HIOKI

Green Procurement Guidelines

Third Edition

HIOKI E.E. Corporation

-Contents-

1. Introduction

Thank you very much for your continued support and cooperation in our business activities.

In recent years, the global environment has been under serious jeopardy, including global warming, loss of biodiversity, and depletion of water and energy resources. In the future, there is a possibility that environmental problems will become even more serious as a result of economic development, and the role of corporations in environmental conservation has become increasingly important. HIOKI E.E. Corporation recognizes the environmental impact of its products and its activities of developing, manufacturing, selling and servicing electric measuring instruments. Based on its corporate philosophy of contributing to society, HIOKI E.E. Corporation collaborates with its business partners to develop environmentally friendly products and conduct environmental conservation activities in order to build a sustainable society. In order to reduce and harmonize the impact on the local environment and the irreplaceable global environment, the entire company conducts corporate activities that take the environment into consideration.

From this perspective, we have formulated our Green Procurement Guidelines to manufacture environmentally conscious products and have promoted activities to procure materials with low environmental impact with the cooperation of our suppliers.

In response to the acceleration of social regulations and industry trends toward the realization of a sustainable society, we have reviewed this report and published it as the third edition.

Cooperation of suppliers is indispensable for promoting green procurement activities. We will continue to strengthen our partnerships with business partners who observe these guidelines and work together to build a sustainable society.

We ask our business partners for their understanding of our objectives and the importance of our efforts, and for their continuing support and cooperation.

HIOKI E.E. Corporation
Materials Management Division

HIOKI Quality/Environmental Policy

Quality Policy: Management Guidelines "Best Customer Service"

・Provide high-quality products and services to earn the satisfaction and trust of our customers.

Environmental Policy: Management Guidelines "Contributing to the Realization of a Sustainable Society"

・Contribute to the realization of a sustainable society through business operations.

Please refer to the Social and Environmental Activities Report for the respective years presented in URL below.

https://www.hioki.co.jp/jp/csr/report/(Link)

2. For the environmentally preferable purchasing guidelines

-1. Overview

These guidelines set forth standards for environmental considerations (chemicals control, eco-design, disposal, etc.) when procuring raw materials and components used in HIOKI products.

This report presents the essential condition with which suppliers are expected to comply at least, and the assessment of suppliers' environmental efforts, which they want to consider.

-2. Purpose

Based on our quality and environmental policies, these guidelines aim to comply with environmental laws and regulations in each country, procure environmentally conscious materials, strive to reduce the use of chemical substances in harmful substances, and collect information so that downstream users can disclose information on the substances they contain.

-3. Scope of Application

We will apply the procurement of raw materials, components, supplies, etc. for production to all suppliers who deliver them to us, as well as to all suppliers who deliver them.

(OEM, our name Product resells, etc. are also treated as parts on our system when products are delivered. The scope of application also applies to consumables and auxiliary materials used within us.)

3. Requirements to Suppliers

[For manufacturers as suppliers]

We recommend that suppliers instruct manufacturers of parts and components procured for the manufacture of products, parts, and components to be delivered to us and secondary ~~processing~~ suppliers. We request them to work on environmental protection activities in accordance with these standards and confirm that they meet the requirements.

[When the business partner is a trading company]

We ask our suppliers to communicate these standards to the manufacturers of the products, parts, and parts that they deliver to us, and to instruct them to engage in environmental conservation activities in accordance with these standards.

In addition, we request that you collect information on the satisfaction of the standards from the manufacturers of the suppliers and provide it to us.

-1. Promoting Environmental Conservation at Suppliers

We ask our suppliers to make positive efforts to protect the environment (e.g., to formulate environmental policies, improve systems, implement education, etc.).

-2. Construction of management system

In order to continue to properly manage chemical substance management and conflict minerals, it is necessary to clarify management matters and establish systems at business partners.

HIOKI may confirm the status of management of suppliers when managing chemical substances and

conflict minerals in accordance with these procurement guidelines. We ask you to cooperate in doing so.
Recommended control system: ISO 14001, Eco-Action, etc.

-3. Control hazardous substances contained in procured raw materials and parts

We request the management of environmentally hazardous substances (non-use of banned substances, reports on the use of controlled substances, etc.) in accordance with the list of substances listed in the separate table for banned substances and controlled substances set forth by us.
In addition to our investigation and management, we may ask you to investigate and manage them in accordance with the requests of our customers, but we ask for your cooperation on each occasion.

（1） Prohibited Substances (Appendix)

Substances that have already been deliberately banned for use due to domestic and overseas laws and regulations, etc. Non-use of conflict minerals.
For substances with regulated values, the exclusion provisions of the relevant laws and regulations shall be within the limits.
In addition to the substances prohibited from being used (Level A substances) and those prohibited by REACH Regulations shown in the attached table, the substances that may be regulated in the future are covered.

[Applicable laws and regulations]

We select banned substances based on major domestic and overseas laws and regulations, etc. We will prohibit the use and inclusion of substances prohibited by law, etc. other than these substances.

[Domestic]
① Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Class I Specified Chemical Substances)
② Foreign Exchange and Foreign Trade Control Act (Export Trade Control Order)
③ Industrial Safety and Health Act
④ Act on the Protection of the Ozone Layer through Regulation of Specific Substances (Specific Substances under the Act)

[Overseas]
① EU-RoHS Directive (10-substance restriction)
② EU-REACH Regulations (Restricted Substances, Permitted Substances, SVHC Substances)
③ EU-European Parliament and Council Directive on Packaging and Packaging Waste
④ EU-CLP rules (mainly display requirements)
⑤ CMRT designated minerals, including the Dodd-Frank Act

※The above list also includes laws and regulations related to the substances controlled in (2) below.

[Operation of prohibited substances (mandatory condition)]

Prohibited substances are prohibited from being delivered on the same day.
Even if there is no designation in the drawing or order book, we ask you to deliver items that do not

contain prohibited substances. Pay special attention when proposing alternative parts.

In the unlikely event that the substance is found after delivery, contact our Materials Management Division promptly.

① Except where specified in particular by us.

② Excludes use due to exemption. (See the appendix to RoHS Directive for exemptions.)

(2) Substances under Management (Attached Table)

Subject to the controlled substances (Level B substances) and REACH Regulation SVHC shown in the attached table, and other substances that may be added in the future. (Controlled substances related to other applicable laws and regulations may be added from time to time.)

[Operation of controlled substances]

Currently, laws and regulations do not prohibit these products, but revisions to laws and regulations may prevent them from being used. Therefore, please proceed with switching to alternative products to the extent possible and ascertain the status of their use.

-4. Submission of Survey Report on Environmentally Hazardous Substances

Please reply to our request for a survey on the use of environment-related substances. Please use chemSHERPA format for the survey format. If this is not possible, please consult separately. Depending on the type of product to be delivered and necessity, the details of the investigation requested may differ.

Due to requests for responsible mineral sourcing, we may request responses regarding the use of conflict minerals, 3TG (tin, tantalum, tungsten, gold) and cobalt and mica in formats such as CMRT, CRTs, and MRTs.

In addition, we may conduct individual investigations into laws and regulations that stipulate the provision of information on content. In doing so, please submit the delivery data promptly (according to the specified delivery date).

※See below for CMRT formats.

http://www.responsiblemineralsinitiative.org/reporting-templates/cmrt/(Link)

http://www.responsiblemineralsinitiative.org/reporting-templates/cobalt-reporting-template/(Link)

※See JEITA

https://home.jeita.or.jp/mineral/2020seminar/pdf/2020_cmrt.pdf

4. Supplementary Rules (Version History)

1. Departure from May 10, 2013
2. Revised 1 January 2019
3. Revised: 3/1/2022

These guidelines are subject to revision without notice in consideration of domestic and overseas laws and regulations and social trends.

Above

Appended Table

Banned Substances and Controlled Substances

		No.	Name of substance	Target or use	Threshold ※1
Banned substances (Level A substances)		1	Tributyl Tin Oxide (TBTO)	Paints and pigments	1,000ppm
		2	Tributyl tins (TBTs) Triphenyl tins (TPTs)	Stabilizers and anti-oxide/aging agents	1,000ppm
		3	Polychlorinated Biphenyls (PCBs)	Insulation oil, lubricants, flame retardants	Deliberate additions
		4	Polychlorinated naphthane (Chlorine number is 3 or more)	Lubricants, coatings, resin stabilizers, flame retardants	Deliberate additions
		5	Short Chain Chlorinated Paraffins	Fire retardant, plasticizer	1,000ppm
		6	Asbestos	Electrical insulator, filler, gasket	Deliberate additions
		7	Azo colorants forming certain amines	Pigments and colorants for wire dressings ※Limited to areas of sustained contact with the human body	30ppm
		8	Ozone-Depleting Substances	Refrigerant	Deliberate additions
		9	Radioactive material	Packaging or wrapping material	Deliberate additions
		10	DBT (dibutyltin compound) DOT (dioctyltin compound)	Stabilizer for PVC, curing catalyst for silicone resin and urethane resin	1,000ppm
		11	Decabromodifenyl ether 1163-19-5 (DecaBDE)	Flame retardant added to synthetic resins (polyethylene, polystyrene, polyester, ABS, etc.)	
		12	Tris phosphate (isopropylphenyl) 68937-41-7 ※6	Flame-resistant plasticizers for PVC products	PIP (3:1) see
		13	Phenol 2,4,6(TTBP) 732-26-3	Liquid Lubricants and grease Additives/Anti-Oxidizing Additives	See TSCA Regulations
		14	Hexachloro-1,3-butadiene (HCBD) 87-68-3	For organic solvents, insecticides, and gyroscopes. Fluid, heat transfer material	
		15	Pentachlorothiophenol (PCTP) 133-49-3	Wood protective materials, plant growth regulators, herbicides	See TSCA Regulations
	ROHS 10 Goods Quality	16	Cadmium and its compounds ※2	Cadmium contained in all alloys containing zinc (brass, zinc die-casting, lead-free solder, etc.), plating, plastics, rubber, paint, etc.	100ppm ※3
		17	Lead and its compounds ※2	Lead contained in all categories except for various alloys and applicable exemptions	1,000ppm ※3
		18	Mercury and its compounds ※2	All mercury contained in light bulbs other than compact fluorescent lamps and straight fluorescent lamps	1,000ppm ※3
		19	Hexavalent chromium compounds ※2	All chromiums of six value contained in chromium processing, plating, paint, etc. Metal chromium and chromium in alloys are not covered	1,000ppm ※3
		20	Polybrominated Biphenyls (PBBs)	PBB included in all flame retardants, etc.	1,000ppm ※3
		21	Polybrominated diphenyl ethers (PBDEs)	PBDE contained in all flame retardants, etc.	1,000ppm ※3
		22	DEHP (di-2-ethylhexyl phthalate)*4	Plasticizers, pigments, dyes, paints, adhesives, etc.	1,000ppm ※3
		23	BBP (butylbenzil phthalate)*4	Plasticizers, pigments, dyes, paints, adhesives, etc.	1,000ppm ※3
		24	DBP (phthalate di-n-butyl4)	Plasticizers, pigments, dyes, paints, adhesives, etc.	1,000ppm ※3
		25	DIBP (diisobutyle phthalate)*4	Plasticizers, pigments, dyes, paints, adhesives, etc.	1,000ppm ※3
		26	Antimony and its compounds	Pigments, paints, lead-free resins, etc.	※5
		27	Arsenic and its compounds	Pigments, paints, dyes, flame retardants	※5

	No.	Name of substance	Target or use	Threshold ※1
	28	Beryllium and its compounds	Ceramics, alloys, catalysts, and solders	※5
	29	Bismuth and Bismuth Compounds	Glass, lead-free solder, free-cutting aluminum materials	※5
	30	Nickel and Nickel Compounds	Plating, Coatings, Pigments (Excluding Alloys)	※5
	31	Selenium and its compounds	Pigments and paints	※5
	32	Others (excluding PBBs and PBDE) Brominated Flame Retardants	Flame retardant	※5
	33	Polyvinyl chloride (PVC)	Resin, cord coating, plasticizer	※5
	34	Bisphenol A-type Epoxy	Paints, civil engineering, adhesion, electrical insulation materials, reaction intermediates, etc.	※5

※1 The threshold value in this table is the content rate in the homogeneous material.

※2 EU-Packaging Directive 4 substances Less than 100ppm by weight per package (lead, mercury, cadmium, hexavalent chromium)

※3 The use of the exemption is based on RoHS Directive.

※4 Delivery will be prohibited after April 1, 2019.

※5 Reporting of content may be required.

※6 2,4,6 tris (tert-butyle)

REACH Regulation SVHC Material List

●SVHC 1st Listing 15 Substances

	Name of substance	Substance name (English)	CAS No.
1	Dichlorocobalt (II)	Cobalt dichloride	7646-79-9
2	Disodium dichromate dihydrate	Sodium dichromate dehydrate	7789-12-0
3	Arsenic pentoxide	Diarsenic pentaoxide	1303-28-2
4	Arsenic trioxide	Diarsenic trioxide	1327-53-3
5	Lead hydrogen arsenate	Lead hydrogen arsenate	7784-40-9
6	Triethyl arsenate	Triethyl arsenate	15606-95-8
7	DIBUTYL PHTHALODE	Dibutyl phthalate	84-74-2
8	Bis(2-ethylhexyl) phthalate	Bis(2-ethyl(hexyl)phthalate) (DEHP)	117-81-7
9	Benzyl butyl phthalate	Benzyl butyl phthalate	85-68-7
10	Antrasen Corp.	Anthracene	120-12-7
11	Bis (tributylstannyl) oxide	Bis(tributyltin) oxide	56-35-9
12	Musk xylene	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2
13	Hexabromosyclododecane	Hexabromocyclododecane (HBCDD)	25637-99-4
14	Partial chlorinated paraffin (C10-C13)	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffi	85535-84-8
15	4,4'-methylenebisaniline	4,4'-Diaminodiphenylmethane	101-77-9

●SVHC Second Listing 15 Substances

	Name of substance	Substance name (English)	CAS No.
1	2,4-dinitrotoluer	2,4-Dinitrotoluene	121-14-2
2	Anthracene oil	Anthracene oil	90640-80-5
3	Anthrasen Oil, Anthrasen Past, Light Distilling	Anthracene oil, anthracene paste, distn. Lights	91995-17-4
4	Anthracene oil, anthracene paste, anthracene fraction	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2
5	Anthracene oil	Anthracene oil, anthracene-low	90640-82-7
6	Anthracene oil, anthracene paste	Anthracene oil, anthracene paste	90640-81-6
7	DIISOBTYL PHTHALE	Diisobutyl phthalate	84-69-5
8	Aluminosilicate, refractory ceramic fibers	Aluminosilicate, Refractory Ceramic Fibres	--
9	Zirconia Alumino Silicate and Refractorable Ceramic Fibers	Zirconia Aluminosilicate, Refractory Ceramic Fibres	--
10	Lead chromium acid	Lead chromate	7758-97-6
11	Molybdenum sulfate chromic acid lead, molybdenum red, C.I Pigmentred 104	Bis(tributyltin) Lead chromate molybdate sulfate red (C.I. Pigment Red 104)	12656-85-8
12	Yellow Lead, C.I Pigment Yellow 34	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2
13	2-chloroethyl	Tris(2-chloroethyl)phosphate	115-96-8
14	High temperature coal tar pitch	EU-Packaging Directive 4 substances Less than 100ppm by weight per package (lead, mercury, cadmium, hexavalent chromium)	
15	Acrylamide	Acrylamide	79-06-1

●SVHC Third Listing 8 Substances

	Name of substance	Substance name (English)	CAS No.
1	Trichloroethylene, trichlene	Trichloroethylene	79-01-6
2	Boronic Acid	Boric acid	10043-35-3 11113-50-1
3	SODIUM TETRABORATE	Disodium tetraborate	1303-96-4 1330-43-4 12179-04-3
4	Disodium tetraborate	Tetraboron disodium heptaoxide	12267-73-1
5	Sodium chromate	Sodium chromate	7775-11-3
6	Potassium chromate	Potassium chromate	7789-00-6
7	Ammonium dichromate	Ammonium dichromate	7789-09-5
8	Potassium dichromate	Potassium dichromate	7778-50-9

●SVHC Fourth Listed 8 Substances

	Name of substance	Substance name (English)	CAS No.
1	Cobalt sulfate (II)	Cobalt(II) sulphate	10124-43-3
2	Cobalt nitrate (II)	Cobalt(II) dinitrate	10141-05-6
3	Cobalt carbonate (II)	Cobalt(II) carbonate	513-79-1
4	Cobalt Acetate (II)	Cobalt(II) diacetate	71-48-7

REACH Regulation SVHC Material List

5	2-methoxyethanol, methyl cellosolve	2-Methoxyethanol	109-86-4
6	2-Ethoxyethanol, cellosolve	2-Ethoxyethanol	110-80-5
7	Chromium trioxide	Chromium trioxide	1333-82-0
8	Acid produced from chromium trioxide and its oligomers	Potassium	7738-94-5
	(Olygomers of chromic acid, nichromic acid/heavy chromic acid, chromic acid/nichromic acid)	Chromic acid, Dichromic acid, Oligomers of chromic acid dichromic acid	13530-68-2

REACH Regulation SVHC Material List

●SVHC Fifth Listed 7 Substances

	Name of substance	Substance name (English)	CAS No.
1	2-ETOXYTEL ACETHETICS	2-ethoxyethyl acetate	111-15-9
2	Strontium chromate	Strontium chromate	7789-06-2
3	1,2-benzenedicarboxylic acids, branched and straight chain alkyl esters with 7-11 carbon atoms	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4
4	Hydrazine	Hydrazine	7803-57-8 302-01-2
5	1-Methyl-2-pyrrolidone	1-methyl-2-pyrrolidone	872-50-4
6	1,2,3-trichloropropane	1,2,3-trichloropropane	96-18-4
7	The principal component is 1,2-Benzendicarbonic Acid and Side-Chain Hydrocarbons with 7 Carbons Phthalates with 6-8 carbon equivalents	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6

●SVHC Sixth Listing 20 Substances

	Name of substance	Substance name (English)	CAS No.
1	Tris (Chromete) Nichrome, Chrome Acid/Chrome (III)	Dichromium tris(chromate)	24613-89-6
2	Potassium hydroxyzinc chromate	Potassium hydroxyoctaoxodizincatedi-chromate	11103-86-9
3	Pentazinc chomate octahydroxide	Pentazinc chromate octahydroxide	49663-84-5
4	Aluminosilicate, refractory ceramic fibers	Aluminosilicate Refractory Ceramic Fibres (RCF)	--
5	Zirconia Alumino Silicate and Refractorable Ceramic Fibers	Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF)	--
6	Polymer of aniline and formaldehyde	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4
7	Bis(2-methoxyethyl) = phthalate	Bis(2-methoxyethyl) phthalate	117-82-8
8	2-Metxianiline	2-Methoxyaniline; o-Anisidine	90-04-0
9	4-(2,4,4-trimethanol?2?yl)	4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	140-66-9
10	1,2-dichloroethane	1,2-Dichloroethane	107-06-2
11	Diethylene glycol dimethyl ether	Bis(2-methoxyethyl) ether	111-96-6
12	Hyuric acid	Arsenic acid	7778-39-4
13	Calcium hydrocarbons	Calcium arsenate	7778-44-1
14	Lead(II) arsenate	Trilead diarsenate	3687-31-8
15	N,N-DIMETHYLACETAMIDE	N,N-dimethylacetamide (DMAC)	127-19-5
16	2,2'-dichloro-4,4'-methylenedianiline	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4
17	3,3-bis(4-hydroxyphenyl)isobenzofuran-1(3H)-one	Phenolphthalein	77-09-8
18	Lead azide (II)	Lead azide Lead diazide	13424-46-9
19	2,4,6-trinitro-1,3-Benzenediol lead (II) salt	Lead styphnate	15245-44-0
20	Lead dicipicrinate, bispiclinic acid lead (II), Lead (II) bis (2,4,6-trinitrobenzene-1-olate)	Lead dipicrate	6477-64-1

●SVHC Seventh Listing 13 Substances

	Name of substance	Substance name (English)	CAS No.
1	Triethylene glycol dimethyl ether	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2
2	Ethylene glycol dimethyl ether	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4
3	Boron trioxide (boron oxide)	Diboron trioxide	1303-86-2
4	Formamide	Formamide	75-12-7
5	Methane sulfonate lead (II)	Lead(II) bis(methanesulfonate)	17570-76-2
6	TGIC, 1,3,5-triglycidyl isocyanurate, triglycidyl isocyanurate	TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	2451-62-9
7	β-TGIC, 1,3,5-Tris(2,3-epoxypropyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (triglycidyl isocyanurate)	β-TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)	59653-74-6
8	4,4'-bis (dithy amino) benzophenone (Mihirarketon)	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8
9	N,N,N', N'-tetramethyl-4,4'-methylenedianiline (Michler base)	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1
10	4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-diene-1-ylidene]dimethylammonium chloride (C.I. basic violet 3)	4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9
11	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Blue 26)*	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	2580-56-5

REACH Regulation SVHC Material List

12	α, α-bis[4-(dichloromethane) ferry]-4-(ferrymino) naphthalene-1-methanol (C.I. Solvent Blue 4)*	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0
13	4,4'-Bis(dimethylamino)-4"-(methylamino)trityl alcohol*	4,4'-bis(dimethylamino)-4"-(methylamino)trityl alcohol	561-41-1

* When Miller ketone (EC No 202-027-5) or Miller base (EC No. 202-959-2) contains 0.1% or more

REACH Regulation SVHC Material List

●SVHC 8th Listing 54 Substances

	Name of substance	Substance name (English)	CAS No.
1	Decabromodiphenyl ether (deca BDE)	Bis(pentabromophenyl) ether (DecaBDE)	1163-19-5
2	Pentacosa Fluorotetradecanic acid	Pentacosafluorotridecanoic acid	72629-94-8
3	Tricosafluorodecanic acid	Tricosafluorododecanoic acid	307-55-1
4	Henicosa Fluoroundechanic acid	Henicosafluoroundecanoic acid	2058-94-8
5	Heptacosafluotetradecane acid	Heptacosafluorotetradecanoic acid	376-06-7
6	4-(1,1,3,3-tetramethylbutyl) phenol, ethoxylate	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated - covering well-defined substances and UVCB substances, polymers and homologues	-
7	4-Nonyl Phenol [sole and mixed of all isomers of nine-carbon straight-chain and branched alls, and mixtures (UVCB)]	4-Nonylphenol, branched and linear - substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof	-
8	Azodicalbonamide	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3
9	Cyclohexane-1,2-dicarboxylic anhydride	Hexahydro-2-benzofuran-1,3-dione (HHPA), cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride	85-42-7, 13149-00-3, 14166-21-3
10	Methylhexahydrophthalic anhydride, all isomers	Hexahydromethylphathalic anhydride, Hexahydro-4-methylphathalic anhydride, Hexahydro-1-methylphathalic anhydride, Hexahydro-3-methylphathalic anhydride	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9
11	Metxy Acid	Methoxy acetic acid	625-45-6
12	Di-pentyl phthalate, branched and straight chain	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0
13	Di-isopentyl phthalate	Diisopentylphthalate	605-50-5
14	N-pentyl-isopentyl phthalate	N-pentyl-isopentylphtalate	776297-69-9
15	Ethylene Glycol Diether	1,2-Diethoxyethane	629-14-1
16	N,N-dymhylformide	N,N-dimethylformamide; dimethyl formamide	1968/12/2
17	Dibutyldichlorostin Corp.	Dibutyltin dichloride (DBT)	683-18-1
18	Lead subacetate	Acetic acid, lead salt, basic	51404-69-4
19	Basic lead carbonate	Trilead bis(carbonate)dihydroxide (basic lead carbonate)	1319-46-6
20	Basic sulfate white lead	Lead oxide sulfate	12036-76-9
21	Dibasic lead phthalate	Phthalato(2-)]dioxotrilead	69011-06-9
22	Trilead dioxo Distearine	Dioxobis(stearato)trilead	12578-12-0
23	Fatty acid lead, C16-18	Fatty acids, C16-18, lead salts	91031-62-8
24	HFC	Lead bis(tetrafluoroborate)	13814-96-5
25	Cyanamide lead	Lead cyanamidate	20837-86-9
26	Lead nitrate	Lead dinitrate	10099-74-8
27	Lead oxide	Lead oxide (lead monoxide)	1317-36-8
28	Lead Four Oxides (Orange Lead)	Lead tetroxide (orange lead)	1314-41-6
29	Lead titanic acid	Lead titanium trioxide	12060-00-3
30	Lead zirconate titanate	Lead Titanium Zirconium Oxide	12626-81-2
31	Tetrabasic lead sulfate	Pentalead tetraoxide sulphate	12065-90-6
32	Pigment Yellow 41	Pyrochlore, antimony lead yellow	8012-00-8
33	Barium Silicate and Lead Dope	Silicic acid, barium salt, lead-doped	68784-75-8
34	Lead Silicates	Silicic acid, lead salt	11120-22-2
35	Base sulfuric acid lead	Sulfurous acid, lead salt, dibasic	62229-08-7
36	Four-ethyl lead	Tetraethyllead	78-00-2
37	Lead sulphate, tribasic	Tetralead trioxide sulphate	12202-17-4
38	Dibasic lead phosphite	Trilead dioxide phosphonate	12141-20-7
39	Furan	Furan	110-00-9
40	Propylene oxide	Propylene oxide; 1,2-epoxypropane; methyloxirane	75-56-9
41	Diethyl sulfate	Diethyl sulphate	64-67-5
42	Dimethanol sulfate	Dimethyl sulphate	77-78-1
43	3-ethyl-2-isopentyl-2-methyl-1,3-oxazolidine	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2
44	Ginoceb Corp.	Dinoseb	88-85-7
45	4,4'-methylenebis-o-toluidine	4,4'-methylenedi-o-toluidine	838-88-0
46	4,4'-Oxydianiline and its salt	4,4'-oxydianiline and its salts	101-80-4
47	4-Amino azobenzene	4-Aminoazobenzene; 4-Phenylazoaniline	1960/9/3
48	4-methyl-m-phenylenediamine	4-methyl-m-phenylenediamine (2,4-toluene-diamine)	95-80-7
49	2-methoxy-5-methylaniline	6-methoxy-m-toluidine (p-cresidine)	120-71-8
50	Bifenyl-4-iramin	Biphenyl-4-ylamine	92-67-1
51	o-Amino Azotoluene	o-aminoazotoluene	97-56-3
52	o-toruidine	o-Toluidine; 2-Aminotoluene	95-53-4
53	N-METHYLACETAMIDE	N-methylacetamide	79-16-3

REACH Regulation SVHC Material List

54	1-bromopropane	1-bromopropane	106-94-5

REACH Regulation SVHC Material List

●SVHC 9th Listing 10 Substances

	Name of substance	Substance name (English)	CAS No.
1	Cadmium	Cadmium	7440-43-9
2	Cadmium oxide	Cadmium oxide	1306-19-0
3	Dipentyl phthalate and diamyl phthalate (DPP)	Dipentyl phthalate (DPP)	131-18-0
4	4-Nonylphenol, branched and linear ethoxylates [including those ethoxylated containing any of the individual isomers and combinations thereof of materials with covalently linked straight and/or branched alkyl chains of carbon number 9 at the position of 4 of the phenol, UVCB and well-defined materials (materials of known composition, etc.), polymers and congeners]	4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]	-
5	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3
6	2-(2H-benzotriazol-2-yl)-4,6-di-tert-pentylphenol (UV-328)	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1
7	2,4-Di-butyl tert--6-(5-chlorobenzotriazole-2-yl)phenol (UV-327)	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1
8	2-Benzotriazol-2-il-4, 6-di tert-butylphenol (UV-	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7
9	Ammonium pentadecafluorooctanoate, ammonium perfluorooctanoate, ammonium perfluorooctanoate (APFO)	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1
10	Pentadecafluorooctanoic acid, perfluorooctanoic acid, and perfluorooctanoic acid (PFOA)	Pentadecafluorooctanoic acid (PFOA)	335-67-1

●SVHC 10th Listing 7 Substances

	Name of substance	Name of substance	CAS No.
1	Cadmium sulfide, cadmium sulfide (II), and cadmium sulphide	Cadmium sulphide	1306-23-6
2	3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulfonate)disodium, Congo Red (C.I. Direct Red 28)	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0
3	4-amino-3-[[4'-[(2,4-diaminophenyl)azo]-[1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disodium disodium, chlorazole black E (C.I. Direct Black 38)	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7
4	Dihexyl phthalate, dihexyl phthalate, di-n-hexyl phthalate	Dihexyl phthalate	84-75-3
5	Imidazolidine-2-thione, 2-imidazolidine thione, N,N'-ethylenethiourea; 2-imidazoline-2-thiol	Imidazolidine-2-thione; 2-imidazoline-2-thiol	96-45-7
6	Lead Acetate (II), Bis Acetate Lead (II), Lead Di Acetate (II)	Lead di(acetate)	301-04-2
7	Trixylenyl phosphate, tri(dimethylphenyl) phosphate, and tris(dimethylphenyl) phosphate	Trixylyl phosphate	25155-23-1

●SVHC 11th Listing Four Substances

	Name of substance	Name of substance	CAS No.
1	Dichlorocadmium	Cadmium chloride	10108-64-2
2	1,2-benzenedicarboxylic acid, dihexyl ester, branched and straight chain	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4
3	Sodium peroxoborate and sodium perborate	Sodium peroxometaborate	7632-04-4
4	Sodium perborate; Perborate, Sodium salt	Sodium perborate; perboric acid, sodium salt	-

●SVHC 12th Listing 6 Substances

	Name of substance	Name of substance	CAS No.
1	Cadmium fluoride	Cadmium fluoride	7790-79-6
2	Cadmium Sulfurate (II), Cadmium Sulfurate (II) Anhydrous and Hydraulic	Cadmium sulphate	10124-36-4; 31119-53-6
3	2-Benzotriazol-2-il-4, 6-di tert-butylphenol (UV-	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7
4	2-(2H-benzotriazol-2-yl)-4,6-di-tert-pentylphenol (UV-328)	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1

REACH Regulation SVHC Material List

5	2-ethylhexyl (DOTE) 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1
6	10-ethyl-4,4-dichlor-7-oxa-8-oxa-3,5-dithia-4-dinatetradecane 2-ethyl hexil and 10-ethyl-4 [-[-(-2(ethylhexil)oxie]-2-oxoethio]-4-octar-7-oxa-8-oxa-3,5-ditia-4-stannatetradename 2-ethyl hexil response products (DOTE and MOTE response products)*	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	-

REACH Regulation SVHC Material List

●SVHC 13th Listing 2 Substances

	Name of substance	Name of substance	CAS No.
1	1,2-benzenedicarboxylic acid, di-C6-10-alkyl ester; Mixtures of 1,2-benzenedicarboxylic acid, decyl hexyl octyl diester, and 0.3% or more dihexyl phthalate (EC No. 201-559-5)	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)	68515-51-5、68648-93-1
2	5-sec-butyl-2-(2,4-dimethylcyclohexa-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohexa-3-en-1-yl)-5-methyl-1,3-dioxane [2] (including individual stereoisomers of [1] and [2], or combinations thereof)	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]	-

●SVHC 14th Listing 5 Substances

	Name of substance	Name of substance	CAS No.
1	Nitrobenzene	Nitrobenzene	98-95-3
2	2,4-Di-butyl tert--6-(5-chlorobenzotriazole-2-yl)phenol (UV-327)	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1
3	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3
4	1,3-propane sultone	1,3-propanesultone	1120-71-4
5	Perfluoronan-1-acid (2,2,3,3,4,4,5,5,6,6,7,7, 8,8,9,9,9-Heptadecafloropononanoic acid, Salt and ammonium salt)	Perfluorononan-1-oic acid (2,2,3,3,4,4,5,5,6,6,7,7, 8,8,9,9,9-heptadecafluoropononanoic acid And its sodium and ammonium salts	375-95-1、21049-39-8、4149-60-4

●SVHC 15th Listing 1 Substances

	Name of substance	Name of substance	CAS No.
1	Benzo[def]chrysene (benzo[a]pyrene)	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8

●SVHC 16th Listing Four Substances

	Name of substance	Name of substance	CAS No.
1	4,4'-Isopropylidene diphenol (bisphenol A), BPA, 2,2-bis(p-hydroxyphenyl)propane, etc.	4,4'-isopropylidenediphenol (bisphenol A; BPA)	80-05-7
2	Nonadena Fluorolodecanic acid (PFDA) and its salt and ammonium salt (nonadeca fluorocarbonate, nonadeca fluorocarbonate, and nonadeca fluorocarbonate)	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	335-76-2、3830-45-3、3108-42-7
3	p-(1,1-dimethylpropyl)phenol, 4-tert-amylphenol,	p-(1,1-dimethylpropyl)phenol	80-46-6
4	4-heptylphenol, branched and linear [including UVCB and well-defined materials (materials with known compositions, etc.) containing any of the following: materials in which straight and/or branched alkyl chains of carbon number 7 are covalently bonded at the position of 4 of phenol, individual isomers and combinations thereof]	4-heptylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	-

●SVHC 17th Listing 1 Substances

	Name of substance	Name of substance	CAS No.
1	Tridecafluoro-1-hexane sulfonate, perfluorohexane sulfonate, perfluorohexane sulfonate and its salts	Perfluorohexane-1-sulphonic acid and its salts	355-46-4

REACH Regulation SVHC Material List

●SVHC 18th Listing 7 Substances

	Name of substance	Name of substance	CAS No.
1	Chrysene, benzo[a]phenanthrene	Chrysene	218-01-9 (1719-03-5)
2	Benz[a]anthracene	Benz[a]anthracene	56-55-3 (1718-53-2)
3	Cadmium nitrate	Cadmium nitrate	10325-94-7 (10022-68-1)
4	Cadmium hydrocarbons	Cadmium hydroxide	21041-95-2
5	Cadmium carbonate	Cadmium carbonate	513-78-0
6	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentasicycle [12.2.1.16, 9.02, 13.05, 10] octadeca-7,15-diene ("decolor lamps" TM) [Includes isomers or combinations of individual anti- and syn-]	1,6,7,8,9,14,15,16,17,17,18,18- Dodecachloropentacyclo [12.2.1.16,9.02,13.05,10] octadeca-7,15-diene ("Dechlorane Plus"TM) [covering any of its individual anti- and syn-isomers or any combination thereof]	-
7	Reactive organisms of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde, 4-heptylphenol, branched and linear (RP-homepage) [0.1wt% or more of 4-heptylphenol, branched and linear]	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) [with ?0.1% w/w 4-heptylphenol, branched and linear	-

●SVHC 19th Listing 10 Substances

	Name of substance	Name of substance	CAS No.
1	Octamethylcyclotetrasiloxane (D4)	Octamethylcyclotetrasiloxane (D4)	556-67-2
2	Decamethylcyclopentasiloxane (D5)	Decamethylcyclopentasiloxane (D5)	541-02-6
3	Dodecamethylcyclohexasiloxane (D6)	Dodecamethylcyclohexasiloxane (D6)	540-97-6
4	Lead	Lead	7439-92-1
5	Disodium octoborate	Disodium octaborate	12008-41-2
6	Benzo[ghi]perylene	Benzo[ghi]perylene	191-24-2
7	Hydrogenated terphenyl, hydrogenated terphenyl	Terphenyl hydrogenated	61788-32-7
8	Ethylene amines	Ethylenediamine (EDA)	107-15-3
9	1,2,4-benzenetricarboxylic acid 1,2-anhydride (trimellitic anhydride), trimellitic anhydride	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride) (TMA)	552-30-7
10	Dicyclohexyl phthalate (DCHP)	Dicyclohexyl phthalate (DCHP)	84-61-7

※1 For the most recent list of SVHC candidates, please refer to ECHA(EUROPIAN CHEMICALS AGENCY) website.
http://echa.europa.eu/news-and-events/news-alerts

※2 Please contact our Development Promotion Division Chemical Substance Survey Representative for the investigation of prohibited substances and controlled substances.

E-mail : info-GreenSurvey@hioki.co.jp