichlorofluoropropane HCFC) Ozone Depleting Substances (C-I, S04990] Dichlorofluoropropane HCFC) Ozone Depleting Substances (C-I, S08992] Tetrachloro(difluoro)propane HCFC)		[S00064] 2-Chloro-1,3-difluoropropane	102738-79-4	
Ozone Depleting Substances (C-I, S04977] Chloroofluoroethane 110587-1 HCFC) Ozone Depleting Substances (C-I, S00040] 1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb) 111512-5 HCFC) Ozone Depleting Substances (C-I, S05011] Pentachlorodifluoropropane 116867-3 HCFC) Ozone Depleting Substances (C-I, S04991] Dichlorotrifluoropropane 116890-5 HCFC) Ozone Depleting Substances (C-I, S04991] Dichlorofluoropropane 127404-1 HCFC) Ozone Depleting Substances (C-I, S04990] Dichlorofluoropropane 127564-8 HCFC)		[S04978] Chloropentafluoropropane	108662-83-5	
Ozone Depleting Substances (C-I, [S00040] 1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb) 111512-5 HCFC) Ozone Depleting Substances (C-I, [S05011] Pentachlorodifluoropropane HCFC) Ozone Depleting Substances (C-I, [S04991] Dichlorotrifluoropropane HCFC) Ozone Depleting Substances (C-I, [S04991] Dichlorotrifluoropropane HCFC) Ozone Depleting Substances (C-I, [S04990] Dichlorofluoropropane HCFC) Ozone Depleting Substances (C-I, [S08792] Tetrachloro(difluoro)propane HCFC)	ne Depleting Substances (C-I,	[S04977] Chloroofluoroethane	110587-14-9	
Ozone Depleting Substances (C-I, S05011] Pentachlorodifluoropropane 116867-3 HCFC) Ozone Depleting Substances (C-I, S04991] Dichlorotrifluoropropane 116890-5 HCFC) Ozone Depleting Substances (C-I, S04990] Dichlorofluoropropane 127404-1 HCFC) Ozone Depleting Substances (C-I, S04990] Dichlorofluoropropane 127564-8 HCFC)	ne Depleting Substances (C-I,	[S00040] 1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb)	111512-56-2	
Ozone Depleting Substances (C-I, [S04991] Dichlorotrifluoropropane 116890-5 HCFC) Ozone Depleting Substances (C-I, [S04990] Dichlorofluoropropane 127404-1 HCFC) Ozone Depleting Substances (C-I, [S08792] Tetrachloro(difluoro)propane 127564-8 HCFC)	ne Depleting Substances (C-I,	[S05011] Pentachlorodifluoropropane	116867-32-4	
Ozone Depleting Substances (C-I, [S04990] Dichlorofluoropropane 127404-1 HCFC) Ozone Depleting Substances (C-I, [S08792] Tetrachloro(difluoro)propane 127564-8 HCFC)	ne Depleting Substances (C-I,	[\$04991] Dichlorotrifluoropropane	116890-51-8	
Ozone Depleting Substances (C-I, [S08792] Tetrachloro(difluoro)propane 127564-8 HCFC)	ne Depleting Substances (C-I,	[S04990] Dichlorofluoropropane	127404-11-9	
	ne Depleting Substances (C-I,	[\$08792] Tetrachloro(difluoro)propane	127564-82-3	
HCFC)	ne Depleting Substances (C-I,	[S00084] Dichlorotetrafluoropropane(HCFC-234)	127564-83-4	

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

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

⁻ 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
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)	[S03269] 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)	[503436] Ethane, 1-chloro-1,2-difluoro-	338-64-7	
Ozone Depleting Substances (C-I, HCFC)	[S03437] 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)	[500030] 1,1,1,2-Tetrachloro-2-fluoroethane(HCFC-121a)	354-11-0	
Ozone Depleting Substances (C-I, HCFC)	[507449] 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)	[500044] 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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- 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.

- Shindengen Electric Manufacturing Co., Ltd. -

Prohibited Substances in Products

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Substance Croup Name	- Shindengen Electric Manufac	turing Co., Ltd	Prohibited Substances in Products	page 34/67
HECFL	Substance Group Name	Example Substances	CAS No.	Remarks
MCFC		[S04933] 1-chloro-1,1,2-trifluoroethane	421-04-5	
HCC S07459 1,1,1,2,3-pentachloro-2-fluoro-propane (HCFC-231ab) 421-94-3 421-94-3 422-9		[S08306] Propane, 1,1,2-trichloro-1-fluoro-	421-41-0	
HCFC		[S07458] 1-Chloro-1,1,2,2-tetrafluoropropane (HCFC-244cc)	421-75-0	
MECFO		[S07459] 1,1,1,2,3-pentachloro-2-fluoro-propane (HCFC-231bb)	421-94-3	
HEFG		[S07460] 1,1,1,2,2,3-Hexachloro-3-fluoropropane (HCFC-221ab)	422-26-4	
Incres Company Substances (C-1, S00061] 2,3-Dichloro-1,1,1,2,3-pentafluoropropane(HCFC-225ba) A22-48-0		[S07461] 1,2,2,3,3-pentachloro-1,1-difluoropropane (HCFC-222aa) 422-30-0	
HCFC S07462 1,1,1,3,3-pentachloro-2,2-diffuoropropane (HCFC-222ca) 422-49-1 HCFC S07462 1,1,1,3-Tetrachloro-2,2-3-trifluoropropane (HCFC-222cb) 422-50-4 HCFC S07463 1,1,1,3-Tetrachloro-2,2,3-trifluoropropane (HCFC-223cb) 422-50-4 HCFC S07463 1,1,1,3-Tetrachloro-2,2,3-tetrafluoropropane (HCFC-223cb) 422-51-5 HCFC S07463 1,1,3-Tetrachloro-1,2,2-trifluoropropane (HCFC-223ca) 422-51-5 HCFC S07466 1,1,3-Trichloro-1,2,2-trifluoropropane (HCFC-223ca) 422-52-6 HCFC S07466 1,1,3-Trichloro-1,2,2-trifluoropropane (HCFC-223ca) 422-53-7 HCFC S07467 1,3-Trichloro-1,2,2-tetrafluoropropane (HCFC-224cb) 422-53-7 HCFC S07467 1,3-Trichloro-1,2,2-tetrafluoropropane (HCFC-224cb) 422-53-7 HCFC S07467 1,3-Trichloro-1,1,2,2-tetrafluoropropane (HCFC-224cb) 422-55-9 S07467 S0747 S0		[S00046] 1,2-Dichloro-1,1,2,3,3-pentafluoropropane(HCFC-225bb) 422-44-6	
HCFC Survival Substances (C-1, S07463 1,1,1,3-Tetrachloro-2,2,3-trifluoropropane (HCFC-223cb) 422-50-4 HCFC Survival Substances (C-1, S07463 1,1,1,3-Tetrachloro-2,2,3-tetrafluoropropane (HCFC-223ca) 422-51-5 HCFC Survival Substances (C-1, S07465 1,1,3-Trichloro-1,2,2-trifluoropropane (HCFC-223ca) 422-52-6 HCFC Survival Substances (C-1, Survival Substances (C-1, Survival Survival Substances (C-1, Survival Survival Survival Survival Substances (C-1, Survival Survival Survival Substances (C-1, Surviva		[S00061] 2,3-Dichloro-1,1,1,2,3-pentafluoropropane(HCFC-225ba)	422-48-0	
HCFC		[S07462] 1,1,1,3,3-pentachloro-2,2-difluoropropane (HCFC-222ca)) 422-49-1	
HCFC S07000 S070000 S0700000 S0700000 S07000000 S070000000 S070000000000		[S07463] 1,1,1,3-Tetrachloro-2,2,3-trifluoropropane (HCFC-223cb)) 422-50-4	
Ozone Depleting Substances (C-I, HCFC) [507465] 1,1,3,3-Tetrachloro-1,2,2-trifluoropropane (HCFC-223ca) 422-52-6 MCFC) S070e0 Depleting Substances (C-I, HCFC) [507466] 1,1,3-Trichloro-1,1,2,2-3-tetrafluoropropane (HCFC-224cb) 422-53-7 Ozone Depleting Substances (C-I, HCFC) [507467] 1,3,3-Trichloro-1,1,2,2-tetrafluoropropane 422-54-8 HCFC) Ozone Depleting Substances (C-I, HCFC) [509131] 1-Chloro-1,1,1,2,2-pentafluoropropane 422-55-9 Ozone Depleting Substances (C-I, HCFC) [509132] 3-Chloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca) 422-56-0 MCFC) Ozone Depleting Substances (C-I, HCFC) [509132] 3-Chloro-1,1,1,2,2-pentafluoropropane (HCFC-234db) 425-94-5 MCFC) Ozone Depleting Substances (C-I, HCFC) [507470] 1,2-Dichloro-1,2,3,3-tetrafluoropropane (HCFC-234db) 425-94-5 MCFC) Ozone Depleting Substances (C-I, HCFC) [507470] 1,2-Dichloro-1-fluoropropane (HCFC-271fb) 490-55-7 MCFC) Ozone Depleting Substances (C-I, HCFC) [500051] 1,2-Dichloro-1-fluoroethane 430-57-9 MCFC) Ozone Depleting Substances (C-I, HCFC) [500934] 1-chloro-1,2,2-trifluoroethane 431-06-1 MCFC) Ozone Depleting Substances (C-I, HCFC) [5004934] 1-chloro-1,1,1-3,3,3-pentafluoropropane (HCFC-225da		[S07464] 1,1,1-Trichloro-2,2,3,3-tetrafluoropropane	422-51-5	
Done Depleting Substances (C-I, ISO7466] 1,1,3-Trichloro-1,2,2,3-tetrafluoropropane (HCFC-224cb) 422-53-7 MCFC) A22-54-8 Done Depleting Substances (C-I, ISO7467] 1,3,3-Trichloro-1,1,2,2-tetrafluoropropane 422-55-9 MCFC) A22-55-9 Done Depleting Substances (C-I, ISO0066] 3,3-Dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca) 422-56-0 HCFC) A22-56-0 Ozone Depleting Substances (C-I, ISO0066] 3,3-Dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca) 422-57-1 HCFC) A22-57-1 Ozone Depleting Substances (C-I, ISO0066] 3,3-Dichloro-1,2,3,3-tetrafluoropropane (HCFC-234db) 425-94-5 HCFC) A25-94-5 Ozone Depleting Substances (C-I, ISO00061] 1,1-Dichloro-2-fluoroethane; Freon-141a 430-53-5 HCFC) A30-55-7 Ozone Depleting Substances (C-I, ISO0001] 1,2-Dichloro-1-fluoroethane 430-55-7 HCFC) A30-55-7 Ozone Depleting Substances (C-I, ISO00081] 1,2-Dichloro-1,2-diffluoroethane 431-06-1 HCFC) A31-06-1 Ozone Depleting Substances (C-I, ISO0048] 1,2-Dichloro-1,1,3,3,3-pentafluoropropane(HCFC-225da) 431-86-7 HCFC) A31-86-7 Ozone Depleting Substances (C-I, ISO0068] 3-Chloro-1,1,1-tr		[S07465] 1,1,3,3-Tetrachloro-1,2,2-trifluoropropane (HCFC-223ca)	422-52-6	
HCFC	Ozone Depleting Substances (C-I,	[S07466] 1,1,3-Trichloro-1,2,2,3-tetrafluoropropane (HCFC-224cb)) 422-53-7	
HCFC Czone Depleting Substances (C-I, [500066] 3,3-Dichloro-1,1,1,2,2-pentafluoropropane(HCFC-225ca) 422-56-0 HCFC Czone Depleting Substances (C-I, [509132] 3-Chloro-1,1,1,2,2,3-hexafluoropropane HCFC-234db) 425-94-5 HCFC (S07470] 1,2-Dichloro-1,2,3,3-tetrafluoropropane HCFC-234db) 425-94-5 HCFC (S07470] 1,2-Dichloro-1,2,3,3-tetrafluoropropane HCFC-234db) 425-94-5 HCFC (S07470] 1,1-Dichloro-2-fluoroethane; Freon-141a 430-53-5 HCFC (S07471] 1-Chloro-1-fluoropropane HCFC-271fb) 430-55-7 HCFC (S07471] 1-Chloro-1-fluoropropane HCFC-271fb) 430-57-9 HCFC (S07471] 1-Chloro-1-fluoroethane 430-57-9 HCFC (S00050] 1,2-Dichloro-1,2-difluoroethane 431-06-1 HCFC (S00050] 1,2-Dichloro-1,2-difluoroethane 431-06-1 HCFC (S00050] 1,2-Dichloro-1,2,2-trifluoroethane 431-07-2 HCFC (S00048] 1,2-Dichloro-1,2,2-trifluoroethane 431-07-2 HCFC (S00048] 1,2-Dichloro-1,1,3,3,3-pentafluoropropane(HCFC-225da) 431-86-7 HCFC (S00048] 1,2-Dichloro-1,1,1-trifluoropropane(HCFC-225da) 431-86-7 HCFC (S00048] 1,2-Dichloro-1,1,1-trifluoropropane(HCFC-225db) 460-35-5 HCFC (S00068) 3-Chloro-1,1,1-trifluoropropane(HCFC-225db) 460-35-5 HCFC (S00068) 3-Chloro-1,1,1-trifluoropropane(HCFC-225db) 460-39-9 HCFC (S00067) 3,3-Dichloro-1,1,1-trifluoropropane HCFC-232fc) 460-89-9 HCFC (S00067) 3,3-Dichloro-1,1,1-trifluoropropane HCFC-232fc) 460-89-9 HCFC (S00068) 1,1-Dichloro-1,1,3,3,3-pentafluoropropane HCFC-232fc (S00067) 3,3-Dichloro-1,1,1-Trifluoropropane (SCCC) 3,0-Trifluoropropan	Ozone Depleting Substances (C-I,	[S07467] 1,3,3-Trichloro-1,1,2,2-tetrafluoropropane	422-54-8	
Ozone Depleting Substances (C-I, [S00066] 3,3-Dichloro-1,1,1,2,2-pentafluoropropane(HCFC-225ca) 422-56-0 HCFC) A22-57-1 Ozone Depleting Substances (C-I, [S09132] 3-Chloro-1,1,1,2,2,3-hexafluoropropane (HCFC-234db) 422-57-1 HCFC) A22-57-1 Ozone Depleting Substances (C-I, [S07470] 1,2-Dichloro-1,2,3,3-tetrafluoropropane (HCFC-234db) 425-94-5 HCFC) A30-53-5 Ozone Depleting Substances (C-I, [S07471] 1-Chloro-1-fluoropropane (HCFC-271fb) 430-53-5 HCFC) A30-55-7 Ozone Depleting Substances (C-I, [S00051] 1,2-Dichloro-1-fluoropethane 430-57-9 HCFC) Conne Depleting Substances (C-I, [S00051] 1,2-Dichloro-1,2-diffluoroethane 431-06-1 HCFC) Conne Depleting Substances (C-I, [S00048] 1,2-Dichloro-1,1,2-diffluoroethane 431-06-1 HCFC) Conne Depleting Substances (C-I, [S00048] 1,2-Dichloro-1,1,3,3,3-pentafluoropropane(HCFC-225da) 431-86-7 HCFC) Conne Depleting Substances (C-I, [S00048] 1,2-Dichloro-1,1,1-trifluoropropane (HCFC-225da) 431-86-7 HCFC) Conne Depleting Substances (C-I, [S00068] 3-Chloro-1,1,1-trifluoropropane (HCFC-225fb) 460-63-9 HCFC) Conne Depleting Substances (C-I, [S00067] 3,3-Dichloro-1,1,1-trifluoropropane (HCFC-242fa) 460-63-9		[\$09131] 1-Chloro-1,1,2,2,3,3-hexafluoropropane	422-55-9	
Ozone Depleting Substances (C-I, ISO9132] 3-Chloro-1,1,1,2,2,3-hexafluoropropane 422-57-1 HCFC) 425-94-5 Ozone Depleting Substances (C-I, ISO470] 1,2-Dichloro-1,2,3,3-tetrafluoropropane (HCFC-234db) 425-94-5 HCFC) 430-53-5 Ozone Depleting Substances (C-I, ISO4931] 1,1-Dichloro-2-fluoroethane; Freon-141a 430-55-7 HCFC) 430-55-7 Ozone Depleting Substances (C-I, ISO0051] 1,2-Dichloro-1-fluoroethane 430-55-7 HCFC) 430-55-7 Ozone Depleting Substances (C-I, ISO0051] 1,2-Dichloro-1-fluoroethane 431-06-1 HCFC) 431-06-1 Ozone Depleting Substances (C-I, ISO0050] 1,2-Dichloro-1,2,2-trifluoroethane 431-06-1 HCFC) 431-06-1 Ozone Depleting Substances (C-I, ISO0048] 1,2-Dichloro-1,1,3,3,3-pentafluoropropane(HCFC-225da) 431-86-7 HCFC) 431-86-7 Ozone Depleting Substances (C-I, ISO0068] 3-Chloro-1,1,1-trifluoropropane (HCFC-225da) 431-87-8 HCFC) 460-35-5 Ozone Depleting Substances (C-I, ISO0068] 3-Chloro-1,1,1-trifluoropropane (HCFC-242fa) 460-63-9 HCFC) 460-69-5 Ozone Depleting Substances (C-I, ISO0067] 3,3-Dichloro-1,1,1-trifluoropropane (HCFC-232fc) 4	Ozone Depleting Substances (C-I,	[S00066] 3,3-Dichloro-1,1,1,2,2-pentafluoropropane(HCFC-225ca)	422-56-0	
Ozone Depleting Substances (C-I, HCFC) [S07470] 1,2-Dichloro-1,2,3,3-tetrafluoropropane (HCFC-234db) 425-94-5 HCFC) Ozone Depleting Substances (C-I, HCFC) [S04931] 1,1-Dichloro-2-fluoroethane; Freon-141a 430-53-5 HCFC) Ozone Depleting Substances (C-I, HCFC) [S07471] 1-Chloro-1-fluoropropane (HCFC-271fb) 430-55-7 HCFC) Ozone Depleting Substances (C-I, HCFC) [S00051] 1,2-Dichloro-1-fluoroethane 430-57-9 HCFC) Ozone Depleting Substances (C-I, HCFC) [S00050] 1,2-Dichloro-1,2,2-difluoroethane 431-06-1 HCFC) Ozone Depleting Substances (C-I, HCFC) [S04934] 1-chloro-1,2,2-trifluoroethane 431-07-2 HCFC) Ozone Depleting Substances (C-I, HCFC) [S0048] 1,2-Dichloro-1,1,3,3,3-pentafluoropropane(HCFC-225da) 431-86-7 HCFC) Ozone Depleting Substances (C-I, HCFC) [S07472] 2-Chloro-1,1,1,3,3,3-hexafluoropropane 460-35-5 HCFC) Ozone Depleting Substances (C-I, HCFC) [S0068] 3-Chloro-1,1,1-trifluoropropane (HCFC-242fa) 460-63-9 HCFC) Ozone Depleting Substances (C-I, HCFC) [S00067] 3,3-Dichloro-1,1,1-trifluoropropane (HCFC-232fc) 460-69-5 HCFC) Ozone Depleting Substances (C-I, HCFC) [S00067] 1,1,1,1,3-Tetrachloro-3,3-difluoropropane (HCFC-2	Ozone Depleting Substances (C-I,	[S09132] 3-Chloro-1,1,1,2,2,3-hexafluoropropane	422-57-1	
HCFC Component HCFC-271fb HCFC-271		[S07470] 1,2-Dichloro-1,2,3,3-tetrafluoropropane (HCFC-234db)	425-94-5	
Ozone Depleting Substances (C-I, ISO7471] 1-Chloro-1-filuoropropane (HCFC-271fb) 430-55-7 HCFC) 430-57-9 Ozone Depleting Substances (C-I, ISO0051] 1,2-Dichloro-1,2-difluoroethane 431-06-1 HCFC) 431-06-1 Ozone Depleting Substances (C-I, ISO0050] 1,2-Dichloro-1,2,2-trifluoroethane 431-07-2 HCFC) 431-07-2 Ozone Depleting Substances (C-I, ISO0048] 1,2-Dichloro-1,1,3,3,3-pentafluoropropane(HCFC-225da) 431-86-7 HCFC) 431-86-7 Ozone Depleting Substances (C-I, ISO0068] 3-Chloro-1,1,1,3,3,3-hexafluoropropane 431-87-8 HCFC) 460-35-5 Ozone Depleting Substances (C-I, ISO0068] 3-Chloro-1,1,1-trifluoropropane(HCFC-253fb) 460-35-5 HCFC) 460-63-9 Ozone Depleting Substances (C-I, ISO0067] 3,3-Dichloro-1,1-difluoropropane (HCFC-242fa) 460-63-9 HCFC) 460-69-5 Ozone Depleting Substances (C-I, ISO0067] 3,3-Dichloro-1,1,1-trifluoropropane (HCFC-232fc) 460-89-9 HCFC) 460-89-9 Ozone Depleting Substances (C-I, ISO0055] 1-Chloro-1,1,3,3,3-pentafluoropropane 460-92-4 Ozone Depleting Substances (C-I, ISO0043] 1,1-Dichloro-2,2-difluoroethane 471-43-2		[S04931] 1,1-Dichloro-2-fluoroethane; Freon-141a	430-53-5	
Ozone Depleting Substances (C-I, [S00051] 1,2-Dichloro-1-fluoroethane HCFC) 430-57-9 Ozone Depleting Substances (C-I, [S00050] 1,2-Dichloro-1,2-difluoroethane HCFC) 431-06-1 Ozone Depleting Substances (C-I, [S04934] 1-chloro-1,2,2-trifluoroethane HCFC) 431-07-2 Ozone Depleting Substances (C-I, [S00048] 1,2-Dichloro-1,1,3,3,3-pentafluoropropane(HCFC-225da) 431-86-7 HCFC) Conne Depleting Substances (C-I, [S07472] 2-Chloro-1,1,1,3,3,3-hexafluoropropane HCFC-225db) 431-87-8 HCFC) Conne Depleting Substances (C-I, [S00068] 3-Chloro-1,1,1-trifluoropropane(HCFC-253fb) 460-35-5 HCFC) Ozone Depleting Substances (C-I, [S07474] 1,3,3,Trichloro-1,1-difluoropropane (HCFC-242fa) 460-63-9 HCFC) Ozone Depleting Substances (C-I, [S00067] 3,3-Dichloro-1,1,1-trifluoropropane (HCFC-242fa) 460-69-5 HCFC) Ozone Depleting Substances (C-I, [S0007475] 1,1,1,3-Tetrachloro-3,3-difluoropropane (HCFC-232fc) 460-89-9 HCFC) Ozone Depleting Substances (C-I, [S00055] 1-Chloro-1,1,3,3,3-pentafluoropropane 460-92-4 Ozone Depleting Substances (C-I, [S00043] 1,1-Dichloro-2,2-difluoroethane 471-43-2	Ozone Depleting Substances (C-I,	[S07471] 1-Chloro-1-fluoropropane (HCFC-271fb)	430-55-7	
Ozone Depleting Substances (C-I, IS00050] 1,2-Dichloro-1,2-difluoroethane 431-06-1 HCFC) 431-07-2 Ozone Depleting Substances (C-I, IS0048] 1,2-Dichloro-1,1,3,3,3-pentafluoropropane(HCFC-225da) 431-86-7 HCFC) 431-86-7 Ozone Depleting Substances (C-I, IS0048] 1,2-Dichloro-1,1,1,3,3,3-pentafluoropropane(HCFC-225da) 431-87-8 HCFC) 431-87-8 Ozone Depleting Substances (C-I, IS0068] 3-Chloro-1,1,1-trifluoropropane(HCFC-253fb) 460-35-5 HCFC) 460-35-5 Ozone Depleting Substances (C-I, IS0068] 3-Chloro-1,1-difluoropropane (HCFC-242fa) 460-63-9 HCFC) 460-69-9 Ozone Depleting Substances (C-I, IS0067] 3,3-Dichloro-1,1-trifluoropropane (HCFC-232fc) 460-69-5 HCFC) 460-89-9 Ozone Depleting Substances (C-I, IS0067] 1,1,1,3-Tetrachloro-3,3-difluoropropane (HCFC-232fc) 460-89-9 HCFC) 460-92-4 Ozone Depleting Substances (C-I, IS00051] 1-Chloro-1,1,3,3,3-pentafluoropropane 471-43-2	Ozone Depleting Substances (C-I,	[S00051] 1,2-Dichloro-1-fluoroethane	430-57-9	
Ozone Depleting Substances (C-I, ISO04934] 1-chloro-1,2,2-trifluoroethane 431-07-2 HCFC) 431-86-7 Ozone Depleting Substances (C-I, ISO0048] 1,2-Dichloro-1,1,3,3,3-pentafluoropropane(HCFC-225da) 431-86-7 HCFC) 431-86-7 Ozone Depleting Substances (C-I, ISO0068] 3-Chloro-1,1,1-trifluoropropane (HCFC-253fb) 460-35-5 HCFC) 460-35-5 Ozone Depleting Substances (C-I, ISO0068] 3-Chloro-1,1-difluoropropane (HCFC-242fa) 460-63-9 HCFC) 460-69-9 Ozone Depleting Substances (C-I, ISO0067] 3,3-Dichloro-1,1-trifluoropropane 460-69-5 HCFC) 460-69-9 Ozone Depleting Substances (C-I, ISO0067] 1,1,1,3-Tetrachloro-3,3-difluoropropane (HCFC-232fc) 460-89-9 HCFC) 460-89-9 Ozone Depleting Substances (C-I, ISO0055] 1-Chloro-1,1,3,3,3-pentafluoropropane 460-92-4 HCFC) 460-92-4 Ozone Depleting Substances (C-I, ISO0043] 1,1-Dichloro-2,2-difluoroethane 471-43-2	Ozone Depleting Substances (C-I,	[S00050] 1,2-Dichloro-1,2-difluoroethane	431-06-1	
Ozone Depleting Substances (C-I, ISO0048] 1,2-Dichloro-1,1,3,3,3-pentafluoropropane(HCFC-225da) 431-86-7 HCFC) 431-87-8 HCFC) 431-87-8 HCFC) 460-35-5 Ozone Depleting Substances (C-I, ISO0068] 3-Chloro-1,1,1-trifluoropropane(HCFC-253fb) 460-35-5 HCFC) 460-63-9 Ozone Depleting Substances (C-I, ISO0067] 3,3-Dichloro-1,1-difluoropropane (HCFC-242fa) 460-63-9 HCFC) 460-69-5 Ozone Depleting Substances (C-I, ISO0067] 3,3-Dichloro-1,1,1-trifluoropropane (HCFC-232fc) 460-89-9 HCFC) 460-89-9 Ozone Depleting Substances (C-I, ISO0055] 1-Chloro-1,1,3,3,3-pentafluoropropane (HCFC-232fc) 460-92-4 HCFC) 460-92-4 Ozone Depleting Substances (C-I, ISO0043] 1,1-Dichloro-2,2-difluoroethane 471-43-2		[S04934] 1-chloro-1,2,2-trifluoroethane	431-07-2	
Ozone Depleting Substances (C-I, [S07472] 2-Chloro-1,1,1,3,3,3-hexafluoropropane (HCFC) 431-87-8 MCFC) 460-35-5 MCFC) 460-35-5 MCFC) 460-35-5 Ozone Depleting Substances (C-I, [S07474] 1,3,3,Trichloro-1,1-difluoropropane (HCFC-242fa) 460-63-9 HCFC) 460-69-5 Ozone Depleting Substances (C-I, [S00067] 3,3-Dichloro-1,1,1-trifluoropropane (HCFC-232fc) 460-69-5 HCFC) 460-89-9 Ozone Depleting Substances (C-I, [S07475] 1,1,1,3-Tetrachloro-3,3-difluoropropane (HCFC-232fc) 460-89-9 HCFC) 460-92-4 Ozone Depleting Substances (C-I, [S00055] 1-Chloro-1,1,3,3,3-pentafluoropropane 460-92-4 HCFC) 471-43-2	Ozone Depleting Substances (C-I,	[S00048] 1,2-Dichloro-1,1,3,3,3-pentafluoropropane(HCFC-225da)	431-86-7	
Ozone Depleting Substances (C-I, [S00068] 3-Chloro-1,1,1-trifluoropropane(HCFC-253fb) 460-35-5 HCFC) 460-63-9 MCFC) 460-63-9 HCFC) 460-69-5 Ozone Depleting Substances (C-I, [S00067] 3,3-Dichloro-1,1,1-trifluoropropane 460-69-5 HCFC) 460-89-9 Ozone Depleting Substances (C-I, [S07475] 1,1,1,3-Tetrachloro-3,3-difluoropropane (HCFC-232fc) 460-89-9 HCFC) 460-92-4 Ozone Depleting Substances (C-I, [S00055] 1-Chloro-1,1,3,3,3-pentafluoropropane 460-92-4 HCFC) 471-43-2	Ozone Depleting Substances (C-I,	[S07472] 2-Chloro-1,1,1,3,3,3-hexafluoropropane	431-87-8	
Ozone Depleting Substances (C-I, [S07474] 1,3,3,Trichloro-1,1-difluoropropane (HCFC-242fa) 460-63-9 HCFC) 460-69-5 Ozone Depleting Substances (C-I, [S00067] 3,3-Dichloro-1,1,1-trifluoropropane (HCFC-232fc) 460-69-5 HCFC) 460-89-9 HCFC) 460-89-9 Ozone Depleting Substances (C-I, [S00055] 1-Chloro-1,1,3,3,3-pentafluoropropane (HCFC-232fc) 460-92-4 HCFC) 460-92-4 Ozone Depleting Substances (C-I, [S00043] 1,1-Dichloro-2,2-difluoroethane 471-43-2	Ozone Depleting Substances (C-I,	[S00068] 3-Chloro-1,1,1-trifluoropropane(HCFC-253fb)	460-35-5	
Ozone Depleting Substances (C-I, [S00067] 3,3-Dichloro-1,1,1-trifluoropropane 460-69-5 HCFC) 460-89-9 MCFC) 460-89-9 HCFC) 460-89-9 MCFC) 460-92-4 Ozone Depleting Substances (C-I, [S00055] 1-Chloro-1,1,3,3,3-pentafluoropropane 460-92-4 HCFC) 460-92-4 Ozone Depleting Substances (C-I, [S00043] 1,1-Dichloro-2,2-difluoroethane 471-43-2	Ozone Depleting Substances (C-I,	[S07474] 1,3,3,Trichloro-1,1-difluoropropane (HCFC-242fa)	460-63-9	
Ozone Depleting Substances (C-I, ISO7475] 1,1,1,3-Tetrachloro-3,3-difluoropropane (HCFC-232fc) 460-89-9 HCFC) 460-92-4 Ozone Depleting Substances (C-I, ISO0055] 1-Chloro-1,1,3,3,3-pentafluoropropane 460-92-4 HCFC) 471-43-2	Ozone Depleting Substances (C-I,	[S00067] 3,3-Dichloro-1,1,1-trifluoropropane	460-69-5	
Ozone Depleting Substances (C-I, [S00055] 1-Chloro-1,1,3,3,3-pentafluoropropane 460-92-4 HCFC) Ozone Depleting Substances (C-I, [S00043] 1,1-Dichloro-2,2-difluoroethane 471-43-2	Ozone Depleting Substances (C-I,	[S07475] 1,1,1,3-Tetrachloro-3,3-difluoropropane (HCFC-232fc)	460-89-9	
Ozone Depleting Substances (C-I, [S00043] 1,1-Dichloro-2,2-difluoroethane 471-43-2	Ozone Depleting Substances (C-I,	[S00055] 1-Chloro-1,1,3,3,3-pentafluoropropane	460-92-4	
	Ozone Depleting Substances (C-I,	[S00043] 1,1-Dichloro-2,2-difluoroethane	471-43-2	

⁻ 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.

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

Similaringen Electric Manarate	turing co., Etc.	Trombited Substances in Froducts	page 33/07
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	-	
	[S09122] BromopentafluoroPropane	-	
	[S09116] Bromotetrafluoroethane	-	
Ozone Depleting Substances (C-II, HBFC)	[S09125] Bromotetrafluoropropane	-	
Ozone Depleting Substances (C-II, HBFC)	[S09108] Bromotrifluoroethane	-	
	[S09127] Bromotrifluoropropane	-	
	[S09107] Dibromodifluoroethane	-	

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 36/67

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	
	[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	

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Similacingen Electric Manana	curing co., Eta.	1 Tombited Substances III 1 Todaets	page 37/07
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	
Ozone Depleting Substances (C-II, HBFC)	[S05042] Ethane, 1,1,1,2-tetrabromo-2-fluoro-	353-93-5	
Ozone Depleting Substances (C-II, HBFC)	[S04100] C2HF2Br3; 1,2,2-Tribromo-1,1-difluoroethane	353-97-9	
Ozone Depleting Substances (C-II, HBFC)	[S00096] 1,2-Dibromo-1,1,2-trifluoroethane	354-04-1	
Ozone Depleting Substances (C-II, HBFC)	[S00098] 1,2-Dibromo-1-fluoroethane	358-97-4	
Ozone Depleting Substances (C-II, HBFC)	[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	
,	[S00135] 2-Bromo-1,1,1-trifluoroethane	421-06-7	
	[S00136] Bromotrifluoropropane	421-46-5	
	[S03567] 1,2,2-Tribromo-3,3,3-trifluoropropane	421-90-9	
	[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	
	[S00101] 1,2-Dibromo-1,1,3,3,3-pentafluoropropane	431-78-7	
	[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	
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Prohibited Substances in Products page 38/67

Shindengen Electric Manufac	turing Co., Ltd P	rohibited Substances in Products	page 38/6
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, IBFC)	[S0S050] C3H2F5Br; Propane, 3-bromo-1,1,1,2,3-pentafluoro-, (R*,R	*)- 53692-44-7	
Ozone Depleting Substances (C-II, IBFC)	[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	
Dzone Depleting Substances (C-II, IBFC)	[S03853] Propane, 1,2,3-tribromo-1,1-difluoro-	666-25-1	
Ozone Depleting Substances (C-II, IBFC)	[S03854] C3HF4Br3; Propane, 1,2,3-tribromo-1,1,3,3-tetrafluoro-	666-48-8	
Ozone Depleting Substances (C-II, IBFC)	[S04099] C2HF2Br3; 1,2,2-Tribromo-1,1-difluoroethane	677-34-9	
Ozone Depleting Substances (C-II, IBFC)	[S05044] Propane, 2-bromo-1,1,1,2,3-pentafluoro-	677-52-1	
Ozone Depleting Substances (C-II, IBFC)	[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, IBFC)	[S05047] Propane, 1-bromo-1,2,2,3,3-pentafluoro-	679-94-7	
Ozone Depleting Substances (C-II, IBFC)	[S05053] Propane, 1-bromo-1,2,2,3-tetrafluoro-	70192-71-1	
zone Depleting Substances (C-II, BFC)	[S00122] 1,1,1-Tribromo-2,2-difluoropropane	70192-80-2	
zone Depleting Substances (C-II, IBFC)	[S05054] Propane, 1-bromo-1,1,2,2-tetrafluoro	70192-84-6	
zone Depleting Substances (C-II, IBFC)	[S00126] Tribromofluoropropane	75372-14-4	
zone Depleting Substances (C-II, IBFC)	[S00092] 1,2-Dibromo-1,1-difluoroethane	75-82-1	
Ozone Depleting Substances (C-II, IBFC)	[S00138] 1-Bromo-2-fluoroethane	762-49-2	
zone Depleting Substances (C- I, Bromochloromethane)	[S00129] Bromochloromethane	74-97-5	
zone Depleting Substances (E-I, romomethane)	[S00143] Bromomethane(Methyl bromide)	74-83-9	
zone Depleting Substances Others, Trichloroethane)	[S02376] 1,1,2-Trichloroethane	79-00-5	
zone Depleting Substances Others)	[S05164] 1-Bromopropane; n-Propyl bromide	106-94-5	8th SVHC (Dec/19/2012)
zone Depleting Substances Others)	[S02826] Dibromochloromethane	124-48-1	
zone Depleting Substances Others)	[S02967] 1,2-Dibromo-1,1,2-trichloroethane	13749-38-7	
Izone Depleting Substances Others)	[S07430] Trifluoroiodomethane	2314-97-8	
Izone Depleting Substances Others)	[S00127] Fluoroethyne	2713-09-9	
Izone Depleting Substances Others)	[S03458] Tribromofluoromethane	353-54-8	
Izone 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	
zone Depleting Substances Others)	[S03465] 1,1,1-Tribromo-2,2,2-trifluoroethane	354-48-3	

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Substance Group Name	Example Substances	CAS No.	Remarks
Ozone Depleting Substances (Others)	[S03466] 1,2-Dibromo-1-chloro-1,2,2-trifluoroethane	354-51-8	
Ozone Depleting Substances (Others)	[S03467] Bromopentafluoroethane	354-55-2	
Ozone Depleting Substances (Others)	[S00922] Butane, decafluoro-	355-25-9	
Ozone Depleting Substances (Others)	[S03473] 1-Chloro-1,2-difluoroethylene	359-04-6	
Ozone Depleting Substances (Others)	[S03475] 2-bromo-1,1-difluoroethylene	359-08-0	
Ozone Depleting Substances (Others)	[S03476] 2-Chloro-1,1-difluoroethylene	359-10-4	
Ozone Depleting Substances (Others)	[S03545] 1,2-Dichloro-1-fluoroethylene	430-58-0	
Ozone Depleting Substances (Others)	[S03546] 1,1-Dibromo-2,2-difluoroethylene	430-85-3	
Ozone Depleting Substances (Others)	[S03556] 1-Chloro-2-fluoroethylene	460-16-2	
Ozone Depleting Substances (Others)	[S03593] Ethane, 2-bromo-2-chloro-1,1,1-trifluoro-, (2R)-	51230-17-2	
Ozone Depleting Substances (Others)	[S03594] Ethane, 2-bromo-2-chloro-1,1,1-trifluoro-, (2S)-	51230-18-3	
Ozone Depleting Substances (Others)	[S03673] Tetrabromomethane; Carbon tetrabromide	558-13-4	
Ozone Depleting Substances (Others)	[S03719] 2-Bromo-1,1-dichloroethylene	5870-61-1	
Ozone Depleting Substances (Others)	[S03732] Tribromochloromethane	594-15-0	
Ozone Depleting Substances (Others)	[S03733] Dibromodichloromethane	594-18-3	
Ozone Depleting Substances (Others)	[S03741] Tribromoethylene	598-16-3	
Ozone Depleting Substances (Others)	[S03745] Bromotrifluoroethylene	598-73-2	
Ozone Depleting Substances (Others)	[S03802] 1,2-Dibromotetrachloroethane	630-25-1	
Ozone Depleting Substances (Others)	[S06146] Hexachloroethane	67-72-1	
Ozone Depleting Substances (Others)	[S01295] Chloromethane; Methyl chloride	74-87-3	
Ozone Depleting Substances (Others)	[S04142] Ethane, bromochlorotrifluoro-	74925-63-6	
Ozone Depleting Substances (Others)	[S07506] Ethane, bromo-	74-96-4	
Ozone Depleting Substances (Others)	[S04155] Difluorodibromomethane	75-61-6	
Ozone Depleting Substances (Others)	[S04156] Bromotrichloromethane	75-62-7	
Ozone Depleting Substances (Others)	[S04160] 1-Bromo-1-chloro-2,2-difluoroethylene	758-24-7	
Ozone Depleting Substances (Others)	[S04162] Pentabromoethane	75-95-6	
Ozone Depleting Substances (Others)	[S00965] Ethane, hexafluoro-	76-16-4	
Ozone Depleting Substances (Others)	[S00876] Propane, octafluoro-	76-19-7	
Ozone Depleting Substances (Others)	[S04205] Tetrabromoethylene	79-28-7	
Ozone Depleting Substances (Others)	[S04979] Chlorotrifluoroethylene (Ethene, 1-chloro-1,2,2-trifluoro-; CFC-1	113) 79-38-9	
Asbestos	[S00008] Other asbestos	-	
Asbestos	[S00007] Crocidolite	12001-28-4	

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
	·		Remarks
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	
Azocolourants and Azodyes which form certain aromatic amines	[S09152] Azocolourants and Azodyes which form certain aromatic	amines -	
Azocolourants and Azodyes which form certain aromatic amines	[S02226] 4,4'-Methylene-bis(2-chloroaniline)	101-14-4	6th SVHC (Dec/19/2011)
Azocolourants and Azodyes which form certain aromatic amines	[S02229] 4,4'-Methylenedianiline	101-77-9	1st SVHC (Oct/28/2008)
Azocolourants and Azodyes which form certain aromatic amines	[S00015] 4,4'-Oxydianiline	101-80-4	8th SVHC (Dec/19/2012)
Azocolourants and Azodyes which form certain aromatic amines	[S00024] 4-Chloroaniline	106-47-8	
Azocolourants and Azodyes which form certain aromatic amines	[S02234] 3,3'-Dimethoxybenzidine	119-90-4	Substances 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	
Azocolourants and Azodyes which form certain aromatic amines	[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 mines	[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)

⁻ 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
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	
Azocolourants and Azodyes which form certain aromatic amines	[S02387] 4-Methyl-m-phenylenediamine	95-80-7	8th SVHC (Dec/19/2012)
Azocolourants and Azodyes which form certain aromatic amines	[S00022] o-Aminoazotoluene	97-56-3	8th SVHC (Dec/19/2012)
Azocolourants and Azodyes which form certain aromatic amines	[S00020] 5-Nitro-o-toluidine	99-55-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S02020] Monomethyl-dichloro-diphenyl methane(Ugilec 121,U	gilec 21) -	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S02018] Other PCBs and PCTs	-	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04774] 2,2',3,4,4',5(or 2,2',3,4,4',5')-Hexachlorobiphenyl	108145-39-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04775] (R)-2,2',3,3',4,4',6,6'-Octachlorobiphenyl	109328-45-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04776] (S)-2,2',3,3',4,4',6,6'-Octachlorobiphenyl	109328-46-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S02017] Chlorodiphenyl(Aroclor 1260)	11096-82-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S02015] Aroclor 1254	11097-69-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S02639] Aroclor 1221	11104-28-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04777] 2,2',3,6,6',?-Hexachlorobiphenyl	111276-74-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04778] 2,4,4',?,?-Pentachlorobiphenyl	111276-75-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04779] 2,2',6',?,?-Pentachlorobiphenyl	111276-76-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04780] 2,2',5,6',?,?-Hexachlorobiphenyl	111276-77-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04781] 2,?,?-Trichlorobiphenyl	111276-78-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04782] 4,4',?,?,?,-Hexachlorobiphenyl	111276-79-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04783] 2,2',5,6',?,?,?-Heptachlorobiphenyl	111276-80-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04784] 4,4',?,?,?-Pentachlorobiphenyl	111276-81-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04785] 2,3,3',4,4',5,5',?-Octachlorobiphenyl	111276-82-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04786] 2,2',5,6',?,?,?-Octachlorobiphenyl	111276-83-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S02650] Aroclor 1232	11141-16-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S02854] Aroclor 1248	12672-29-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S02857] Aroclor 1016	12674-11-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S02014] Aroclor	12767-79-2	

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

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Similaringen Electric Manara	cturing co., Etc.	Trombited Substances in Froducts	page 42/1
Substance Group Name	Example Substances	CAS No.	Remarks
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04570] 2,2'-Dichlorobiphenyl; PCB-4	13029-08-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S02269] Polychlorinated biphenyls	1336-36-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04787] (+)-2,2',3,6-Tetrachlorobiphenyl	151262-31-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04788] (-)-2,2',3,6-Tetrachlorobiphenyl	151262-32-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04789] (+)-2,2',3,5',6-Pentachlorobiphenyl	151262-34-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04790] (-)-2,2',3,5',6-Pentachlorobiphenyl	151262-35-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04791] (S)-2,2',3,3',6-Pentachlorobiphenyl	153153-43-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04792] (R)-2,2',3,3',6-Pentachlorobiphenyl	153153-44-7	
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	

⁻ 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.

- Shindengen Electric Manufa	cturing Co., Ltd	Prohibited Substances in Products	page 43/67
Substance Group Name	Example Substances	CAS No.	Remarks
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	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04564] 3-Chlorobiphenyl; PCB-2	2051-61-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04565] 4-Chlorobiphenyl; PCB-3; p-Chlorobiphenyl	2051-62-9	
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	[S03304] pentachloro[1,1'-biphenyl]	25429-29-2	

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[S04576] Dichloro-1,1'-biphenyl

Polychlorinated Terphenyls
Polychlorinated Biphenyls and

Polychlorinated Terphenyls

- 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 44/67
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- Sililideligeli Electric ivialidia	cturing co., Ltd	Profibited Substances III Products	page 44/6
Substance Group Name	Example Substances	CAS No.	Remarks
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] 3,4¹-Dichlorobiphenyl; PCB-13	2974-90-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04568] 3,4-Dichlorobiphenyl; PCB-12	2974-92-7	
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] 2,3,4,4'-Tetrachlorobiphenyl; PCB-60	33025-41-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04587] 3,4'-Dichlorobiphenyl; PCB-13	33039-81-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04588] 2,2',3,3',4,4',6,6'-Octachloro-1,1'-biphenyl; PCB-197	33091-17-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[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 Polychlorinated Terphenyls	[S04592] 3,3',5,5'-Tetrachloro-1,1'-biphenyl; PCB-80	33284-52-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04593] 2,3,4,5-Tetrachloro-1,1'-biphenyl; PCB-61	33284-53-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[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 Polychlorinated Terphenyls	[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	

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

25512-42-9

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.

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

Substance Group Name	Example Substances	CAS No.	Remarks
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 Polychlorinated Terphenyls	[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 Polychlorinated Terphenyls	[S04605] 2,2',3,4,4',5-Hexachlorobiphenyl; PCB-137	35694-06-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04606] 2,2',3,3',4,4',5,5'-Octachlorobiphenyl; PCB-194	35694-08-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04607] 2,2',3,4'-Tetrachloro-1,1'-biphenyl; PCB-42	36559-22-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S02016] Kanechlor 500	37317-41-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04608] 2,2',5-Trichlorobiphenyl; PCB-18	37680-65-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04609] 2,2',4-Trichloro-1,1'-biphenyl; PCB-17	37680-66-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04610] 2',3,5-Trichloro-1,1'-biphenyl; PCB-34	37680-68-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04611] 3,3',4-Trichlorobiphenyl; PCB-35	37680-69-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04612] 2,2',4,5,5'-Pentachlorobiphenyl; PCB-101	37680-73-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04613] 2,2',3,5',6-Pentachloro-1,1'-biphenyl; PCB-95	38379-99-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04614] 2,2',4,4',5-Pentachloro-1,1'-biphenyl; PCB-99	38380-01-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04615] 2,2',3,4,5'-Pentachlorobiphenyl; PCB-87	38380-02-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04616] 2,3,3',4',6-Pentachloro-1,1'-biphenyl; PCB-110	38380-03-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04617] 2,2',3,4',5',6-Hexachloro-1,1'-biphenyl; PCB-149	38380-04-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04618] 2,2',3,3',4,6'-Hexachloro-1,1'-biphenyl; PCB-132	38380-05-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04619] 2,2',3,3',4,4'-Hexachloro-1,1'-biphenyl; PCB-128	38380-07-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S01961] 2,3,3',4,4',5-Hexachlorobiphenyl; PCB-156(Co-PCBs)	38380-08-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04620] 2,2',3,3',6,6'-Hexachloro-1,1'-biphenyl; PCB-136	38411-22-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04621] 2,2',3,3',4,5,6'-Heptachloro-1,1'-biphenyl; PCB-174	38411-25-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04622] 2,2',6-Trichloro-1,1'-biphenyl; PCB-19	38444-73-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04623] 2,3',6-Trichlorobiphenyl; PCB-27	38444-76-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04624] 2,4',6-Trichloro-1,1'-biphenyl; PCB-32	38444-77-8	
Polychlorinated Biphenyls and	[S04625] 2,2',3-Trichlorobiphenyl; PCB-16	38444-78-9	

[S04626] 2,3',5-Trichlorobiphenyl; PCB-26

[S04627] 2,3,3'-Trichloro-1,1'-biphenyl

Polychlorinated Terphenyls
Polychlorinated Biphenyls and

Polychlorinated Terphenyls
Polychlorinated Biphenyls and

Polychlorinated Terphenyls

- Shindengen Electric Manufacturing Co., Ltd	Prohibited Substances in Products	page 46/67
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Substance Group Name	Example Substances	CAS No.	Remarks
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04628] 2,3,4'-Trichloro-1,1'-biphenyl; PCB-22	38444-85-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04629] 2',3,4-Trichloro-1,1'-biphenyl; PCB-33	38444-86-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04630] 3,3',5-Trichloro-1,1'-biphenyl; PCB-36	38444-87-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04631] 3,4',5-Trichloro-1,1'-biphenyl; PCB-39	38444-88-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04632] 3,4,4'-Trichloro-1,1'-biphenyl; PCB-37	38444-90-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04633] 2,2',3,3'-Tetrachlorobiphenyl; PCB-40	38444-93-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04634] 2,2',4,4',6-Pentachloro-1,1'-biphenyl; PCB-100	39485-83-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S01959] 2,3,3',4,4',5,5'-Heptachlorobiphenyl; PCB-189(Co-PCBs)	39635-31-9	
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 ¹ ,5,6-Hexachloro-1,1 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	

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

38444-81-4

38444-84-7

 ⁻ 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.

⁻ 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.

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,

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- Shindengen Electric Manufac	turing Co., Ltd	Prohibited Substances in Products	page 47/67
Substance Group Name	Example Substances	CAS No.	Remarks
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	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04666] 2,2',3,3',4,5'-Hexachloro-1,1'-biphenyl; PCB-130	52663-66-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04667] 2,2',3,3',5,5',6-Heptachloro-1,1'-biphenyl; PCB-178	52663-67-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04668] 2,2',3,4',5,5',6-Heptachloro-1,1'-biphenyl; PCB-187	52663-68-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04669] 2,2',3,4,4',5',6-Heptachloro-1,1'-biphenyl; PCB-183	52663-69-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04670] 2,2',3,3',4,5',6'-Heptachloro-1,1'-biphenyl; PCB-177	52663-70-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04671] 2,2',3,3',4,4',6-Heptachloro-1,1'-biphenyl; PCB-171	52663-71-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S01963] 2,3',4,4',5,5'-Hexachlorobiphenyl; PCB-167(Co-PCBs)	52663-72-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04672] 2,2',3,3',4,5,6,6'-Octachloro-1,1'-biphenyl; PCB-200	52663-73-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04673] 2,2',3,3',4,5,5'-Heptachloro-1,1'-biphenyl; PCB-172	52663-74-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04674] 2,2',3,3',4,5,5',6'-Octachloro-1,1'-biphenyl; PCB-199	52663-75-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04675] 2,2',3,4,4',5,5',6-Octachloro-1,1'-biphenyl; PCB-203	52663-76-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04676] 2,2',3,3',4,5,5',6,6'-Nonachloro-1,1'-biphenyl; PCB-208	52663-77-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04677] 2,2',3,3',4,4',5,6-Octachloro-1,1'-biphenyl; PCB-195	52663-78-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04678] 2,2',3,3',4,4',5,6,6'-Nonachloro-1,1'-biphenyl; PCB-207	52663-79-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04679] 2,2',3,3',5,6-Hexachlorobiphenyl; PCB-134	52704-70-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04680] 2,2',3,4,5,5'-Hexachlorobiphenyl; PCB-141	52712-04-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04681] 2,2',3,4,5,5',6-Heptachloro-1,1'-biphenyl; PCB-185	52712-05-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04682] 2,2',3,3',5,6'-Hexachloro-1,1'-biphenyl; PCB-135	52744-13-5	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S03643] Aroclor 1242	53469-21-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04683] 3,4,5-Trichlorobiphenyl	53555-66-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S03647] Nonachloro-1,1'-biphenyl	53742-07-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04684] 2,3,4,6-Tetrachlorobiphenyl	54230-22-7	

- 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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[S04685] 2,2',3,4,6-Pentachloro-1,1'-biphenyl; PCB-88

Polychlorinated Biphenyls and

Polychlorinated Terphenyls

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- Shindengen Electric Manufa	cturing Co., Ltd	Prohibited Substances in Products	page 48/67
Substance Group Name	Example Substances	CAS No.	Remarks
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04686] 2,2',3,3',4,5-Hexachlorobiphenyl; PCB-129	55215-18-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04687] 2,2',3,4,5-Pentachloro-1,1'-biphenyl; PCB-86	55312-69-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04688] 2,3,6-Trichlorobiphenyl; PCB-24	55702-45-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04689] 2,3,4-Trichlorobiphenyl; PCB-21	55702-46-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04690] 2,3',4-Trichloro-1,1'-biphenyl; PCB-25	55712-37-3	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04691] 2,3,5-Trichlorobiphenyl	55720-44-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04692] 2,2',3,3',4,4',5,6-Octachloro-1,1'-biphenyl; PCB-195	55722-26-4	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04693] 2,2',3,4,4',6-Hexachlorobiphenyl; PCB-139	56030-56-9	
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	[S04697] 2,2',3,4,4',6-Hexachloro-1,1'-biphenyl; PCB-140	59291-64-4	
Polychlorinated Biphenyls and	[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	[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	
- 1 11 1 1 1 1 1 1			

[S04712] 2,2',3,4',5-Pentachloro-1,1'-biphenyl; PCB-90

[S04713] 2,2',3,4',6,6'-Hexachloro-1,1'-biphenyl; PCB-150

68194-07-0

55215-17-3

Polychlorinated Biphenyls and Polychlorinated Terphenyls

Polychlorinated Biphenyls and

Polychlorinated Terphenyls

⁻ 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.

- Shindengen Electric Manufac	cturing Co., Ltd	Prohibited Substances in Products	page 49/67
Substance Group Name	Example Substances	CAS No.	Remarks
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	
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	[S04740] 2,3',5',6-Tetrachloro-1,1'-biphenyl; PCB-73	74338-23-1	

[S04741] 2,3,3',4-Tetrachloro-1,1'-biphenyl; PCB-55

Polychlorinated Terphenyls
Polychlorinated Biphenyls and

Polychlorinated Terphenyls

Substance Group Name	Evample Substances	CAS No	Domarks
- Shindengen Electric Manufacturing Co., Ltd		Prohibited Substances in Products	page 50/67

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Substance Group Name		Example Substances	CAS No.	Remarks
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04742] 2,3,3',6-1	Tetrachloro-1,1'-biphenyl	74472-33-6	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04743] 2,3,4',5-7	Tetrachlorobiphenyl	74472-34-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04744] 2,3,3',4,6	6-Pentachloro-1,1'-biphenyl; PCB-109	74472-35-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04746] 2,3,3',5,6	6-Pentachloro-1,1'-biphenyl; PCB-112	74472-36-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$01966] 2,3,4,4',5	5-Pentachlorobiphenyl; PCB-114(Co-PCBs)	74472-37-0	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04747] 2,3,4,4',6	6-Pentachloro-1,1'-biphenyl; PCB-115	74472-38-1	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[\$04748] 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	6,6'-Hexachloro-1,1'-Biphenyl; PCB-145	74472-40-5	
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	[S04751] 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	[\$04754] 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	[S04768] (+-)-2,2',	3,4,6-Pentachlorobiphenyl	99554-08-2	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04769] (+-)-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	

⁻ 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
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04771] (-)-2,2',3,4,6-Pentachlorobiphenyl	99554-11-7	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04772] (+)-2,2',3,4,4',6-Hexachlorobiphenyl	99554-12-8	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S04773] (-)-2,2',3,4,4',6-Hexachlorobiphenyl	99554-13-9	
Polychlorinated Biphenyls and Polychlorinated Terphenyls	[S02021] Monomethyl-dibromo-diphenyl methane(DBBT)	99688-47-8	
Polychloronaphthalenes (Cl≥2)	[S02010] Other polychlorinated 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)	[S08788] 1,2,3,5,6,8-Hexachloronaphthalene	103426-95-5	
Polychloronaphthalenes (Cl≥2)	[S08878] 1,2,3,4,6,7-Hexachloronaphthalene	103426-96-6	
Polychloronaphthalenes (Cl≥2)	[S08789] 1,2,3,5,6,7-Hexachloronaphthalene	103426-97-7	
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)	[\$08800] 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)	[S08825] 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	

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- Shindengen Electric Manufacturing Co., Ltd. - Prohibited Substances in Products

Substance Group Name	Example Substances	CAS No.	Remarks
•	·	38289-27-9	Remarks
Polychloronaphthalenes (Cl≥2)	[S03506] Polychlorinated naphthalene		
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	
Polychloronaphthalenes (Cl≥2)	[S04851] 1,3,7-Trichloronaphthalene; PCN-21	55720-37-1	
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	30340 20 0	
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	14596-10-2	
Radioactive Substances	[S03114] Lead, isotope of mass 202; Lead-202	15752-86-0	
Radioactive Substances	[S03119] Nickel uranium oxide (NiU3O10)	15780-33-3	
Radioactive Substances	[S04048] Nickel uranyl tetraacetate, of uranium depleted in uranium	-235 71767-12-9	
Radioactive Substances	[S02189] Plutonium	7440-07-5	
Radioactive Substances	[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	

⁻ 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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Similaringen Electric Manarata	8,		page 33/c
Substance Group Name	Example Substances	CAS No.	Remarks
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)	[S06793] 1-chloroundecane	2473-03-2	
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)	[S02171] Chloroalkane(C10-13)	85535-84-8	1st SVHC (Oct/28/2008)
ributyl Tin Oxide (TBTO)	[S02336] Bis(tri-n-butyltin)oxide	56-35-9	1st SVHC (Oct/28/2008)
Benzene	[S02349] Benzene	71-43-2	
Hexachlorobenzene	[S02009] Hexachlorobenzene	118-74-1	
1-Nitrodiphenyl and its salts	[S00002] 1,1'-Biphenyl, 4-nitro- salt	-	
1-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)		-	
Dioxins (Polychlorodibenzofurans)	[S01954] 1,2,3,6,7,8-Hexachlorodibenzofuran(PCDFs)	-	
Dioxins (Polychlorodibenzofurans)	[S01956] 1,2,3,7,8,9-Hexachlorodibenzofuran(PCDFs)	-	
Dioxins (Polychlorodibenzofurans)	[S01968] 2,3,4,7,8-Pentachlorodibenzofuran(PCDFs)		
Dioxins (Polychlorodibenzofurans)	[S01976] Octachlorodibenzofuran(PCDFs)	39001-02-0	
Dioxins (Polychlorodibenzofurans)		51207-31-9	
	[S01970] 2,3,7,8-Tetrachlorodibenzofuran(PCDFs)	55673-89-7	
Dioxins (Polychlorodibenzofurans)			
Dioxins (Polychlorodibenzofurans)	[S03691] 2,3,4,7,8-Pentachloro dibenzofurans	57117-31-4	
Dioxins (Polychlorodibenzofurans)	[S01958] 1,2,3,7,8-Pentachlorodibenzofuran(PCDFs)	57117-41-6	
Dioxins (Polychlorodibenzofurans)	[S03692] 1,2,3,6,7,8-Hexachloro dibenzofuran	57117-44-9	
Dioxins (Polychlorodibenzofurans)	[S01967] 2,3,4,6,7,8-Hexachlorodibenzofuran(PCDFs)	60851-34-5	
Dioxins (Polychlorodibenzofurans)	[S01949] 1,2,3,4,6,7,8-Heptachlorodibenzofuran(PCDFs)	67562-39-4	
Dioxins (Polychlorodibenzofurans)	[S04010] 1,2,3,4,7,8-Hexachloro dibenzofuran	70648-26-9	
Dioxins (Polychlorodibenzofurans)	[S04088] 1,2,3,7,8,9-Hexachloro dibenzofuran	72918-21-9	
Dioxins Polychlorodibenzodioxins)	[S01969] 2,3,7,8-Tetrachlorodibenzo-p-dioxin(PCDDs)	1746-01-6	
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		
Dioxins Polychlorodibenzodioxins)	[S01957] 1,2,3,7,8-Pentachlorodibenzo[b,e][1,4]dioxen(PCDDs	· 	
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	

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- Shindengen Electric Manufacturing Co., Ltd	Prohibited Substances in Products	page 54/67
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Substance Group Name	Example Substances	CAS No.	Remarks
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 2	2009/251/EC
Perfluorooctanesulfonate (PFOS) and its salts	[S02489] 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2- [ethyl[(neptadecafluorooctyl)sulphonyl]amino]ethyl 2-methyl-2-propenoate, 2- [ethyl[(nonafluorobutyl)sulphonyl]amino]ethyl 2-methyl-2-propenoate, 2- [ethyl[(pentadecafluoroheptyl)sulphonyl]amino]ethyl 2-methyl-2-propenoate, 2- [ethyl[(tridecafluorohexyl)sulphonyl]amino]ethyl 2-methyl-2-propenoate and 2- propenoic acid	-	
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)methane reaction products with 2-ethyl-1-hexanol, 2-butanone, oxime, N-ethyl-N-{2-hydroxyethyl}-1-C4-C8 perfluoroalkanesulphonamide	-	
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 [S02487] Sulphonamides, C4-8-alkane, perfluoro, N-ethyl-N-(hydroxyethyl)-, polymers	178094-69-4	
Perfluorooctanesulfonate (PFOS) and its salts	[SU2487] Sulphonamides, C4-8-aikane, pernuoro, N-ethyl-N-(Inydroxyetnyl)-, polymers with 1,1"-methylenebis(-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	

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Substance Group Name	Example Substances	CAS No.	Remarks
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	[S02441] 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	[S02442] 1-Octanesulphonamide, N,N'-[phosphinicobis(oxy-2,1-ethanediyl)]bis[N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, ammonium salt	30381-98-7	
Perfluorooctanesulfonate (PFOS) and its salts	[S02493] Fatty acids, linseed-oil, dimers, 2- [[(heptadecafluorooctyl)sulphonyl]methylamino]ethyl esters	306973-46-6	
Perfluorooctanesulfonate (PFOS) and its salts	[S02494] Sulphonamides, C4-8-alkane, perfluoro, N-{hydroxyethyl}-N-methyl, reaction products with 12-hydroxystearic acid and 2,4-TDl, 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-1,1,2,2,3,3,4,5,5,6,6,7,7,7-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-methyl-propyl 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	

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- Shindengen Electric Manufacturing Co., Ltd. - Prohibited Substances in Products

Substance Group Name	Example Substances	CAS No.	Remarks
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-	307-35-7	
Perfluorooctanesulfonate (PFOS) and its salts	[S02443] 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	[S02444] 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	
Perfluorooctanesulfonate (PFOS) and its salts	[S02432] 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	[S02455] 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	[S02458] 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	

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Substance Group Name	Example Substances	CAS No.	Remarks
Perfluorooctanesulfonate (PFOS)	[S02459] 1-Propanaminium, 3-[[(heptadecafluorooctyl)sulphonyl]amino]-N,N',N''-	68310-75-8	
and its salts	trimethyl-, iodide, ammonium salt		
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[(undecafluoropentyl)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	
Perfluorooctanesulfonate (PFOS) and 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[(pentadecafluoroheptyl)sulphonyl]amino]ethyl 2-propenoate and 2- [methyl[(undecafluoropentyl)sulphonyl]amino]ethyl 2-propenoate and 2- [methyl[(undecafluoropentyl)sulphonyl]amino]ethyl 2-propenoate	68555-90-8	
Perfluorooctanesulfonate (PFOS) and its salts	[S02462] 2-Propenoic acid, 2-methyl-, 2- [ethyl[(heptadecafluorooctyl)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[(tridecafluorohexyl)sulphonyl]amino]ethyl 2-methyl-2-propenoate, 2- [ethyl[(undecafluoropentyl)sulphonyl]amino]ethyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate	68555-91-9	
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[(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] 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)-, reaction products with N-ethyl-1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-1-butanesulphonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-N-(2-hydroxyethyl)-1-heptanesulphonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-N-(2-hydroxyethyl)-1-hexanesulphonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,5-undecafluoro-N-(2-hydroxyethyl)-1-pentanesulphonamide, polymethylenepolyphenyleneisocyanate and stearyl alc.	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[(neptadecafluorooctyl)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[(Irdiecafluoro-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[[undecafluorohexyl]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	
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Prohibited Substances in Products page 58/67

- Shindengen Electric Manufac			page 58/6
Substance Group Name	Example Substances	CAS No.	Remarks
Perfluorooctanesulfonate (PFOS) and its salts	$[S02471] \ 1-Octanesulphonic acid, \ 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadeca fluoro-, compd. with \ 2,2'-iminobis[ethanol] \ (1:1)$	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-propenoatie, 2-[methyl[[(nonafluorobutyl)sulphonyl]amino]ethyl 2-propenoate, 2-[methyl[[(pentadecafluoroheptyl)sulphonyl]amino]ethyl 2-propenoate and 2-[methyl[[(undecafluoroheptyl)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	[S02474] 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[(tpentadecafluoroheptyl)sulphonyl]amino]ethyl 2-propenoate, 2- [methyl[(tridecafluorohexyl)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	$\hbox{[S05955] Bis (1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-hepta decafluor o-1-octane sulfonic acid) magnesium salt}$	91036-71-4	
Perfluorooctanesulfonate (PFOS) and its salts	[S02476] Sulphonamides, C4-8-alkane, perfluoro, N-(hydroxyethyl)-N-methyl, reaction products with epichlorohydrin, adipates (esters)	91081-99-1	
Perfluorooctanesulfonate (PFOS) and its salts	[S02477] Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-ethoxyethyl 2-propenoate, 2- [([heptadecafluoroocty]suphonyl]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	

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Substance Group Name	Example Substances	CAS No.	Remarks
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	[S07406] 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	
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	
Tri-substituted organostannic compounds	[S03090] Triethyltin phenoxide	1529-30-2	
Tri-substituted organostannic compounds	[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 compounds	[S07422] 4-Methyl-N-phenyl-N-(triphenylstannyl)benzenesulfonamide	172777-09-2	
Tri-substituted organostannic compounds	[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	[S02057] Triphenyltin fatty acid salts(C=9-11)(2-Isopropyl-2,4-dimethylbutanoic acid triphenyltin(IV) salt)	18380-72-8	
compounds	tripricity titri(tv) sait)		

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- Shindengen Electric Manufacturing Co., Ltd. - Prohibited Substances in Products page 60/67

Substance Group Name	Example Substances	CAS No.	Remarks
Tri-substituted organostannic compounds	[S07811] [1,2-Phenylenebis(carbonyloxy)]bis[triphenylstannane]	1954-36-5	
Tri-substituted organostannic compounds	[S02065] Tributyltin fluoride	1983-10-4	
Tri-substituted organostannic compounds	[S03221] Tributyltin dimethyldithiocarbamate	20369-63-5	
Tri-substituted organostannic compounds	[S02066] Tributyltin methacrylate	2155-70-6	
Tri-substituted organostannic compounds	[S03247] TRIBUTYLTIN CYANIDE	2179-92-2	
Tri-substituted organostannic compounds	[S03265] Tripropyltin chloride	2279-76-7	
Tri-substituted organostannic compounds	[S03278] Tributyltin linoleate	24124-25-2	
Tri-substituted organostannic compounds	[506143] 5,5,12,12-Tetrabutyl-7,10-dioxo-6,11-dioxa-5,12-distanna-8-hexadecene	24291-45-0	
Tri-substituted organostannic compounds	[S03314] BIS(TRIBUTYLTIN) ITACONATE	25711-26-6	
Tri-substituted organostannic compounds	[507434] 2,7-Dioxa-1,8-distannaoctane, 4-dodecyl-3,6-dioxo-1,1,1,8,8,8-hexaphenyl-	2591-32-4	
Tri-substituted organostannic compounds	[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	
Tri-substituted organostannic compounds	[S07437] Tributyltin fluoride polymer	27615-98-1	
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] [(1-0xododecyl)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	[503491] Stannane, tributyl(naphthalenyloxy)- ; Tributyltin naphthalate ; Tributyltin naphtholate	36631-23-9	

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			P-8/
Substance Group Name	Example Substances	CAS No.	Remarks
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)	47672-31-1	
Tri-substituted organostannic compounds	[S02067] Bis(tributyltin)phthalate	4782-29-0	
Tri-substituted organostannic compounds	[S03580] TRIBUTYLTIN 2-ETHYLHEXANOATE	5035-67-6	
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)
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	

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Substance Group Name	Example Substances	CAS No.	Remarks
Tri-substituted organostannic	[S02064] Tributyltin sulfamate	6517-25-5	
compounds Tri-substituted organostannic	[S07492] Stannylium, triphenyl-	668-34-8	
compounds Tri-substituted organostannic	[S07493] Tributyl[(dimethylthiocarbamoyl)thio]stannane	67057-32-3	
compounds			
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 compounds	[S03984] TRIBUTYLTIN UNDECYLENATE	69226-47-7	
Tri-substituted organostannic compounds	[S02054] Triphenyltin chloroacetate	7094-94-2	
Tri-substituted organostannic compounds	[S07502] 2-[[(Triphenylstannyl)oxy]carbonyl]benzoate	7224-27-3	
Tri-substituted organostannic compounds	[S06145] Fluorotriisobutyltin(IV)	7304-48-5	
Tri-substituted organostannic compounds	[S02061] Triisobutyltin chloride	7342-38-3	
Tri-substituted organostannic compounds	[S04111] Tripropyltin iodide	7342-45-2	
Tri-substituted organostannic compounds	[S04112] Tributyltin iodide	7342-47-4	
Tri-substituted organostannic compounds	[S04121] Tributyltin iodoacetate	73927-91-0	
Tri-substituted organostannic compounds	[S04122] Tripropyltin iodoacetate	73927-92-1	
Tri-substituted organostannic compounds	[S04123] TRIBUTYLTIN O-IODOBENZOATE	73927-93-2	
Tri-substituted organostannic compounds	[S04124] Tributyltin .betaiodopropionate	73927-95-4	
Tri-substituted organostannic compounds	[S04125] Tributyltin isooctylthioacetate	73927-97-6	
Tri-substituted organostannic compounds	[S04126] TRIBUTYLTIN P-IODOBEMZOATE	73940-88-2	
Tri-substituted organostannic compounds	[S04127] Tributyltin .alpha(2,4,5-trichlorophenoxy) propionate	73940-89-3	
Tri-substituted organostannic compounds	[S07505] 2-Propenoic acid, butyl ester, polymer with tributyl[(2-methyl-1-oxo-2-propenyl)oxy]stannane	74774-66-6	
Tri-substituted organostannic compounds	[S07509] Tributyl(D-gluconoyloxy)stannane	75113-35-8	
Tri-substituted organostannic compounds	[S04148] 1,3,5-TRIS(TRIBUTYLTIN)-S-TRIAZINE-2,4,6-TRIONE	752-58-9	
Tri-substituted organostannic compounds	[S07512] Pyridine, 3-[[(triphenylstannyl)oxy]carbonyl]-	7552-16-1	
Tri-substituted organostannic compounds	[S07513] (4E)-3,6-Dioxo-1,1,1,8,8,8-hexaphenyl-2,7-dioxa-1,8-distannaoct-4-ene	7552-19-4	
Tri-substituted organostannic compounds	[S02362] Triphenyltin hydroxide	76-87-9	
Tri-substituted organostannic compounds	[S04219] Trimethyltin iodide	811-73-4	
Tri-substituted organostannic compounds	[S07518] Stannane, [(2-nitrobenzoyl)oxy]triphenyl-	83500-88-3	
Tri-substituted organostannic compounds	[S07519] Stannane, [(3-nitrobenzoyl)oxy]triphenyl-	83514-66-3	
Tri-substituted organostannic	[S01468] Mixture of tributyltin cyclopentanecarboxylate and its analogs(Tributyltin	85409-17-2	

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Substance Group Name	Example Substances	CAS No.	Remarks
Tri-substituted organostannic compounds	[S07525] Octyl acrylate-Methyl methacrylate-Triphenyltin itaconate copolymer	85424-96-0	
Tri-substituted organostannic compounds	[S04341] Triphenyltin hydride	892-20-6	
Tri-substituted organostannic compounds	[S04342] Triphenyltin iodide	894-09-7	
Fri-substituted organostannic compounds	[S02052] Triphenyltin acetate	900-95-8	
Fri-substituted organostannic compounds	[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 tributyl[(2-methyl-1-oxo-2-propenyl)oxy]stannane	98358-14-6	
ri-substituted organostannic	[S04503] Triethyltin chloride	994-31-0	
ri-substituted organostannic	[S04504] Triethyltin hydroxide	994-32-1	
Dibutyltin (DBT) compounds	[S02551] Dibutyl tin	1002-53-5	
Dibutyltin (DBT) compounds	[S02586] Dibutyltin dimaleate	10192-92-4	
Dibutyltin (DBT) compounds	[S07399] Dibutyltin di(nonylmaleate)	10584-97-1	
Dibutyltin (DBT) compounds	[S07400] 8-Oxa-3,5-dithia-4-stannatetradecanoic acid, 4,4-dibutyl-10-ethyl-7-oxo-, 2-ethylhexyl ester	10584-98-2	
Dibutyltin (DBT) compounds	[S02621] Dibutyltin diacetate	1067-33-0	
Dibutyltin (DBT) compounds	[S07401] Dibutyldimethoxystannane	1067-55-6	
Dibutyltin (DBT) compounds	[\$07910] 3,3,7,7-Tetrabutyl-2,4,6,8,9-pentaoxa-3,7-distanna-1,5-diborabicyclo[3.3.1]nonane	112309-68-9	
Dibutyltin (DBT) compounds	[S07912] 2,2-Dibutyl-1,3-dioxa-7,8-dithia-2-stannacycloundecane-4,11-dione	113289-90-0	
Dibutyltin (DBT) compounds	[S02668] Dibutyltin dilauryl mercaptide	1185-81-5	
Dibutyltin (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	
Dibutyltin (DBT) compounds	[S02904] Dibutyltin dioleate	13323-62-1	
ibutyltin (DBT) compounds	[S02905] Dibutyltin dipalmitate	13323-63-2	
Dibutyltin (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	
bibutyltin (DBT) compounds	[S07415] Dibutylthioxostannane, trimer	15220-82-3	
Dibutyltin (DBT) compounds	[S00328] Di-n-butyltin bis(methyl maleate)	15546-11-9	
ibutyltin (DBT) compounds	[S03101] Dibutytin di(2-ethylhexyl maleate)	15546-12-0	
Dibutyltin (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	
Dibutyltin (DBT) compounds	[S07419] (Z,Z)-dibutylbis[(3-propoxycarbonylacryloyl)oxy]stannane	15853-77-7	
Dibutyltin (DBT) compounds	[S03147] Tin, dibutyl(1,2-ethanediamine-N,N')bis(monoisooctyl 2-butenedioato-O')-	163206-28-8	
Dibutyltin (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	
Dibutyltin (DBT) compounds	[S03173] Bis(acetato)dibutyltin	17523-06-7	
Dibutyltin (DBT) compounds	[S03219] Dibutyltin dihexanoate	19704-60-0	
Dibutyltin (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	
Dibutyltin (DBT) compounds	[S07426] Dodecyl 4,4-dibutyl-7-oxo-8-oxa-3,5-dithia-4-stannaicosanoate	20004-12-0	
Dibutyltin (DBT) compounds	[S07427] Stannane, dibutylbis[(3-carboxyacryloyl)oxy]-, bis(alpha-methylbenzyl) ester	20258-69-9	
Dibutyltin (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] Tin, dibutylbis(2,4-pentanedionato-O,O')-, (OC-6-11)-	22673-19-4	
Dibutyltin (DBT) compounds	[S07842] 1,3,2,4-Dioxathiastannetane, 4,4-dibutyl-, 2-oxide	22709-77-9	

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Prohibited Substances in Products page 64/67

Shindengen Electric Manufacturing Co., Ltd Prohibited Substan		es in Products	page 64/
Substance Group Name	Example Substances	CAS No.	Remarks
Dibutyltin (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	
Dibutyltin (DBT) compounds	[S07432] 1,1,3,3-tetrabutyl-1,3-bis(dodecyloxy)distannoxane	25150-98-5	
Dibutyltin (DBT) compounds	[S08837] Diisooctyl 4,4'-[(dibutylstannylene)bis(oxy)]bis[4-oxoisocrotonate]	25168-21-2	
Dibutyltin (DBT) compounds	[S07849] Tetrabutylbis[mu-(hydrogen maleato)]-mu-oxoditin, diisooctyl ester	25168-23-4	
Dibutyltin (DBT) compounds	[S03302] Dibutyltin bis(isooctyl mercaptoacetate)	25168-24-5	
Dibutyltin (DBT) compounds	[S07850] Tetrabutylbis[mu-(hydrogen maleato)]-mu-oxoditin, dipropyl ester	25248-71-9	
Dibutyltin (DBT) compounds	[S03335] Dibutyltin di(isooctyl 3-mercaptopropionate)	26761-46-6	
Dibutyltin (DBT) compounds	[S02533] Dibutyltin bis(octylthioglycolate)	2781-09-1	
Dibutyltin (DBT) compounds	[S02534] Di-n-butyltin di-2-ethylhexanoate	2781-10-4	
Dibutyltin (DBT) compounds	[S07438] Dibutyldiiodostannane	2865-19-2	
Dibutyltin (DBT) compounds	[S08840] Dibutylbis(myristoyloxy)stannane	28660-67-5	
Dibutyltin (DBT) compounds	[S07440] 3-methoxybutyl 11,11-dibutyl-3-methyl-7-oxo-2,6-dioxa-10,12-dithia-11-stannapentadecan-15-oate	29492-49-7	
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	
Dibutyltin (DBT) compounds	[S07445] 9,9-Dibutyl-6-oxo-2,5-dioxa-8,10-dithia-9-stannadodecan-12-oic acid, 2-methoxyethyl ester	32509-49-2	
Dibutyltin (DBT) compounds	[S03425] 5,7,12-Trioxa-6-stannatetracosa-2,9-dienoic acid, 6,6-dibutyl-4,8,11-trioxo-, dodecyl ester, (Z,Z)	33466-31-8	
Dibutyltin (DBT) compounds	[S03426] Dibutyltin dibutoxide	3349-36-8	
Dibutyltin (DBT) compounds	[S07447] Dibutylbis(octyloxy)stannane	3349-38-0	
Dibutyltin (DBT) compounds	[S07448] 2-methoxyethyl (Z,Z)-11,11-dibutyl-6,9,13-trioxo-2,5,10,12-tetraoxa-11-stannahexadeca-7,14-dien-16-oate	34349-21-8	
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	
Dibutyltin (DBT) compounds	[S07473] 2,2'-[(Dibutylstannylene)bis(thio)]bis(acetic acid)	4401-37-0	
Dibutyltin (DBT) compounds	[S03561] Dibutyltin dioctanoate	4731-77-5	
Dibutyltin (DBT) compounds	[S07822] 2,2-Dibutyl-1,3,7,2-dioxathiastannecane-4,10-dione	4981-24-2	
Dibutyltin (DBT) compounds	[S03595] Dibutyltin bis(lauryl β-mercaptopropionate)	51287-83-3	
Dibutyltin (DBT) compounds	[S07866] Diisooctyl 2,2'-[(1,1,3,3-tetrabutyl-1,3-distannathianediyl)bis(thio)]diacetate	52628-34-9	
Dibutyltin (DBT) compounds	[S07867] Bis([1,1'-biphenyl]-2-yloxy)dibutylstannane	52722-81-3	
Dibutyltin (DBT) compounds	[S03638] Dibutyltin bis(2-ethylhexyl-3-mercaptopropionate)	53202-61-2	
Dibutyltin (DBT) compounds	[S03660] Dibutylbis(ethyl 3-oxobutyrato-O1',O3)tin	54581-65-6	
Dibutyltin (DBT) compounds	[S07477] 3,3'-[(1,1,3,3-Tetrabutyl-1,3-distannoxanediyl)bis(thio)]bis(propanoic acid), diisooctyl ester	55348-64-6	
Dibutyltin (DBT) compounds	[S07478] 2,2'-[(Dibutylstannylene)bis(oxycarbonyl)]bis(benzoic acid), didodecyl ester	55568-37-1	
Dibutyltin (DBT) compounds	[S03677] Dibutyltin bis(cyclohexyl maleate)	5587-52-0	
Dibutyltin (DBT) compounds	[S07479] 1H-Imidazole, 1,1'-(dibutylstannylene)bis-	56149-55-4	
Dibutyltin (DBT) compounds	[S03714] Dibutyltin dibenzoate	5847-54-1	
Dibutyltin (DBT) compounds	[S03714] Dibutyitin dibenzoate [S03715] Dibutyitin distearate	5847-54-1	
Dibutyltin (DBT) compounds	[S07485] Isobutyl (Z,Z)-10,10-dibutyl-2-methyl-5,8,12-trioxo-4,9,11-trioxa-10-stannapentadeca-6,13-dien-15-oate	59571-08-3	
Dibutyltin (DBT) compounds	[S07823] 1,3-diacetoxy-1,1,3,3-tetrabutyldistannoxane	5967-09-9	
Dibutyltin (DBT) compounds	[S08858] Dibutylbis[(1-oxoisooctadecyl)oxy]stannane	59963-28-9	
Dibutyltin (DBT) compounds	[S07487] Octadecyl (Z,2)-6,6-dibutyl-4,8,11-trioxo-5,7,12-trioxa-6-stannatriaconta-2,9-dienoate	61813-52-3	
Dibutyltin (DBT) compounds	[S03782] Diisobutyltin oxide	61947-30-6	
Dibutyltin (DBT) compounds	[S07879] (Z,Z)-8,8-Dibutyl-1-[(1-methylethyl)phenyl]-3,6,10-trioxo-2,7,9-trioxa-8-stannatrideca-4,11-dien-13-oic acid, [(1-methylethyl)phenyl]methyl ester	62044-47-7	
Dibutyltin (DBT) compounds	[S07490] 9-Octadecen-7-ol, 18,18'-[(dibutylstannylene)bis(oxy)]bis[18-oxo-, [R-[R*,R*-(Z,Z)]]-	65540-76-3	
Dibutyltin (DBT) compounds	[S07881] (Z,Z)-4,4'-[(1,1,3,3-Tetrabutyl-1,3-distannoxanediyl)]bis(oxy)bis[4-oxo-2-butenoic acid], diisooctyl ester	67708-87-6	
Dibutyltin (DBT) compounds	[S07882] 2,2-dibutyl-6-oxo-1,3,2-oxathiastanninane-4-carboxylic acid	67859-55-6	
Dibutyltin (DBT) compounds	[S03877] Tin, dibutylbis(N,N-diethylethanamine)difluoro-	67924-24-7	

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Substance Group Name	Example Substances	CAS No.	Remarks
Dibutyltin (DBT) compounds	[\$07495] Dibenzyl (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	68109-87-5	
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-6,13-distannoctadeca-2,9,16-trienedioate	68460-06-0	
Dibutyltin (DBT) compounds	[S07824] 2,2,7,7-Tetrabutyl-1,6,3,8,2,7-dioxadithiadistannecane-5,10-dione	6931-76-6	
Dibutyltin (DBT) compounds	[S07501] 2-Butenoic acid, 4-[(dibutylmethoxystannyl)oxy]-4-oxo-, methyl ester, (2Z)-	6995-92-2	
Dibutyltin (DBT) compounds	[S07886] 5,5,7,7-Tetrabutyl-14-ethyl-11-oxo-6,12-dioxa-4,8-dithia-5,7-distannaoctadecanoic acid, 2-ethylhexyl ester	71510-19-5	
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	
Dibutyltin (DBT) compounds	[S04105] Dibutyltin bis(benzyl maleate)	7324-74-5	
Dibutyltin (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	
Dibutyltin (DBT) compounds	[S04143] Dibutyltin hydrogen borate	75113-37-0	
Dibutyltin (DBT) compounds	[S07510] 5,5-Dibutyl-9-oxo-10,13-dioxa-4,6-dithia-5-stannaheptadecanoic acid, 2-butoxyethyl ester	75113-44-9	
Dibutyltin (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	
Dibutyltin (DBT) compounds	[S07514] Stannane, dibutylbis(3-chloro-1-oxopropoxy)-	7580-74-7	
Dibutyltin (DBT) compounds	[S04176] Dibutyltin dilaurate	77-58-7	
Dibutyltin (DBT) compounds	[S00555] Dibutyltin maleate	78-04-6	
Dibutyltin (DBT) compounds	[S02527] Dibutyltin mercaptopropionate	78-06-8	
Dibutyltin (DBT) compounds	[S04200] Dibutyltin mercaptoacetate	78-20-6	
Dibutyltin (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	
Dibutyltin (DBT) compounds	[S01340] Dibutyloxostannane	818-08-6	
Dibutyltin (DBT) compounds	[S07520] Tetradecyl 4,4-dibutyl-7-oxo-8-oxa-3,5-dithia-4-stannadocosanoate	83833-21-0	
Dibutyltin (DBT) compounds	[S07896] Decyl 5,5-dibutyl-9-oxo-10-oxa-4,6-dithia-5-stannaicosanoate	83833-25-4	
Dibutyltin (DBT) compounds	[S07522] Acetoxy[2-[(2-aminoethyl)amino]propoxy]dibutyltin	84051-94-5	
Dibutyltin (DBT) compounds	[S07523] Hexadecyl 6,6-dibutyl-4,8,11-trioxo-5,7,12-trioxa-6-stannaoctacosa-2,9-dienoate	84787-79-1	
Dibutyltin (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	
Dibutyltin (DBT) compounds	[S04315] Dibutyltin linoleate	85391-79-3	
Dibutyltin (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	
Dibutyltin (DBT) compounds	[\$07526] 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	
Dibutyltin (DBT) compounds	[S04331] Dibutyltin isooctanoate	85702-74-5	
Dibutyltin (DBT) compounds	[S07527] 1,1,3,3-tetrabutyl-1,3-bis[(1-oxoisodecyl)oxy]distannoxane	85702-76-7	
Dibutyltin (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	[S08875] Silicic acid (H4SiO4), tetraethyl ester, reaction products with bis(acetyloxy)dibutylstannane	93925-42-9	
Dibutyltin (DBT) compounds	[S07530] Bis(2-ethylhexyl) o,o'-[(dibutylstannylene)bis(oxycarbonyl)]dibenzoate	94023-65-1	
Dibutyltin (DBT) compounds	[S07905] 1,1,3,3-tetrabutyl-1,3-bis[(1-oxoisooctadecyl)oxy]distannoxane	94279-11-5	
Dibutyltin (DBT) compounds	[S07906] (9Z,12Z)-1,1,3,3-tetrabutyl-1,3-bis(octadeca-9,12-dienoyloxy)distannoxane	94349-26-5	
Dibutyltin (DBT) compounds	[S04477] Dibutyltin linolenate	95873-60-2	
Dibutyltin (DBT) compounds	[S07907] (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	
Dibutyltin (DBT) compounds	[S07533] Dibromodibutylstannane	996-08-7	
Dioctyltin (DOT) compounds	[S08995] Dioctyltin compounds (DOT)		

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Prohibited Substances in Products

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Substance Group Name	Example Substances	CAS No.	Remarks
Dioctyltin (DOT) compounds	[S07397] Bis(2-ethane-1-ylhexan-1-yl) 4,4'-[(dioctan-1-ylstannylene)bisoxy]bis(4-oxobut-2-enoate)	10039-33-5	
Dioctyltin (DOT) compounds	[S07909] 4-Hydroxy-2,2-dioctyl-1,3,2,4-dioxastannaboretane	102667-32-3	
Dioctyltin (DOT) compounds	[S07911] 2,2-Dioctyl-1,3-dioxa-7,8-dithia-2-stannacycloundecane-4,11-dione	113289-87-5	
Dioctyltin (DOT) compounds	[S07408] 5,7,12-Trioxa-6-stannapentacosa-2,9-dienoic acid, 6,6-dioctyl-4,8,11-trioxo-, tridecyl ester, (Z,Z)-	116430-10-5	
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)	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	
Dioctyltin (DOT) compounds	[S07864] Bis[[4-(1,1-dimethylethyl)benzoyl]oxy]dioctylstannane	51541-60-7	
Dioctyltin (DOT) compounds	[S08853] Tin, dioctylbis(2,4-pentanedionatokappa.02,.kappa.04)-	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] (Z)-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	[507508] (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	

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Substance Group Name	Example Substances	CAS No.	Remarks
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	
Dioctyltin (DOT) compounds	[S07900] Dioctylbis(palmitoyloxy)stannane	85938-42-7	
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	[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	[S04525] rel-(1R,2R,5S,6R,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane	134237-50-6	1st SVHC (Oct/28/2008)
Hexabromocyclododecane	[S04524] rel-(1R,2S,5R,6R,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane	134237-51-7	1st SVHC (Oct/28/2008)
Hexabromocyclododecane	[S04526] rel-(1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane	134237-52-8	1st SVHC (Oct/28/2008)
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	[S09002] (1R,2S,5S,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane	169102-57-2	
Hexabromocyclododecane	[S03310] Hexabromocyclododecane	25637-99-4	1st SVHC (Oct/28/2008)
Hexabromocyclododecane	[S02088] 1,2,5,6,9,10-Hexabromocyclododecane	3194-55-6	1st SVHC (Oct/28/2008)
Hexabromocyclododecane	[S03563] rel-(1R,2S,5R,6S,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane	4736-49-6	
Hexabromocyclododecane	[S08998] rel-(1R,2S,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane	65701-47-5	
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	

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Exemption List

ELV Directive

Materials and Components	No.	Materials and Components (Directive (EU) 2017/2096 included)	Scope and expiry date of the exemption	Remarks
Lead as an alloying element	1(a)	Steel for machining purposes and batch hot dip galvanised steel components containing up to 0,35 % lead by weight		
Lead as an alloying element	1(b)	Continuously galvanised steel sheet containing up to 0,35 % lead by weight	Vehicles type-approved before 1 January 2016 and spare parts for these vehicles	
Lead as an alloying element	2(a)	Aluminium for machining purposes with a lead content up to 2% by weight	As spare parts for vehicles put on the market before 1 July 2005	
Lead as an alloying element	2(b)	Aluminium with a lead content up to 1.5% by weight	As spare parts for vehicles put on the market before 1 July 2008	
Lead as an alloying element	2(c)(i)	Aluminium alloys for machining purposes with a lead content up to 0,4 % by weight	(This exemption shall be reviewed in 2021)	
Lead as an alloying element	2(c)(ii)	Aluminium alloys not included in entry 2(c)(i) with a lead content up to 0,4 % by weight (Applies to aluminium alloys where lead is not intentionally introduced but is present due to the use of recycled aluminium)	(This exemption shall be reviewed in 2024)	
Lead as an alloying element	3	Copper alloy containing up to 4% lead by weight	(This exemption shall be reviewed in 2021)	
Lead as an alloying element	4(a)	Bearing shells and bushes	As spare parts for vehicles put on the market before 1 July 2008	
Lead as an alloying element	4(b)	Bearing shells and bushes in engines, transmissions and air conditioning compressors	As spare parts for vehicles put on the market before 1 July 2011	
Lead and lead compounds in components	5(a)	Lead in batteries in high-voltage systems (*) that are used only for propulsion in M1 and N1 vehicles (* Systems that have a voltage of > 75 V DC as defined in Directive 2006/95/EC of the European Parliament and of the Council of 12 December 2006 on the harmonisation of the laws of Member States relating to electrical equipment designed for use within certain voltage limits (OJ L 374, 27.12.2006, p. 10).)	Vehicles type-approved before 1 January 2019 and spare parts for these vehicles	
Lead and lead compounds in components	5(b)	Lead in batteries for battery applications not included in entry 5(a)	(This exemption shall be reviewed in 2021)	
Lead and lead compounds in components	6	Vibration dampers	Vehicles type-approved before 1 January 2016 and spare parts for these vehicles	
Lead and lead compounds in components	7(a)	Vulcanising agents and stabilisers for elastomers in brake hoses, fuel hoses, air ventilation hoses, elastomer/metal parts in the chassis applications, and engine mountings	As spare parts for vehicles put on the market before 1 July 2005	
Lead and lead compounds in components	7(b)	Vulcanising agents and stabilisers for elastomers in brake hoses, fuel hoses, air ventilation hoses, elastomer/metal parts in the chassis applications, and engine mountings containing up to 0.5% lead by weight	As spare parts for vehicles put on the market before 1 July 2006	
Lead and lead compounds in components	7(c)	Bonding agents for elastomers in powertrain applications containing up to 0.5% lead by weight	As spare parts for vehicles put on the market before 1 July 2009	
Lead and lead compounds in components	8(a)	Lead in solders to attach electrical and electronic components to electronic circuit boards and lead in finishes on terminations of components other than electrolyte aluminium capacitors, on component pins and on electronic circuit boards	Vehicles type-approved before 1 January 2016 and spare parts for these vehicles	
Lead and lead compounds in components	8(b)	Lead in solders in electrical applications other than soldering on electronic circuit boards or on glass	Vehicles type-approved before 1 January 2011 and spare parts for these vehicles	
Lead and lead compounds in components	8(c)	Lead in finishes on terminals of electrolyte aluminium capacitors	Vehicles type-approved before 1 January 2013 and spare parts for these vehicles	
Lead and lead compounds in components	8(d)	Lead used in soldering on glass in mass airflow sensors	Vehicles type-approved before 1 January 2015 and spare parts of such vehicles	
Lead and lead compounds in components	8(e)	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead)	(This exemption shall be reviewed in 2019.)	

ELV Directive

Materials and Components	No.	Materials and Components	Scope and expiry date of the	Remarks
, , , , , , , , , , , , , , , , , , ,		(Directive (EU) 2017/2096 included)	vehicles type-approved	
Lead and lead compounds in components	8(f)(a)	Lead in compliant pin connector systems	before 1 January 2017 and spare parts for these vehicles	
Lead and lead compounds in components	8(f)(b)	Lead in compliant pin connector systems other than the mating area of vehicle harness connectors	(This exemption shall be reviewed in 2019.)	
ead and lead compounds in components	8(g)	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	(This exemption shall be reviewed in 2019.)	
ead and lead compounds in components	8(h)	Lead in solder to attach heat spreaders to the heat sink in power semiconductor assemblies with a chip size of at least 1cm ² of projection area and a nominal current density of at least 1A/mm ² of silicon chip area	Vehicles type-approved before 1 January 2016 and after that date as spare parts for these vehicles	
Lead and lead compounds in components	8(i)	Lead in solders in electrical glazing applications on glass except for soldering in laminated glazing	Vehicles type-approved before 1 January 2016 and after that date as spare parts for these vehicles	
Lead and lead compounds in components	8(j)	Lead in solders for soldering of laminated glazing	Vehicles type-approved before 1 January 2020 and after that date as spare parts for these vehicles	
Lead and lead compounds in components	9	Valve seats	As spare parts for engine types developed before 1 July 2003	
Lead and lead compounds in components	10(a)	Electrical and electronic components which contain lead in a glass or ceramic, in a glass or ceramic matrix compound, in a glass-ceramic material, or in a glass-ceramic matrix compound. This exemption does not cover the use of lead in: - glass in bulbs and glaze of spark plugs, - dielectric ceramic materials of components listed under 10(b), 10(c) and 10(d).		
Lead and lead compounds in components	10(b)	Lead in PZT-based dielectric ceramic materials of capacitors being part of integrated circuits or discrete semiconductors		
Lead and lead compounds in components	10(c)	Lead in dielectric ceramic materials of capacitors with a rated voltage of less than 125 V AC or 250 V DC	Vehicles type-approved before 1 January 2016 and spare parts for these vehicles	
Lead and lead compounds in components	10(d)	Lead in the dielectric ceramic materials of capacitors compensating the temperature-related deviations of sensors in ultrasonic sonar systems	Vehicles type-approved before 1 January 2017 and after that date as spare parts for these vehicles	
Lead and lead compounds in components	11	Pyrotechnic initiators	Vehicles type-approved before 1 July 2006 and spare parts for these vehicles	
Lead and lead compounds in components	12	Lead-containing thermoelectric materials in automotive electrical applications to reduce CO ₂ emissions by recuperation of exhaust heat	Vehicles type approved before 1 January 2019 and spare parts for these vehicles	
Hexavalent chromium	13(a)	Corrosion preventive coatings	As spare parts for vehicles put on the market before 1 July 2007	
Hexavalent chromium	13(b)	Corrosion preventive coatings related to bolt and nut assemblies for chassis applications	As spare parts for vehicles put on the market before 1 July 2008	
Hexavalent chromium	14	As an anti-corrosion agent of the carbon steel cooling system in absorption refrigerators in motor caravans up to 0,75 weight -% in the cooling solution except where the use of other cooling technologies is practicable (i.e. available on the market for the application in motor caravans) and does not lead to negative environmental, health and/or consumer safety impacts		
Mercury	15(a)	Discharge lamps for headlight application	Vehicles type-approved before 1 July 2012 and spare parts for these vehicles	
Mercury	15(b)	Fluorescent tubes used in instrument panel displays	Vehicles type-approved before 1 July 2012 and spare parts for these vehicles	

ELV Directive

Materials and Components	No.	Materials and Components (Directive (EU) 2017/2096 included)	Scope and expiry date of the exemption	Remarks
Cadmium	16	Batteries for electrical vehicles	As spare parts for vehicles put on the market before 31 December 2008	

 $[\]ensuremath{^{*}}$ Always verify exemptions using the latest version of the ELV directive master.

^{*} This table is an extract copy of the latest ELV directive appendix at the time of the creation of the table. If there are any inconsistencies with the original, the original shall take precedence.

^{*} For inclusion other than the above applications, the thresholds shall be cadmium 0.01 wt%, lead, mercury and hexavalent chromium 0.1 wt%.

Substance	No.	Exemption (Directive (EU) 2019/178 included)	Scope and dates of applicability
	1	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):	
	1(a)	For general lighting purposes < 30W: 5mg	Expires on 31 December 2011; 3.5mg may be used per burner after 31 December 2011 unti 31 December 2012; 2.5mg shall be used per burner after 31 December 2012
	1(b)	For general lighting purposes ≥ 30W and < 50W: 5mg	Expires on 31 December 2011; 3.5mg may be used per burner after 31 December 2011
Mercury	1(c)	For general lighting purposes ≥ 50W and < 150W: 5mg	
	1(d)	For general lighting purposes ≥ 150W: 15mg	
	1(e)	For general lighting purposes with circular or square structural shape and tube diameter ≤ 17mm	No limitation of use until 31 December 2011; 7mg may be used per burner after 31 December 2011
	1(f)	For special purposes: 5mg	
	1(g)	For general lighting purposes < 30 W with a lifetime equal or above 20 000 h: 3,5 mg	Expires on 31 December 2017
	2(a)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp):	
	2(a)(1)	Tri-band phosphor with normal lifetime and a tube diameter < 9mm (e.g. T2): 5mg	Expires on 31 December 2011; 4 mg may be used per lamp after 31 December 2011
Morcury	2(a)(2)	Tri-band phosphor with normal lifetime and a tube diameter \geq 9mm and \leq 17mm (e.g. T5): 5mg	Expires on 31 December 2011; 3 mg may be used per lamp after 31 December 2011
Mercury	2(a)(3)	Tri-band phosphor with normal lifetime and a tube diameter > 17mm and ≤ 28mm (e.g. T8): 5mg	Expires on 31 December 2011; 3.5mg may be used per lamp after 31 December 2011
	2(a)(4)	Tri-band phosphor with normal lifetime and a tube diameter > 28mm (e.g. T12): 5mg	Expires on 31 December 2012; 3.5mg may be used per lamp after 31 December 2012
	2(a)(5)	Tri-band phosphor with long lifetime (≥ 25000 h): 8mg	Expires on 31 December 2011; 5 mg may be used per lamp after 31 December 2011
	2(b)	Mercury in other fluorescent lamps not exceeding (per lamp):	
	2(b)(1)	Linear halophosphate lamps with tube > 28mm (e.g. T10 and T12): 10mg	Expires on 13 April 2012
	2(b)(2)	Non-linear halophosphate lamps (all diameters): 15mg	Expires on 13 April 2016
Mercury	2(b)(3)	Non-linear tri-band phosphor lamps with tube diameter > 17mm (e.g. T9)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011
	2(b)(4)	Lamps for other general lighting and special purposes (e.g. induction lamps)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011
	3	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp):	
	3(a)	Short length (≤ 500mm)	No limitation of use until 31 December 2011; 3,5 mg may be used per lamp after 31 December 2011
Mercury	3(b)	Medium length (> 500mm and ≤ 1500mm)	No limitation of use until 31 December 2011; mg may be used per lamp after 31 December 2011
	3(c)	Long length (> 1500mm)	No limitation of use until 31 December 2011; 13 mg may be used per lamp after 31 December 2011
Mercury	4(a)	Mercury in other low pressure discharge lamps (per lamp)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011
	4(b)	Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index Ra > 60:	
	4(b)-I	P ≤ 155W	No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011
Mercury	4(b)-II	155W < P ≤ 405W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011
	4(b)-III	P > 405W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011
	4(c)	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner):	
	4(c)-I	P ≤ 155W	No limitation of use until 31 December 2011; 25 mg may be used per burner after 31 December 2011

Substance	No.	Exemption (Directive (EU) 2019/178 included)	Scope and dates of applicability
Mercury	4(c)-II	155W < P ≤ 405W	No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011
	4(c)-III	P > 405W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011
Mercury	4(d)	Mercury in High Pressure Mercury (vapour) lamps (HPMV)	Expires on 13 April 2015
Mercury	4(e)	Mercury in metal halide lamps (MH)	
Mercury	4(f)	Mercury in other discharge lamps for special purposes not specifically mentioned in this Annex	
Mercury	4(g)	Mercury in hand crafted luminous discharge tubes used for signs, decorative or architectural and specialist lighting and light-artwork, where the mercury content shall be limited as follows: (a) 20 mg per electrode pair + 0,3 mg per tube length in cm, but not more than 80 mg, for outdoor applications and indoor applications exposed to temperatures below 20 °C; (b) 15 mg per electrode pair + 0,24 mg per tube length in cm, but not more than 80 mg, for all other indoor applications.	Expires on 31 December 2018
Lead	5(a)	Lead in glass of cathode ray tubes	
Lead	5(b)	Lead in glass of fluorescent tubes not exceeding 0.2% by weight	
Lead	6(a)	Lead as an alloying element in steel for machining purposes and in galvanised steel containing up to 0.35% lead by weight	Expires on: - 21 July 2021 for categories 8 and 9 other the in vitro diagnostic medical devices and industrial monitoring and control instruments 21 July 2023 for category 8 in vitro diagnost medical devices; - 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
Lead	6(a)-I	Lead as an alloying element in steel for machining purposes containing up to 0,35 % lead by weight and in batch hot dip galvanised steel components containing up to 0,2 % lead by weight	Expires on 21 July 2021 for categories 1-7 and 10.
Lead	6(b)	Lead as an alloying element in aluminium containing up to 0.4% lead by weight	Expires on: - 21 July 2021 for categories 8 and 9 other thin vitro diagnostic medical devices and industrial monitoring and control instrument - 21 July 2023 for category 8 in vitro diagnost medical devices, - 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
Lead	6(b)-I	Lead as an alloying element in aluminium containing up to 0,4 % lead by weight, provided it stems from lead-bearing aluminium scrap recycling	Expires on 21 July 2021 for categories 1-7 and 10.
Lead	6(b)-II	Lead as an alloying element in aluminium for machining purposes with a lead content up to 0,4 % by weight	Expires on 18 May 2021 for categories 1-7 an 10.
Lead	6(c)	Copper alloy containing up to 4% lead by weight	Expires on: - 21 July 2021 for categories 1-7 and 10, - 21 July 2021 for categories 8 and 9 other th in vitro diagnostic medical devices and industrial monitoring and control instrument - 21 July 2023 for category 8 in vitro diagnost medical devices, - 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.

Substance	No.	Exemption (Directive (EU) 2019/178 included)	Scope and dates of applicability
Lead	7(a)	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85% by weight or more lead)	Applies to categories 1-7 and 10 (except applications covered by point 24 of this Annex) and expires on 21 July 2021. For categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments expires on 21 July 2021. For category 8 in vitro diagnostic medical devices expires on 21 July 2023. For category 9 industrial monitoring and control instruments, and for category 11 expires on 21 July 2024.
Lead	7(b)	Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, and network management for telecommunications	
	7(c)-l	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound	Applies to categories 1-7 and 10 (except applications covered under point 34) and expires on 21 July 2021. For categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments expires on 21 July 2021. For category 8 in vitro diagnostic medical devices expires on 21 July 2023. For category 9 industrial monitoring and control instruments, and for category 11 expires on 21 July 2024.
Lead	7(c)-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125V AC or 250V DC or higher	Does not apply to applications covered by point 7(c)-I and 7(c)-IV of this Annex. Expires on: - 21 July 2021 for categories 1-7 and 10; - 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments; - 21 July 2023 for category 8 in vitro diagnostic medical devices; - 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
	7(c)-III	Lead in dielectric ceramic in capacitors for a rated voltage of less than 125V AC or 250V DC	Expires on 1 January 2013 and after that date may be used in spare parts for EEE placed on the market before 1 January 2013
	7(c)-IV	Lead in PZT based dielectric ceramic materials for capacitors which are part of integrated circuits or discrete semiconductors	Expires on: - 21 July 2021 for categories 1-7 and 10; - 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments; - 21 July 2023 for category 8 in vitro diagnostic medical devices; - 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
	8(a)	Cadmium and its compounds in one shot pellet type thermal cut-offs	Expires on 1 January 2012 and after that date may be used in spare parts for EEE placed on the market before 1 January 2012
Cadmium	8(b)	Cadmium and its compounds in electrical contacts	Applies to categories 8, 9 and 11 and expires on: - 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments; - 21 July 2023 for category 8 in vitro diagnostic medical devices; - 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.

Substance	No.	Exemption (Directive (EU) 2019/178 included)	Scope and dates of applicability
	8(b)-I	Cadmium and its compounds in electrical contacts used in: - circuit breakers, - thermal sensing controls, - thermal motor protectors (excluding hermetic thermal motor protectors), - AC switches rated at: - 6 A and more at 250 V AC and more, or - 12 A and more at 125 V AC and more, - DC switches rated at 20 A and more at 18 V DC and more, and - switches for use at voltage supply frequency ≥ 200 Hz.	Applies to categories 1 to 7 and 10 and expires on 21 July 2021.
Hexavalent chromium	9	Hexavalent chromium as an anticorrosion agent of the carbon steel cooling system in absorption refrigerators up to 0.75% by weight in the cooling solution	
Lead	9(b)	Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications	Applies to categories 8, 9 and 11; expires on: - 21 July 2023 for category 8 in vitro diagnostic medical devices, - 21 July 2024 for category 9 industrial monitoring and control instruments and for category 11, - 21 July 2021 for other subcategories of categories 8 and 9.
Lead	9(b)-I	Lead in bearing shells and bushes for refrigerant- containing hermetic scroll compressors with a stated electrical power input equal or below 9 kW for heating, ventilation, air conditioning and refrigeration (HVACR) applications	Applies to category 1; expires on 21 July 2019.
	11(a)	Lead used in C-press compliant pin connector systems	May be used in spare parts for EEE placed on the market before 24 September 2010
Lead	11(b)	Lead used in other than C-press compliant pin connector systems	Expires on 1 January 2013 and after that date may be used in spare parts for EEE placed on the market before 1 January 2013
Lead	12	Lead as a coating material for the thermal conduction module C-ring	May be used in spare parts for EEE placed on the market before 24 September 2010
Lead	13(a)	Lead in white glasses used for optical applications	Applies to all categories; expires on: - 21 July 2023 for category 8 in vitro diagnostic medical devices; - 21 July 2024 for category 9 industrial monitoring and control instruments and for category 11; - 21 July 2021 for all other categories and subcategories
Lead/Cadmium	13(b)	Cadmium and lead in filter glasses and glasses used for reflectance standards	Applies to categories 8, 9 and 11; expires on: -21 July 2023 for category 8 in vitro diagnostic medical devices; -21 July 2024 for category 9 industrial monitoring and control instruments and for category 11; -21 July 2021 for other subcategories of categories 8 and 9
	13(b)-I	Lead in ion coloured optical filter glass types	
	13(b)-II	Cadmium in striking optical filter glass types; excluding applications falling under point 39 of this Annex	Applies to categories 1 to 7 and 10; expires on 21 July 2021 for categories 1 to 7 and 10
	13(b)-III	Cadmium and lead in glazes used for reflectance standards	
Lead	14	Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80% and less than 85% by weight	Expired on 1 January 2011 and after that date may be used in spare parts for EEE placed on the market before 1 January 2011
Lead	15	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	Applies to categories 8, 9 and 11 and expires on: - 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments; - 21 July 2023 for category 8 in vitro diagnostic medical devices; - 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.

Substance	No.	Exemption (Directive (EU) 2019/178 included)	Scope and dates of applicability
Lead	15(a)	Lead in solders to complete a viable electrical connection between the semiconductor die and carrier within integrated circuit flip chip packages where at least one of the following criteria applies: - a semiconductor technology node of 90 nm or larger; - a single die of 300 mm² or larger in any semiconductor technology node; - stacked die packages with die of 300 mm² or larger, or silicon interposers of 300 mm² or larger.	Applies to categories 1 to 7 and 10 and expires on 21 July 2021.
Lead	16	Lead in linear incandescent lamps with silicate coated tubes	Expires on 1 September 2013
Lead	17	Lead halide as radiant agent in high intensity discharge (HID) lamps used for	
		professional reprography applications	
Lead	18(a)	Lead as activator in the fluorescent powder (1% lead by weight or less) of discharge lamps when used as speciality lamps for diazoprinting reprography, lithography, insect traps, photochemical and curing processes containing phosphors such as SMS ((Sr,Ba) ₂ MgSi ₂ O ₇ :Pb)	Expired on 1 January 2011
Lead	18(b)	Lead as activator in the fluorescent powder (1% lead by weight or less) of discharge lamps when used as sun tanning lamps containing phosphors such as BSP (BaSi ₂ O ₅ :Pb)	Expires on: - 21 July 2021 for categories 1-7 and 10; - 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments; - 21 July 2023 for category 8 in vitro diagnostic medical devices; - 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
Lead	18(b)-I	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps containing phosphors such as BSP (BaSi $_2$ O $_5$:Pb) when used in medical phototherapy equipment	Applies to categories 5 and 8, excluding applications covered by entry 34 of Annex IV, and expires on 21 July 2021.
Lead	19	Lead with PbBiSn-Hg and PbInSn-Hg in specific compositions as main amalgam and with PbSn-Hg as auxiliary amalgam in very compact energy saving lamps (ESL)	Expires on 1 June 2011
Lead	20	Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCDs)	Expires on 1 June 2011
Lead/Cadmium	21	Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	Applies to categories 8, 9 and 11 and expires on: - 21 July 2021 for categories 8 and 9 other tha in vitro diagnostic medical devices and industrial monitoring and control instruments - 21 July 2023 for category 8 in vitro diagnostic medical devices; - 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
Cadmium	21(a)	Cadmium when used in colour printed glass to provide filtering functions, used as a component in lighting applications installed in displays and control panels of EEE	Applies to categories 1 to 7 and 10 except applications covered by entry 21(b) or entry 39 and expires on 21 July 2021.
Cadmium	21(b)	Cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	Applies to categories 1 to 7 and 10 except applications covered by entry 21(a) or 39 and expires on 21 July 2021.
Lead	21(c)	Lead in printing inks for the application of enamels on other than borosilicate glasses	Applies to categories 1 to 7 and 10 and expires on 21 July 2021.
Lead	23	Lead in finishes of fine pitch components other than connectors with a pitch of 0.65mm and less	May be used in spare parts for EEE placed on the market before 24 September 2010
Lead	24	Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors	Expires on: - 21 July 2021 for categories 1-7 and 10, - 21 July 2021 for categories 8 and 9 other tha in vitro diagnostic medical devices and industrial monitoring and control instruments, - 21 July 2023 for category 8 in vitro diagnostic medical devices, - 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
Lead	25	Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring	
	26	Lead oxide in the glass envelope of black light blue lamps	Expires on 1 June 2011

Substance	No.	Exemption (Directive (EU) 2019/178 included)	Scope and dates of applicability
Lead	27	Lead alloys as solder for transducers used in high-powered (designated to operate for several hours at acoustic power levels of 125dB SPL and above) loudspeakers	Expired on 24 September 2010
Lead	29	Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC	Expires on: - 21 July 2021 for categories 1-7 and 10; - 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and ontrol instruments; - 21 July 2023 for category 8 in vitro diagnostic medical devices; - 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
Cadmium	30	Cadmium alloys as electrical/mechanical solder joints to electrical conductors located directly on the voice coil in transducers used in high-powered loudspeakers with sound pressure levels of 100dB (A) and more	
Lead	31	Lead in soldering materials in mercury free flat fluorescent lamps (which, e.g. are used for liquid crystal displays, design or industrial lighting)	
Lead	32	Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes	Expires on: - 21 July 2021 for categories 1-7 and 10, - 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments, - 21 July 2023 for category 8 in vitro diagnostic medical devices, - 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
Lead	33	Lead in solders for the soldering of thin copper wires of 100µm diameter and less in power transformers	
Lead	34	Lead in cermet-based trimmer potentiometer elements	Applies to all categories; expires on: - 21 July 2021 for categories 1-7 and 10, - 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments, - 21 July 2023 for category 8 in vitro diagnostic medical devices, - 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
Mercury	36	Mercury used as a cathode sputtering inhibitor in DC plasma displays with a content up to 30mg per display	Expired on 1 July 2010
Lead	37	Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body	Expires on: - 21 July 2021 for categories 1-7 and 10; - 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments; - 21 July 2023 for category 8 in vitro diagnostic medical devices; - 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
Cadmium	38	Cadmium and cadmium oxide in thick film pastes used on aluminium bonded beryllium oxide	
Cadmium	39(a)	Cadmium selenide in downshifting cadmium-based semiconductor nanocrystal	Expires for all categories on [two years after the publication of the Delegated Directive in the Official Journal]
Cadmium	40	Cadmium in photoresistors for analogue optocouplers applied in professional audio equipment	Expires on 31 December 2013
Lead	41	Lead in solders and termination finishes of electrical and electronic components and finishes of printed circuit boards used in ignition modules and other electrical and electronic engine control systems, which for technical reasons must be mounted directly on or in the crankcase or cylinder of hand-held combustion engines (classes SH:1, SH:2, SH:3 of Directive 97/68/EC of the European Parliament and of the Council	Expires on 31 December 2018

Substance	No.	Exemption (Directive (EU) 2019/178 included)	Scope and dates of applicability
Lead	42		Applies to category 11, excluding applications covered by entry 6(c) of this Annex. Expires on 21 July 2024.

 $[\]ensuremath{^{*}}$ Always verify exemptions using the latest version of the RoHS directive master.

^{*} This table is an extract copy of the latest RoHS directive appendix at the time of the creation of the table. If there are any inconsistencies with the original, the original shall take precedence.

^{*} For inclusion other than the above applications, the thresholds shall be cadmium 0.01 wt%, lead, mercury, hexavalent chrome, PBB and PBDE 0.1 wt%.

RoHS Directive Annex IV; Medical devices and monitoring and control instruments

Substances	No.	Exemptions (Directive (ELL) 2016/1029 included)	Scope and dates of applicability
Equipment utilising or detect	ing ionisir	(Directive (EU) 2016/1029 included)	
Lead, Cadmium, Mercury	1	Lead, cadmium and mercury in detectors for ionising radiation.	
Lead, Cadmidin, Mercury	2	Lead bearing in X-ray tubes.	
Leau		Lead in electromagnetic radiation amplification devices: micro-channel plate and	
Lead	3	capillary plate.	
Lead	4	Lead in glass frit of X-ray tubes and omage intensifiers and lead in glass frit binder for assembly of gas lasers and for vacuum tubes that convert electromagnetic radiation into electrons.	
Lead	5	Lead in shielding for ionising radiation.	
Lead	6	Lead in X-ray test objects.	
Lead	7	Lead stearate X-ray diffraction crystals.	
Cadmium	8	Radioactive cadmium isotope source for portable X-ray fluorescence spectrometers.	
ensors, detectors and electr	odes		
Lead, Cadmium	1a	Lead and cadmium in ion selective electrodes including glass of pH electrodes.	
Lead	1b	Lead anodes in electrochemical oxygen sensors.	
Lead, Cadmium, Mercury	1c	Lead, cadmium and mercury in infra-red light detectors.	
		Mercury in reference electrodes: low chloride mercury chloride, mercury sulphate	
Mercury	1d	and mercury oxide.	
thers			
Cadmium	9	Cadmium in helium-cadmium lasers.	
Lead, Cadmium	10	Lead and cadmium in atomic absorption spectroscopy lamps.	
Lead	11	Lead in alloys as a superconductor and thermal conductor in MRI.	
Lead, Cadmium	12	Lead and cadmium in metallic bonds creating superconducting magnetic circuits in	Expires on 30 June 2021.
Lead	13	Lead in counterweights.	
Lead	14	Lead in single crystal piezoelectric materials for ultrasonic transducers.	
Lead	15	Lead in solders for bonding to ultrasonic transducers.	
Mercury	16	Mercury in very high accuracy capacitance and loss measurement bridges and in high frequency RF switches and relays in monitoring and control instruments not exceeding 20 mg of mercury per switch or relay.	
Lead	17	Lead in solders in portable emergency defibrillators.	
Lead	18	Lead in solders of high performance infrared imaging modules to detect in the range 8-14 µm.	
Lead	19	Lead in Liquid crystal on silicon (LCoS) displays.	
Cadmium	20	Cadmium in X-ray measurement filters.	
Cadmium	21	Cadmium in phosphor coatings in image intensifiers for X-ray images until 31 December 2019 and in spare parts for X-ray systems placed on the EU market before 1 January 2020.	
Lead	22	Lead acetate marker for use in stereotactic head frames for use with CT and MRI and in positioning systems for gamma beam and particle therapy equipment.	Expires on 30 June 2021.
Lead	23	Lead as an alloying element for bearings and wear surfaces in medical equipment exposed to ionising radiation.	Expires on 30 June 2021.
Lead	24	Lead enabling vacuum tight connections between aluminium and steel in X-ray image intensifiers.	Expires on 31 December 2019.
Lead	25	Lead in the surface coatings of pin connector systems requiring nonmagnetic connectors which are used durably at a temperature below – 20 °C under normal operating and storage conditions.	Expires on 30 June 2021.
Lead	26	Lead in the following applications that are used durably at a temperature below – 20 °C under normal operating and storage conditions: (a) solders on printed circuit boards; (b) termination coatings of electrical and electronic components and coatings of printed circuit boards; (c) solders for connecting wires and cables; (d) solders connecting transducers and sensors. Lead in solders of electrical connections to temperature measurement sensors in devices which are designed to be used periodically at temperatures below – 150 °C.	Expires on 30 June 2021.

Substances	No.	Exemptions	Scope and dates of applicability
Substances	140.	(Directive (EU) 2016/1029 included)	Scope and dates of applicability
Lead	27	Lead in — solders, — termination coatings of electrical and electronic components and printed circuit boards, — connections of electrical wires, shields and enclosed connectors, which are used in (a) magnetic fields within the sphere of 1 m radius around the isocentre of the magnet in medical magnetic resonance imaging equipment, including patient monitors designed to be used within this sphere, or (b) magnetic fields within 1 m distance from the external surfaces of cyclotron magnets, magnets for beam transport and beam direction control applied for particle therapy.	Expires on 30 June 2020.
Lead	28	Lead in solders for mounting cadmium telluride and cadmium zinc telluride digital array detectors to printed circuit boards.	Expires on 31 December 2017.
Lead	29	Lead in alloys, as a superconductor or thermal conductor, used in cryo-cooler cold heads and/or in cryo-cooled cold probes and/or in cryo-cooled equipotential bonding systems, in medical devices (category 8) and/or in industrial monitoring and control instruments.	Expires on 30 June 2021.
Hexavalent chromium	30	Hexavalent chromium in alkali dispensers used to create photocathodes in X-ray image intensifiers until 31 December 2019 and in spare parts for X-ray systems placed on the EU market before 1 January 2020.	
Lead, Cadmium, Hexavalent chromium	31 a	Lead, cadmium, hexavalent chromium, and polybrominated diphenyl ethers (PBDE) in spare parts recovered from and used for the repair or refurbishment of medical devices, including in vitro diagnostic medical devices, or electron microscopes and their accessories, provided that the reuse takes place in auditable closed-loop business-to-business return systems and that each reuse of parts is notified to the customer.	Expires on: (a) 21 July 2021 for the use in medical devices other than in vitro diagnostic medical devices; (b) 21 July 2023 for the use in in vitro diagnosti medical devices; (c) 21 July 2024 for the use in electron microscopes and their accessories.
Lead	32	Lead in solders on printed circuit boards of detectors and data acquisition units for Positron Emission Tomographs which are integrated into Magnetic Resonance Imaging equipment.	Expires on 31 December 2019.
Lead	33	Lead in solders on populated printed circuit boards used in Directive 93/42/EEC class IIa and IIb mobile medical devices other than portable emergency defibrillators.	Expires on 30 June 2016 for class IIa and on 31 December 2020 for class IIb.
Lead	34	Lead as an activator in the fluorescent powder of discharge lamps when used for extracorporeal photopheresis lamps containing BSP (BaSi 2 O 5 :Pb) phosphors.	Expires on 22 July 2021.
Mercury	35	Mercury in cold cathode fluorescent lamps for back-lighting liquid crystal displays, not exceeding 5 mg per lamp, used in industrial monitoring and control instruments placed on the market before 22 July 2017	21 July 2024
Lead	36	Lead used in other than C-press compliant pin connector systems for industrial monitoring and control instruments.	31 December 2020. May be used after that date in spare parts for industrial monitoring and control instruments placed on the market before 1 January 2021.
Lead	37	Lead in platinized platinum electrodes used for conductivity measurements where at least one of the following conditions applies: (a) wide-range measurements with a conductivity range covering more than 1 order of magnitude (e.g. range between 0.1 mS/m and 5 mS/m) in laboratory applications for unknown concentrations; (b) measurements of solutions where an accuracy of +/- 1 % of the sample range and where high corrosion resistance of the electrode are required for any of the following: (i) solutions with an acidity < pH 1; (ii) solutions with an alkalinity > pH 13; (iii) corrosive solutions containing halogen gas; (c) measurements of conductivities above 100 mS/m that must be performed with portable instruments.	31 December 2018.
Lead	38	Lead in solder in one interface of large area stacked die elements with more than 500 interconnects per interface which are used in X-ray detectors of computed tomography and X-ray systems.	31 December 2019. May be used that date in spare parts for CT and X-ray systems placed on the market before 1 January 2020.
Lead	39	Lead in micro-channel plates (MCPs) used in equipment where at least one of the following properties is present: (a) a compact size of the detector for electrons or ions, where the space for the detector is limited to a maximum of 3 mm/MCP (detector thickness + space for installation of the MCP), a maximum of 6 mm in total, and an alternative design yielding more space for the detector is scientifically and technically impracticable;	(a) 21 July 2021 for medical devices and monitoring and control instruments;

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Substances	No.	Exemptions (Directive (EU) 2016/1029 included)	Scope and dates of applicability
		 (b) a two-dimensional spatial resolution for detecting electrons or ions, where at least one of the following applies: (i) a response time shorter than 25 ns; (ii) a sample detection area lager than 149 mm²; (iii) a multiplication factor larger than 1.3 x 10³. 	(b) 21 July 2023 for in-vitro diagnostic medical devices;
		(c) a response time shorter than 5 ns for detecting electrons or ions;	(c) 21 July 2024 for industrial monitoring and control instruments.
		(d) a sample detection area larger than 314 mm2 for detecting electrons or ions; (e) a multiplication factor larger than 4.0×10^7 .	
Lead	40	Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC for industrial monitoring and control instruments.	31 December 2020. May be used after that date in spare parts for industrial monitoring and control instruments placed on the market before 1 January 2021.
Lead	41	Lead as a thermal stabiliser in polyvinyl chloride (PVC) used as base material in amperometric, potentiometric and conductometric electrochemical sensors which are used in in-vitro diagnostic medical devices for the analysis of blood and other body fluids and body gases.	Expires on 31 December 2018.
Mercury	42	Mercury in electric rotating connectors used in intravascular ultrasound imaging systems capable of high operating frequency (> 50 MHz) modes of operation.	Expires on 30 June 2019.
Cadmium	43	Cadmium anodes in Hersch cells for oxygen sensors used in industrial monitoring and control instruments, where sensitivity below 10 ppm is required.	Expires on 15 July 2023.

^{*} Always verify exemptions using the latest version of the RoHS directive master.

^{*} This table is an extract copy of the latest RoHS directive appendix at the time of the creation of the table. If there are any inconsistencies with the original, the original shall take precedence.

^{*} For inclusion other than the above applications, the thresholds shall be cadmium 0.01 wt%, lead, mercury, hexavalent chrome, PBB and PBDE 0.1 wt%.