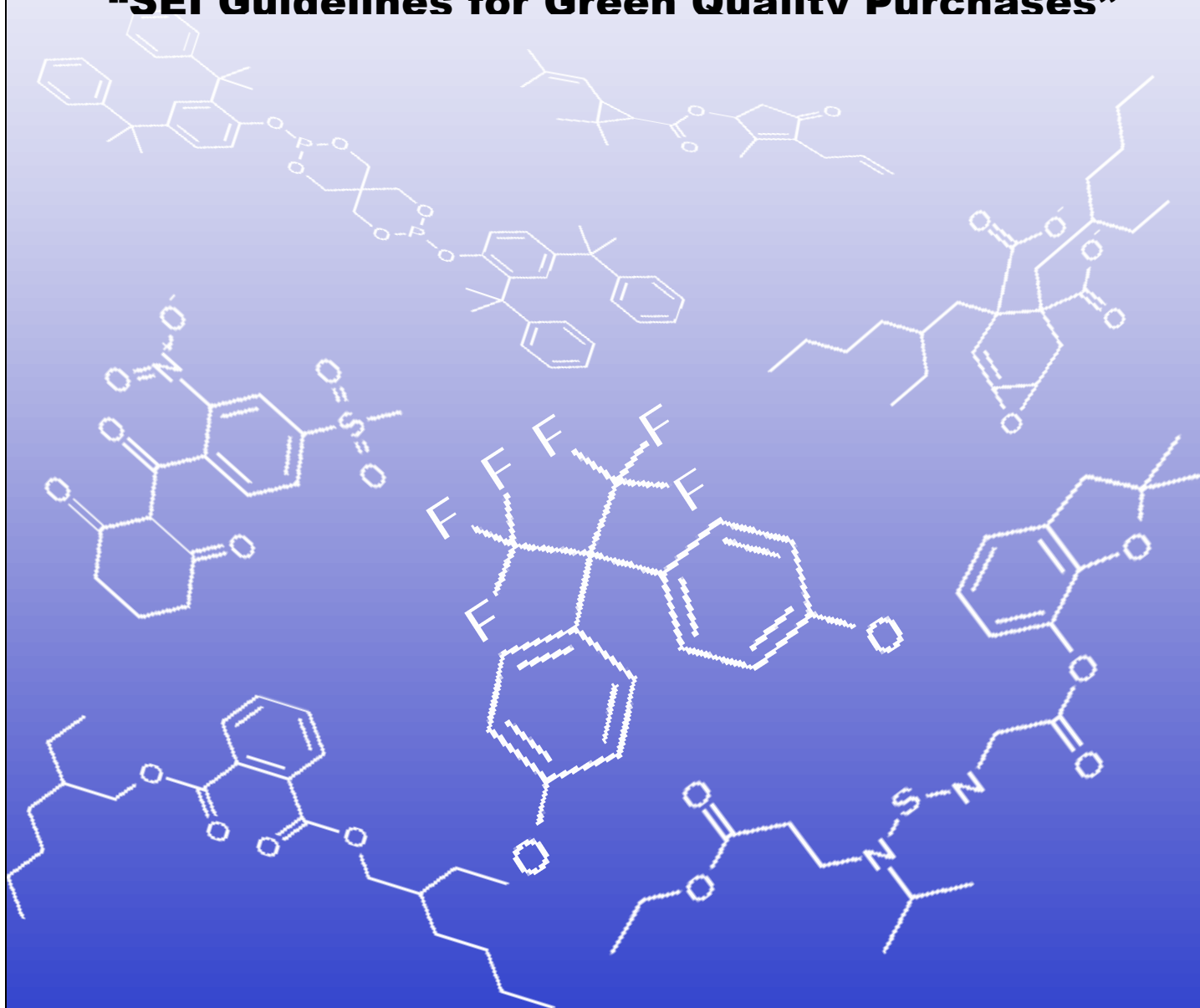


SEI Standards for Chemical Substance Management

Annex I to

“SEI Guidelines for Green Quality Purchases”



Nov. 2013 Ver 2.0

SUMITOMO ELECTRIC INDUSTRIES, LTD.

SEI Standards for Chemical Substance Management

This standard was established as an annex to “SEI Guidelines for Green Quality Purchases” for the purpose to control chemical substances in goods sold to company belonging to Sumitomo Electric Industry group (“SEI group”)*. This standard provides “prohibited substances”, “controlled substances” and “substances to be eliminated from supplier’s manufacturing process” *

+: As to definitions and terms, refer to the table below and TABLE 6.

TABLE 1. Prohibited Substances

TABLE 2. Controlled Substances

TABLE 3. Substances to be eliminated from supplier’s manufacturing process

TABLE 4. Criteria for judgment concerning the report on declarable substances

TABLE 5. Reference lists of prohibited substances in products (A01–A22, B01)

TABLE 6. Terms and definitions

According to “SEI Guidelines for Green Quality Purchases”, chemical substances to be prohibited or controlled are classified into four (4) ranks, from rank A to D, and controlled in accordance with rules defined for each rank. As to object to be controlled of each rank, refer to the table below.

Substance category	Control rank	Object to be controlled		
		Substance	Mixture	Article
Prohibited substances	Rank A	●	●	●
	Rank B	●	●	
Controlled substances	Rank C	○	○	○
	Rank D	○	○	

● : Prohibited substance shall not be contained in goods sold to SEI group above concentration threshold of each substance, except that relevant legal exception or exemption which permits inclusion of such substance, e.g. RoHS exemption, is applicable.

In case where prohibited substance is contained within threshold value or exception or exemption is applicable to its inclusion, relevant information about its inclusion[§] shall be disclosed by supplier.

○ : Controlled substances shall be disclosed their inclusion, presence or absence, in goods delivered to SEI group. In case of inclusion relevant information about its inclusion[§] shall be disclosed by supplier.

This standard is not covering all of legal regulations and/or SEI’s internal rules for controlling hazardous substances (e.g. “Hazardous Materials of Fire Service Act” or “Specific Chemical Substances of Industrial Safety and Health Law” are not subject to this standard). Therefore purchased goods containing one or more chemical substance which is subject to legal regulation and not listed in this standard shall meet all of relevant requirements that may be established by law or by SEI.

#: In case where a member company of SEI group may request chemical substance control according to different standards, supplier shall preferentially comply with those standards.

§: “Relevant information about inclusion” shall at least include chemical ID, like name and CAS No., content, containing part and use of each contained substances.

Revision History

AS “Standards for chemical substances in products”#

Ver. 1.0	Document ID No.	Date of issue
	KAN 12-003	Jul. 01, 2012
Revision summary	– Established as “Standards for chemical substances in products” by separating lists for chemical substance to be prohibited or controlled from “SEI Green Quality Guidelines for Purchased Items”.	
Ver. 2.0	Document ID No.	Date of issue
	KAN 13-003	Nov. 01, 2013
Revision summary	<ul style="list-style-type: none"> – TABLE 6, “Terms and definitions”, is added. – Description about typical exemption under each legal regulation is deleted from this standard and references for each regulation were added instead. – Chemical substances to be prohibited or controlled are classified into four (4) ranks, from rank A to D. – Missing footnotes were filled. – Substance group of “PCB’s and PCT’s” was divided into two gropes, “PCB’s” and “PCT’s”. – “Specific benzotriazole” was added to list of prohibited substance as A20 of rank A substances. – Class I Specified Chemical Substances of Japanese Chemical Substances Control Law and substances banned from manufacturing by Japanese Industrial Safety and Health Law were changed their category from controlled substance to prohibited substance. – To add dioctyltin compound to prohibited substances “A07 Dibutyltin compounds” was changed to “A07 Dibutyltin compounds and Dioctyltin compounds” – According to Annex XVII to REACH regulation “A06 Tributyltin compounds(TBT’s) and Triphenyltin compounds(TPT’s)” was changed “A06 Tri-substituted organostannic compounds (e.g. Tributyltin compounds(TBT’s)) and Triphenyltin compounds(TPT’s)” 	

#: As to the revision history prior to establishment of Ver1.0 of this standard, refer to the revision history of “SEI Green Quality Guidelines for Purchased Items”.

TABLE 1. PROHIBITED SUBSTANCES

SEI's prohibited substances are listed in TABLE.1-1 and -2. TABLE 1-1 refers to prohibited substances classified in rank A, substances prohibited from containing in substance, mixture and article sold to SEI group, and table 1-2 refers to prohibited substances classified in rank B, prohibited from containing in substance and mixture sold to SEI group. As to details about threshold concentration and use, table 5 should be referred. And as to exemptions from legislation, current provisions shall be referred §.

§: In case where prohibited substance is contained in goods within legally defined threshold value or exception or exemption is applicable to its inclusion, relevant information about its inclusion shall be disclosed by supplier.

TABLE 1-1. Rank A (prohibited from containing in substance, mixture and article)

No.	Classification	Substance and substance group specification	Reference table
A01	Metals and metal compounds	Cadmium and cadmium compounds	Ref. TABLE 5-A01
A02		Hexavalent chromium compounds	Ref. TABLE 5-A02
A03		Lead and lead compounds	Ref. TABLE 5-A03
A04		Mercury and mercury compounds	Ref. TABLE 5-A04
A05		Bis(tri-n-butyltin) oxide (TBTO)	Ref. TABLE 5-A05
A06		Tri-substituted organostannic compounds (e.g. Tributyltin Compounds (TBTs) and Triphenyltin Compounds (TPTs))	Ref. TABLE 5-A06
A07		Dibutyltin compounds and Dioctyltin compounds	Ref. TABLE 5-A07
A08	Halogenated organic compounds	Polybrominated biphenyls (PBBs)	Ref. TABLE 5-A08
A09		Polybrominated diphenyl ethers (PBDEs)	Ref. TABLE 5-A09
A10		Polychlorinated biphenyls (PCBs)	Ref. TABLE 5-A10
A11		Polychlorinated terphenyls (PCTs)	Ref. TABLE 5-A11
A12		Polychloronaphthalenes (limited to compounds with number of chlorine atoms 3 or more)	Ref. TABLE 5-A12
A13		Specific short-chain chlorinated paraffins (number of carbon atoms 10-13)	Ref. TABLE 5-A13
A14		Perfluorooctane sulphonates (PFOS) and their salts	Ref. TABLE 5-A14
A15	Others	Asbestos	Ref. TABLE 5-A15
A16		Specific azocolourants and azodyes (which form specific aromatic amines) in textile and leather applications only	Ref. TABLE 5-A16
A17		Ozone depleting substances	Ref. TABLE 5-A17
A18		Radioactive substances	Ref. TABLE 5-A18
A19		Dimethylfumarate (DMF)	Ref. TABLE 5-A19
A20		Specific benzotriazole	Ref. TABLE 5-A20
A21		Class I Specified Chemical Substances of Japanese Chemical Substances Control Law (being limited to substances not specified in this table as other rank A substance)	Ref. TABLE 5-A21
A22		Substances banned from manufacturing by Japanese Industrial Safety and Health Law(§) (being limited to substances not specified in this table as other rank A substance)	Ref. TABLE 5-A22

#: Substance specified by paragraph (1) of the Order for Enforcement of the Industrial Safety and Health Act.

TABLE 1-2. Rank B (prohibited from containing in substance and mixture)

No.	Substance and substance group specification	Reference table
B01	Volatile organochlorine compound (being limited to specific toxic substance of Soil Contamination Countermeasures Act)	Ref. TABLE 5-B01

TABLE 2. CONTROLLED SUBSTANCES

SEI's "Controlled Substances" are listed in TABLE 2-1 and -2. TABLE 2-1 refers to substances classified into rank C substance. Substances specified as rank C substance shall be known relevant information about their inclusion[#] in substance, mixture and article and also be required to disclose such information to SEI group. TABLE 2-2 refers to controlled substances classified in rank D substance. Substances specified as rank D substance shall be known relevant information about their inclusion^{*} and also be required to disclose such information to SEI group.

[#]: "Relevant information about inclusion" shall involve chemical identification, like name and CAS No., concentration, containing part and use of included substances at least.

TABLE 2-1 Rank C (Controlled its inclusion in substance, mixture and article)

No.	Classification	Substance and substance group specification	note
C01	Part of JAMP declarable substances ^{*1,*2}	Poisonous and Deleterious Substances Control Law: Specified Poisonous Substances (This list collects a specified order of the promulgation revision on August 15, 2007) ^{*3}	Other than prohibited substances or mixture of this standard.
		Substances classified to CMR-Cat. 1 or 2 in ANNEX VI to EU CLP regulation, REGULATION (EC) No 1272/2008	
		Substances listed in ANNEX XVII (Restricted substances) for EU REACH regulation, REGULATION (EC) No 1907/2006 (Other than EU CLP regulation Annex VI TABLE3.2 CMR-Cat.1,2)	
		Substances listed in candidate list for authorization of EU REACH regulation, REGULATION (EC) No 1907/2006 [http://echa.europa.eu/web/guest/candidate-list-table]	
		Substances classified as PBT in ESIS, European chemical Substances Information System [http://esis.jrc.ec.europa.eu/index.php?PGM=pbt]	
		Substances listed in GADSL, Global Automotive Declarable Substance List [http://www.gadsl.org/]	
		Substances specified as Criteria 1, Currently Regulated substances, in substance list of IEC62474 ^{*4} (Material Declaration for Products of and for the Electrotechnical Industry) [http://std.iec.ch/iec62474/iec62474.nsf/welcome?openpage]	

*1: Declarable substances lists established by JAMP, Joint Article Management Promotion-consortium. It might be revised according to the amendment of law or lists for chemical substance regulation. Therefore the latest version shall be always applied. (in case of using JAMP tools like MSDSplus or AIS, version 4.3 or later shall be used to refer to newest substance lists at any time)

[JAMP Declarable substances list] <http://www.jamp-info.com/list>

*2: Not identical to JAMP declarable substance lists. Subset of SEI's Rank A substances, A21 and A22, are included in JAMP declarable substance list but in C01.

*3: Refer to web site of National Institute of Health Science (Database for Poisonous and Deleterious Substances Control Law)

<http://www.nihs.go.jp/law/dokugeki/dokugeki.html>

*4: International committee providing standards for criteria and protocol for managing and exchanging chemical composition data of electrotechnical products. Established by IEC (International Electrotechnical Commission) and providing substance lists having its roots in JIG (Joint Industry Guide).

TABLE 2-2 Rank D (Controlled its inclusion in substance and mixture)*5

No.	Substance and substance group specification	Note
D01	Poisonous and Deleterious Substances Control Law: Specified as deleterious substance*3	Other than substances or mixture specified as Rank A, B or C in this standard.
	Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof:	
	Specified as Class I or Class II Designated Chemical Substances *6	
	Act on Promotion of Global Warming Countermeasures: Greenhouse Gases*7	

*5: Declaration of information about inclusion, like substance name, CAS No. and inclusion rate is required to describe in its (M)SDS.

*6: Ministry of Economy, Trade and Industry (Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof)
http://www.meti.go.jp/policy/chemical_management/law/msds/2.html

*7: Ministry of the Environment (Reporting of carbon dioxide equivalent greenhouse gas emissions)
http://ghg-santeikohyo.env.go.jp/files/about_documet/gaiyo201306.pdf

TABLE 3. SUBSTANCES TO BE ELIMINATED FROM SUPPLIER'S MANUFACTURING PROCESS
(Substances specified as "substances to be eliminated" by Montreal Protocol and Law concerning the Protection of the Ozone Layer through the Control of Specified Substances and Other Measures)

No.	Substance group	Substance grope of Montreal Protocol	Deadline for total elimination	Exemption
1	Chlorofluorocarbons (CFCs)	A-I	Immediately	· Refrigerants for air conditioner, refrigeration etc, fire extinguisher · Items exempted in Montreal Protocol (examples shown below)
2	Halons	A-II		
3	Hydrobromofluorocarbons (HBFCs)	C-II		
4	Carbon tetrachloride	B-II		
5	1,1,1- trichloroethane	B-III		
6	Methyl bromide	C-III		
7	Bromochloromethane	E-I	Year 2020	
8	Hydrochlorofluorocarbons (HCFCs)	C-I		

TABLE 4. CRITERIA FOR JUDGEMENT CONCERNING THE REPORT ON DECLARABLE SUBSTANCES
*(adapted from "JAMP AIS-MSDSplus Practical Guide") *8*

Legal threshold value (Note A)	Concentration (Note B)	Non-intentional inclusion (Note C)	Intentional addition (Note D)
Yes	Threshold value or higher	To be reported	To be reported
	Less than threshold value	Not necessary to be reported (However, it is necessary to report if any of condition shown Note E is met)	
No	0.1wt% or higher	To be reported	
	Less than 0.1wt%	Not necessary to be reported (However, it is necessary to report if any of condition shown Note E is met)	

Note A: The "Legal threshold value" refers to the concentration specified by the laws and regulations mentioned in connection with JAMP's declarable substances. As to details about threshold values refer to "JAMP AIS MSDSplus Practical Guide".

Note B: The concentration is estimated with analytical and theoretical estimates as well as past control achievements.

Note C: "Non-intentional inclusion" refer to cases where chemical substances are "known to be contained" except those "intentionally added" as shown in Note 8.

Note D: "Intentional addition" refers to "cases where chemical substances are added (contained) in order to give specific characteristics to the objects." The inclusion as impurities, reactive by-products, decomposed materials, residual monomer in polymer or something which are not supposed to be included intentionally, does not constitute "intentional addition" but "non-intentional inclusion".

Note E: If any of certain conditions provided in "JAMP AIS MSDSplus practical guide" is met, the inclusion of declarable substances is to be reported. As to details about them refer to "JAMP AIS MSDSplus Practical Guide".

*8: In case of using other material declaration tools, for example JAMA/JAPIA sheet, IMDS or JGPSSI (IEC62321), criteria for those tools should be complied.

TABLE 5. REFERENCE LISTS OF PROHIBITED SUBSTANCES IN PRODUCTS (A01-A22, B01)

(Following lists do not cover all the relevant substances and/or their information. Those lists refer to only typical substances and information. It is necessary to check original legal provisions before significant decision like applying exemptions.)

TABLE. 5-A01 Cadmium and Cadmium Compounds

Legislative Requirement		Major Legislation
Regulation	Application	
Less than 100ppm * ⁹	Packaging material	EU Directive 94/62/EC (EU Directive on Packaging and Packaging Waste)
Less than 20ppm	Portable batteries or accumulators	EU Directive 2006/66/EC (EU Battery Directive)
Less than 100ppm	Other those above (For resin(including rubber), paint, ink, pigment and dye, concentration shall be evaluated in dry state)	Act on the Promotion of Effective Utilization of Resources (J-Moss), EU RoHS Directive, EU ELV Directive, China RoHS, Korean RoHS
Substance name		CAS No.
Cadmium		7440-43-9
Cadmium oxide		1306-19-0
Cadmium sulfide		1306-23-6
Cadmium chloride		10108-64-2
Cadmium sulfate		10124-36-4
Other cadmium compounds		-

TABLE. 5-A02 Hexavalent Chromium Compounds

Legislative Requirement		Major Legislation
Regulation	Application	
Less than 100ppm * ⁹	Packaging material	EU Directive 94/62/EC(EU Directive on Packaging and Packaging Waste)
Less than 1000ppm	Other than those above	Act on the Promotion of Effective Utilization of Resources (J-Moss), EU RoHS Directive, EU ELV Directive, China RoHS, Korean RoHS
Substance name		EC No. CAS No.
Chromium (VI) oxide		- 1333-82-0
Barium chromate		- 10294-40-3
Calcium chromate		- 13765-19-0
Lead (II) chromate		231-846-0 7758-97-6
Lead chromate molybdate sulfate		235-759-9 12656-85-8
C.I. Pigment yellow 34 (lead sulfochromate yellow)		215-693-7 1344-37-2
Sodium chromate		- 7775-11-3
Sodium dichromate		- 10588-01-9
Strontium chromate		- 7789-06-2
Potassium dichromate		- 7778-50-9
Potassium chromate		- 7789-00-6
Zinc chromate		- 13530-65-9
Other hexavalent chromium compounds		-

TABLE. 5-A03 Lead and Lead Compounds

Legislative Requirement		Major Legislation
Regulation	Application	
Less than 100ppm * ⁹	Packaging material	EU Directive 94/62/EC(EU Directive on Packaging and Packaging Waste)
Prohibited from intentional using or less than 300ppm	Surface contact layer of the Cord	US(CA)Proposition65
Less than 1000ppm	Other than those above	Act on the Promotion of Effective Utilization of Resources (J-Moss), EU RoHS Directive , EU ELV Directive, China RoHS, Korean RoHS
Substance name	EC No.	CAS No.
Lead	—	7439-92-1
Lead(II) sulfate	—	7446-14-2
Lead(II) carbonate	—	598-63-0
Lead(II) chromate	231-846-0	7758-97-6
lead chromate molybdate sulfate	235-759-9	12656-85-8
Lead hydroxidcarbonate	—	1319-46-6
Lead acetate	—	301-04-2
Lead (II) acetate, trihydrate	—	6080-56-4
Lead phosphate	—	7446-27-7
Lead selenide	—	12069-00-0
Lead (IV) oxide	—	1309-60-0
Lead (II, IV) oxide	—	1314-41-6
Lead (II) sulfide	—	1314-87-0
Lead (II) oxide	—	1317-36-8
Lead(II) carbonate basic	—	1319-46-6
Lead hydroxidcarbonate	—	1344-36-1
Lead phosphate	—	7446-27-7
C.I. Pigment yellow 34 (lead sulfochromate yellow)	215-693-7	1344-37-2
Lead(II) titanate	—	12060-00-3
Lead sulfate, sulphuric acid, lead salt	—	15739-80-7
Lead sulphate,tribasic	—	12202-17-4
Lead stearate	—	1072-35-1
Other lead compounds	—	—

TABLE. 5-A04 Mercury and Mercury Compounds

Legislative Requirement		Major Legislation
Regulation	Application	
Less than 100ppm * ⁹	Packaging material	EU Directive 94/62/EC(EU Directive on Packaging and Packaging Waste)
Less than 5ppm	All batteries or accumulators	EU Directive 2006/66/EC(EU Battery Directive)
Less than 1000ppm	Other than described above	Act on the Promotion of Effective Utilization of Resources (J-Moss), EU RoHS Directive, China RoHS, Korean RoHS
Substance name	CAS No.	
Mercury	7439-97-6	
Mercuric chloride	33631-63-9	
Mercury (II) chloride	7487-94-7	
Mercuric sulfate	7783-35-9	
Mercuric nitrate	10045-94-0	
Mercuric (II) oxide	21908-53-2	
Mercuric sulfide	1344-48-5	
Other mercury compounds	—	

TABLE. 5-A05 Bis(tri-n-butyltin) oxide

Legislative Requirement		Major Legislation
Less than 1000ppm ^{*10} in any products		Class 1 specified chemical substances of Act on the Evaluation of Chemical Substances and Regulation of their Manufacture, etc. EU REACH Regulation ANNEX XVII (Restricted substance)
Substance name	EC No.	CAS No.
Bis(tri-n-butyltin) oxide	200-268-0	56-35-9

TABLE. 5-A06 Tri-substituted Organostannic Compounds

(e.g. Tributyltin Compounds (TBTs) and Triphenyltin Compounds (TPTs))

Legislative Requirement	Major Legislation
Less than 1000ppm ^{*10} in any products	Class 1 specified chemical substances of Act on the Evaluation of Chemical Substances and Regulation of their Manufacture, etc. EU REACH Regulation ANNEX XVII (Restricted substance)
Substance name	CAS No.
Triphenyltin=N, N-dimethyldithiocarbamate	1803-12-9
Triphenyltinfluoride	379-52-2
Triphenyltinacetate	900-95-8
Triphenyltinchloride	639-58-7
Triphenyltinhydroxide	76-87-9
Triphenyltin fattyacid((9-11)salt)	18380-71-7, 18380-72-8, 47672-31-1, 94850-90-5
Triphenyltinchloroacetate	7094-94-2
Tributyltinmethacrylate	2155-70-6
Bis (tributyltin) fumalate	6454-35-9
Tributyltinfluoride	1983-10-4
Bis (tributyltin) 2, 3-dibromosuccinate	31732-71-5
Tributyltinacetate	56-36-0
Tributyltinlaurate	3090-36-6
Bis (tributyltin) phthalate	4782-29-0
Copolymer of alkyl (c=8) acrylate, methyl methacrylate and tributyltin methacrylate	67772-01-4
Tributyltinsulfamate	6517-25-5
Bis (tributyltin) maleate	14275-57-1
Tributyltinchloride	1461-22-9, 7342-38-3
Tributyltin cyclopentane carbonat=mixture	85409-17-2
Tributyltin-1, 2, 3, 4, 4a, 4b, 5, 6, 10, 10a-decahydro-7-isopropyl-1, 4a-dimethyl-1-phenanthrenecarboxylatemix	26239-64-5
Other trisubstituted organotin compounds (Specified as restricted substances of REACH Regulation. Not limited to Class 1 specified chemical substances of Act on the Evaluation of Chemical Substances and Regulation of their Manufacture, etc.)	—

TABLE. 5-A07 Dibutyltin Compounds and Dioctyltin Compounds

Legislative Requirement	Major Legislation
Less than 1000ppm ^{*10} in any products	EU REACH Regulation ANNEX XVII (Restricted substance)
Substance name	CAS No.
Dibutyltin oxide	818-08-6
Dibutyltin diacetate	1067-33-0
Dibutyltindilaurate	77-58-7
Di-n-butyl(maleate)tin	78-04-6
Other dibutyltin compounds	—
Dioctyltin oxide	870-08-6
Diisooctyl 2,2'-[(dioctylstannylene)bis(thio)]diacetate	26401-97-8
Dioctyltin maleate	16091-18-2
Diisooctyl 2,2'-[(dibutylstannylene)bis(thio)]diacetate	25168-24-5
Other dioctyltin compounds	—

TABLE. 5-A08 Polybrominated Biphenyls (PBBs)

Legislative Requirement	Major Legislation
Less than 1000ppm in any products	Act on the Promotion of Effective Utilization of Resources (J-Moss), EU RoHS Directive, China RoHS, Korean RoHS
Substance name	CAS No.
Polybrominated Biphenyls	59536-65-1
Dibromobiphenyl	92-86-4
2-Bromobiphenyl	2052-07-5
3-Bromobiphenyl	2113-57-7
4-Bromobiphenyl	92-66-0
Tribromobiphenyl	59080-34-1
Tetrabromobiphenyl	40088-45-7
Pentabromobiphenyl	56307-79-0
Hexabromobiphenyl	59080-40-9
hexabromo-1,1-biphenyl	36355-01-8
Firemaster FF-1	67774-32-7
Heptabromobiphenyl	35194-78-6
Octabromobiphenyl	61288-13-9
Nonabiphenyl	27753-52-2
Decabromobiphenyl	13654-09-6

TABLE. 5-A09 Polybromodiphenyl Ethers (PBDEs)

Legislative Requirement	Major Legislation
Less than 1000ppm in any products	Act on the Promotion of Effective Utilization of Resources (J-Moss), EU RoSH Directive, China RoSH, Korean RoSH
Substance name	CAS No.
Bromodiphenyl ether	101-55-3
Dibromodiphenyl ethers	2050-47-7
Tribromodiphenyl ether	49690-94-0
Tetrabromodiphenyl ethers	40088-47-9
Pentabromodiphenyl ether (note: Commercially available PeBDPO is a complex reaction mixture containing a variety of brominated diphenyloxides.)	32534-81-9 (CAS No. used for Commercial grades of PeBDPO)
Hexabromodiphenyl ether	36483-60-0
Heptabromodiphenylether	68928-80-3
Octabromodiphenyl ether	32536-52-0
Nonabromodiphenylether	63936-56-1
Decabromodiphenyl ether	1163-19-5

Tabel. 5-A10 Polychlorinated Biphenyls (PCBs)

Legislative Requirement	Major Legislation
Prohibited from intentional using*11 in any products	Class 1 specified chemical substances of Act on the Evaluation of Chemical Substances and Regulation of their Manufacture, etc. Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes EU REACH Regulation ANNEX XVII (Restricted substance)
Substance name	CAS No.
Polychlorinated Biphenyls	1336-36-3
Monomethyl-tetrachloro-diphenyl methane (Ugilec 141)	76253-60-6
Monomethyl-dichloro-diphenyl methane (Ugilec 121, Ugilec 21)	81161-70-8
Monomethyl-dibromo-diphenyl methane (DBBT)	99688-47-8

Tabel. 5-A11 Polychlorinated Terphenyls (PCTs)

Legislative Requirement	Major Legislation
Less than 50ppm in any products	EU REACH Regulation ANNEX XVII (Restricted substance)
Substance name	CAS No.
Polychlorinated Terphenyls (including every isomer and homologue)	61788-33-8

TABLE. 5-A12 Polychlorinated Naphthalenes (containing 3 or more chlorides)

Legislative Requirement	Major Legislation
Prohibited from intentional using *11 in any products	Class 1 specified chemical substances of Act on the Evaluation of Chemical Substances and Regulation of their Manufacture, etc.
Substance name	CAS No.
Polychlorinated Naphthalenes	70776-03-3
Other polychlorinated Naphthalenes	—

TABLE. 5-RA13 Short Chain Chlorinated Paraffins (SCCPs, C10-C13)

Legislative Requirement		Major Legislation
Prohibited from intentional using ^{*11} in any products		EU REACH Regulation Annex XVII(Restricted substance)
Substance name	EC No.	CAS No.
Chlorinated paraffins (C10-13)	287-476-5	85535-84-8
Chlorinated paraffins (C10-12)	—	108171-26-2
Chlorinated paraffins (C12-13)	—	71011-12-6
Chlorinated paraffins	—	61788-76-9
Other short-chain Chlorinated paraffins	—	—

TABLE. 5-A14 Perfluorooctane Sulfonates (PFOS) and their salts

Legislative Requirement	Major Legislation
Regulation	
Prohibited from intentional using in any products	Class 1 specified chemical substances of Act on the Evaluation of Chemical Substances and Regulation of their Manufacture, etc. Stockholm Convention on Persistent Organic Pollutants.
Substance name	CAS No.
Perfluorooctane sulfonates (PFOS) C8F17SO2X (X=—OR, —NR or other derivatives)	—

TABLE. 5-A15 Asbestos

Legislative Requirement	Major Legislation
Prohibited from intentional using and less than 1000ppm*2 in any products	Air Pollution Control Act(Specified dust), Industrial Safety and Health Law: Prohibition of Manufacturing, etc. and Permission for Manufacturing, EU REACH Regulation ANNEX XVII (Restricted substance)
Substance name	CAS No.
Asbestos	1332-21-4
Actinolite	77536-66-4
Amosite (Grunerite)	12172-73-5
Anthophyllite	77536-67-5
Chrysotile	12001-29-5
Crocidolite	12001-28-4
Tremolite	77536-68-6

TABLE. 5-A16 Azo pigments and azo dyes which form specific aromatic amines (only for textile and leather)*¹²

Legislative Requirement	Major Legislation
Less than 30ppm (as specific amine) in any products	EU REACH Regulation ANNEX XVII (Restricted substance)
Substance name	CAS No.
Biphenyl-4-ylamine	92-67-1
Benzidine	92-87-5
4-Chloro-o-toluidine	95-69-2
2-Naphthylamine	91-59-8
o-Aminoazotoluene	97-56-3
5-Nitro-o-toluidine	99-55-8
4-Chloroaniline	106-47-8
4-Methoxy-m-phenylenediamine	615-05-4
4, 4'-Methylenedianiline	101-77-9
3, 3'-Dichlorobenzidine	91-94-1
3, 3'-Dimethoxybenzidine	119-90-4
3, 3'-Dimethylbenzidine	119-93-7
4, 4'-Methylenedi-o-toluidine	838-88-0
6-Methoxy-m-toluidine	120-71-8
4, 4'-Methylene-bis (2-chloroaniline)	101-14-4
4,4'-Oxydianiline	101-80-4
4, 4'-Thiodianiline	139-65-1
o-Toluidine	95-53-4
4-Methyl-m-phenylenediamine	95-80-7
2, 4, 5-Trimethylaniline	137-17-7
o-Anisidine	90-04-0
4-Amino azobenzene	60-09-3

TABLE. 5-A17 Ozone Depleting Substances*13

Chlorofluorocarbons (CFC), Halons, Hydrobromofluorocarbons (HBFC), Hydrochlorofluorocarbons (HCFC) and others

Legislative Requirement	Major Legislation
Prohibited from intentional using in any products	Act for Protection of the Ozone Layer through Regulation of Designated Substances, etc. Montreal Protocol
Substance name	CAS No.
Trichlorofluoromethane (CFC-11)	75-69-4
Dichlorodifluoromethane (CFC-12)	75-71-8
Chlorotrifluoromethane (CFC-13)	75-72-9
Pentachlorofluoroethane (CFC-111)	354-56-3
Tetrachlorodifluoroethane (CFC-112)	76-12-0
1,1,2,2-Tetrachloro-1,2-difluoroethane (CFC-112)	76-12-0
1,1,1,2-Tetrachloro-2,2-difluoroethane (CFC-112a)	76-11-9
Trichlorotrifluoroethane (CFC-113)	76-13-1
1,1,2-Trichloro-1,2,2-trifluoroethane (CFC-113)	76-13-1
1,1,1-Trichloro-2,2,2-trifluoroethane (CFC-113a)	354-58-5
Dichlorotetrafluoroethane (CFC-114)	76-14-2
Monochloropentafluoroethane (CFC-115)	76-15-3
Heptachlorofluoropropane (CFC-211)	422-78-6, 135401-87-5
1,1,1,2,2,3,3-Heptachloro-3-fluoropropane (CFC-211aa)	422-78-6
1,1,1,2,3,3,3-Heptachloro-2-fluoropropane (CFC-211ba)	422-81-1
Hexachlorodifluoropropane (CFC-212)	3182-26-1
Pentachlorotrifluoropropane (CFC-213)	2354-06-5, 134237-31-3
Tetrachlorotetrafluoropropane (CFC-214)	29255-31-0
1,2,2,3-Tetrachloro-1,1,3,3-tetrafluoropropane (CFC-214aa)	2268-46-4
1,1,1,3-Tetrachloro-2,2,3,3-tetrafluoropropane (CFC-214cb)	-
Trichloropentafluoropropane (CFC-215)	1599-41-3
1,2,2-Trichloropentafluoropropane (CFC-215aa)	1599-41-3
1,2,3-Trichloropentafluoropropane (CFC-215ba)	76-17-5
1,1,2-Trichloropentafluoropropane (CFC-215bb)	-
1,1,3-Trichloropentafluoropropane (CFC-215ca)	-
1,1,1-Trichloropentafluoropropane (CFC-215cb)	4259-43-2
Dichlorohexafluoropropane (CFC-216)	661-97-2
Monochloroheptafluoropropane (CFC-217)	422-86-6
Bromochloromethane (Halon 1011)	74-97-5
Dibromodifluoromethane (Halon-1202)	75-61-6
Bromochlorodifluoromethane (Halon-1211)	353-59-3
Bromotrifluoromethane (Halon-1301)	75-63-8
Dibromotetrafluoroethane (Halon-2402)	124-73-2
Carbon Tetrachloride (Tetrachloromethane)	56-23-5
1, 1, 1, - Trichloroethane (methyl chloroform) and its isomers except 1, 1, 2-trichloroethane	71-55-6
Bromomethane (Methyl Bromide)	74-83-9
Bromoethane	74-96-4
1-Bromopropane (n-Propyl bromide)	106-94-5
Iodotrifluoromethane (Trifluoromethyl iodide)	2314-97-8
Chloromethane (Methyl chloride)	74-87-3
Dibromofluoromethane (HBFC-21 B2)	1868-53-7
Bromodifluoromethane (HBFC-22B1)	1511-62-2
Bromofluoromethane (HBFC-31 B1)	373-52-4
Tetrabromofluoroethane (HBFC-121 B4)	306-80-9
Tribromodifluoroethane (HBFC-122 B3)	-
Dibromotrifluoroethane (HBFC-123 B2)	354-04-1
Bromotetrafluoroethane (HBFC-124 B1)	124-72-1
Tribromofluoroethane (HBFC-131 B3)	-
Dibromodifluoroethane (HBFC-132 B2)	75-82-1
Bromotrifluoroethane (HBFC-133 B1)	421-06-7
Dibromofluoroethane (HBFC-141 B2)	358-97-4
Bromodifluoroethane (HBFC-142 B1)	420-47-3
Bromofluoroethane (HBFC-151 B1)	762-49-2
Hexabromofluoropropane (HBFC-221 B6)	-
Pentabromodifluoropropane (HBFC-222 B5)	-

Substance name	CAS No.
Tetrabromotrifluoropropane (HBFC-223 B4)	-
Tribromotetrafluoropropane (HBFC-224 B3)	-
Dibromopentafluoropropane (HBFC-225 B2)	431-78-7
Bromohexafluoropropane (HBFC-226 B1)	2252-78-0
Pentabromofluoropropane (HBFC-231 B5)	-
Tetrabromodifluoropropane (HBFC-232 B4)	-
Tribromotrifluoropropane (HBFC-233 B3)	-
Dibromotetrafluoropropane (HBFC-234 B2)	-
Bromopentafluoropropane (HBFC-235 B1)	460-88-8
Tetrabromofluoropropane (HBFC-241 B4)	-
Tribromodifluoropropane (HBFC-242 B3)	70192-80-2
Dibromotrifluoropropane (HBFC-243 B2)	431-21-0
Bromotetrafluoropropane (HBFC-244 B1)	679-84-5
Tribromofluoropropane (HBFC-251 B3)	75372-14-4
Dibromodifluoropropane (HBFC-252 B2)	460-25-3
Bromotrifluoropropane (HBFC-253 B1)	421-46-5
Dibromofluoropropane (HBFC-261 B2)	51584-26-0
Bromodifluoropropane (HBFC-262 B1)	-
Bromofluoropropane (HBFC-271 B1)	1871-72-3
Dichlorofluoromethane (HCFC-21)	75-43-4
Chlorodifluoromethane (HCFC-22)	75-45-6
Chlorofluoromethane (HCFC31)	593-70-4
Tetrachlorofluoroethane (HCFC 121)	134237-32-4
1,1,2,2-Tetrachloro-1-fluoroethane (HCFC-121)	354-14-3
1,1,1,2-Tetrachloro-2-fluoroethane (HCFC-121a)	354-11-0
Trichlorodifluoroethane (HCFC-122)	41834-16-6
1,2,2-Trichloro-1,1-difluoroethane (HCFC-122)	354-21-2
1,1,2-Trichloro-1,2-difluoroethane (HCFC-122a)	354-15-4
1,1,1-Trichloro-2,2-difluoroethane (HCFC-122b)	354-12-1
Dichlorotrifluoroethane (HCFC-123)	34077-87-7
1,1-Dichloro-2,2,2-trifluoroethane (HCFC-123)	306-83-2
1,2-Dichloro-1,1,2-trifluoroethane (HCFC-123a)	354-23-4, 90454-18-5
1,1-Dichloro-1,2,2-trifluoroethane (HCFC-123b)	812-04-4
Chlorotetrafluoroethane (HCFC-124)	63938-10-3
2-Chloro-1,1,1,2-tetrafluoroethane (HCFC-124)	2837-89-0
1-Chloro-1,1,2,2-tetrafluoroethane (HCFC-124a)	354-25-6
Trichlorofluoroethane (HCFC-131)	27154-33-2, (134237-34-6)
1,1,2-Trichloro-2-fluoroethane (HCFC-131)	359-28-4
1,1,2-Trichloro-1-fluoroethane (HCFC-131a)	811-95-0
1,1,1-Trichloro-2-fluoroethane (HCFC-131b)	2366-36-1
Dichlorodifluoroethane (HCFC-132)	25915-78-0
1,2-Dichloro-1,2-difluoroethane (HCFC-132)	431-06-1
1,1-Dichloro-2,2-difluoroethane (HCFC-132a)	471-43-2
1,2-Dichloro-1,1-difluoroethane (HCFC-132b)	1649-08-7
1,1-Dichloro-1,2-difluoroethane (HCFC-132c)	1842-05-3
Chlorotrifluoroethane (HCFC-133)	1330-45-6, 431-07-2
1-Chloro-1,2,2-trifluoroethane (HCFC-133)	1330-45-6
2-Chloro-1,1,1-trifluoroethane (HCFC-133a)	75-88-7
1-Chloro-1,1,2-trifluoroethane (HCFC-133b)	421-04-5
Dichlorofluoroethane (HCFC-141)	1717-00-6, (25167-88-8)
1,2-Dichloro-1-fluoroethane (HCFC-141)	430-57-9
1,1-Dichloro-2-fluoroethane (HCFC-141a)	430-53-5
1,1-Dichloro-1-fluoroethane (HCFC-141b)	1717-00-6
Chlorodifluoroethane (HCFC-142)	25497-29-4
2-Chloro-1,1-difluoroethane (HCFC-142)	338-65-8
1-Chloro-1,1-difluoroethane (HCFC-142b)	75-68-3
1-Chloro-1,2-difluoroethane (HCFC-142a)	338-64-7
Chlorofluoroethane (HCFC-151)	110587-14-9
1-Chloro-2-fluoroethane (HCFC-151)	762-50-5
1-Chloro-1-fluoroethane (HCFC-151a)	1615-75-4
Hexachlorofluoropropane (HCFC-221)	134237-35-7, 29470-94-8
1,1,1,2,2,3-Hexachloro-3-fluoropropane (HCFC-221ab)	422-26-4
Pentachlorodifluoropropane (HCFC- 222)	134237-36-8

Substance name	CAS No.
1,1,1,3,3-Pentachloro-2,2-difluoropropane (HCFC- 222ca)	422-49-1
1,2,2,3,3-Pentachloro-1,1-difluoropropane (HCFC-222aa)	422-30-0
Tetrachlorotrifluoropropane (HCFC-223)	134237-37-9
1,1,3,3-Tetrachloro-1,2,2-trifluoropropane (HCFC-223ca)	422-52-6
1,1,1,3-Tetrachloro-2,2,3-trifluoropropane (HCFC-223cb)	422-50-4
Trichlorotetrafluoropropane (HCFC- 224)	134237-38-0
1,3,3-Trichloro-1,1,2,2-tetrafluoropropane (HCFC- 224ca)	422-54-8
1,1,3-Trichloro-1,2,2,3-tetrafluoropropane (HCFC-224cb)	422-53-7
1,1,1-Trichloro-2,2,3,3-tetrafluoropropane (HCFC-224cc)	422-51-7
Dichloropentafluoropropane (HCFC-225)	127564-92-5
2,2-Dichloro-1,1,1,3,3-pentafluoropropane (HCFC-225aa)	128903-21-9
2,3-Dichloro-1,1,1,2,3-pentafluoropropane (HCFC-225ba)	422-48-0
1,2-Dichloro-1,1,2,3,3-pentafluoropropane (HCFC-225bb)	422-44-6
3,3-Dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)	422-56-0
1,3-Dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)	507-55-1
1,1-Dichloro-1,2,2,3,3-pentafluoropropane (HCFC-225cc)	13474-88-9
1,2-Dichloro-1,1,3,3,3-pentafluoropropane (HCFC-225da)	431-86-7
1,3-Dichloro-1,1,2,3,3-pentafluoropropane (HCFC-225ea)	136013-79-1
1,1-Dichloro-1,2,3,3,3-pentafluoropropane (HCFC-225eb)	111512-56-2
Chlorohexafluoropropane (HCFC-226)	134308-72-8
2-Chloro-1,1,1,3,3,3-hexafluoropropane (HCFC-226da)	431-87-8
Pentachlorofluoropropane (HCFC- 231)	134190-48-0
1,1,1,2,3-Pentachloro-2-fluoropropane (HCFC-231bb)	421-94-3
Tetrachlorodifluoropropane (HCFC-232)	134237-39-1
1,1,1,3-Tetrachloro-3,3-difluoropropane (HCFC-232fc)	460-89-9
Trichlorotrifluoropropane (HCFC-233)	134237-40-4
1,1,1-Trichloro-3,3,3-trifluoropropane (HCFC-233fb)	7125-83-9
Dichlorotetrafluoropropane (HCFC-234)	127564-83-4
1,2-Dichloro-1,2,3,3-tetrafluoropropane (HCFC-234db)	425-94-5
Chloropentafluoropropane (HCFC-235)	134237-41-5
1-Chloro-1,1,3,3,3-pentafluoropropane (HCFC-235fa)	460-92-4
Tetrachlorofluoropropane (HCFC-241)	134190-49-1
1,1,2,3-Tetrachloro-1-fluoropropane (HCFC-241db)	666-27-3
Trichlorodifluoropropane (HCFC-242)	134237-42-6
1,3,3-Trichloro-1,1-difluoropropane (HCFC-242fa)	460-63-9
Dichlorotrifluoropropane (HCFC-243)	134237-43-7
1,1-Dichloro-1,2,2-trifluoropropane (HCFC-243cc)	7125-99-7
2,3-Dichloro-1,1,1-trifluoropropane (HCFC-243db)	338-75-0
3,3-Dichloro-1,1,1-trifluoropropane (HCFC-243fa)	460-69-5
Chlorotetrafluoropropane (HCFC-244)	134190-50-4
3-Chloro-1,1,2,2-tetrafluoropropane (HCFC-244ca)	679-85-6
1-Chloro-1,1,2,2-tetrafluoropropane (HCFC-244cc)	421-75-0
Trichlorofluoropropane (HCFC-251)	134190-51-5
1,1,3-Trichloro-1-fluoropropane (HCFC-251fb)	818-99-5
1,1,2-Trichloro-1-fluoropropane (HCFC-251dc)	421-41-0
Dichlorodifluoropropane (HCFC-252)	134190-52-6
1,3-Dichloro-1,1-difluoropropane (HCFC-252fb)	819-00-1
Chlorotrifluoropropane (HCFC-253)	134237-44-8
3-Chloro-1,1,1-trifluoropropane (HCFC-253fb)	460-35-5
Dichlorofluoropropane (HCFC-261)	134237-45-9
1,1-Dichloro-1-fluoropropane (HCFC-261fc)	7799-56-6
1,2-Dichloro-2-fluoropropane (HCFC-261ba)	420-97-3
Chlorodifluoropropane (HCFC-262)	134190-53-7
1-Chloro-2,2-difluoropropane (HCFC-262ca)	420-99-5
2-Chloro-1,3-difluoropropane (HCFC-262da)	102738-79-4
1-Chloro-1,1-difluoropropane (HCFC-262fc)	421-02-3
Chlorofluoropropane (HCFC-271)	134190-54-8
2-Chloro-2-fluoropropane (HCFC-271ba)	420-44-0
1-Chloro-1-fluoropropane (HCFC-271fb)	430-55-7

TABLE. 5-A18 Radioactive Substances (Radioactive Isotope)

Legislative Requirement	Major Legislation
Prohibited from intentional using in any products	Nuclear Power Plant Regulations, Laws Concerning the Prevention from Radiation Hazards due to Radioisotopes and Others
Substance name	CAS No.
Uranium-238	7440-61-1
Radon	10043-92-2
Americium-241	14596-10-2
Thorium-232	7440-29-1
Cesium-137	10045-97-3
Strontium-90	10098-97-2
Other radioactive substances	-

TABLE. 5-A19 Dimethylfumarate (DMF)

Legislative Requirement	Major Legislation
Less than 0.1ppm in any products	EU REACH Regulation ANNEX XVII (Restricted substance)
Substance name	CAS No.
Dimethylfumarate (DMF)	624-49-7

TABLE. 5-A20 Specific Benzotriazole

Legislative Requirement	Major Legislation
Prohibited from intentional using in any products	Class 1 specified chemical substances of Act on the Evaluation of Chemical Substances and Regulation of their Manufacture, etc.
Substance name	CAS No.
2-(2H-1,2,3-benzotriazol-2-yl)-4,6-di-tert-butylphenol	3846-71-7

TABLE. 5-A21 Class 1 specified chemical substances of act on the evaluation of chemical substances and regulation of their manufacture, etc.(other than substances specified by other TABLE 5-X of this standard)*¹⁴

Legislative Requirement	Major Legislation	
Prohibited from intentional using in any products	Class 1 specified chemical substances of Act on the Evaluation of Chemical Substances and Regulation of their Manufacture, etc.	
Substance name	CAS No.	MITI No.
Hexachlorobenzene	118-74-1	3-76
1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-exo-1,4-endo-5,8-dimethanonaphthalene (Synonym: Aldrin)	309-00-2	4-303
1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octa hydro-endo-1,4-exo-5,8-dimethanonaphthalene (Synonym: Dieldrin)	60-57-1	4-299
1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octa hydro-endo-1,4-endo-5,8-dimethanonaphthalene (Synonym: Dieldrin)	72-20-8	4-299
1,1,1-Trichloro-2,2-bis(4-chlorophenyl)ethane (Synonym: DDT)	50-29-3	4-910
1,2,4,5,6,7,8,8-Octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methano-1H-indene, 1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetrahydro-4,7-methano-1H-indene and their analogous compounds (Synonym: Chlordane or Heptachlor)	57-74-9, 76-44-8, 5103-71-9, 5103-74-2, 5566-34-7, 6058-23-7, 12789-03-6, 56534-03-3, 56641-38-4	4-637, 9-1646
N,N'-Ditolyl-p-phenylenediamine, N-Tolyl-N'-xylyl-p-phenylenediamine, or N,N'-Dixylyl-p-phenylenediamine	620-91-7, 15017-02-4, 27417-40-9, 28726-30-9, 70290-05-0	3-146, 3-365, 4-332

Substance name	CAS No.	MITI No.
2,4,6-Tri-tert-butylphenol	732-26-3	3-540
1,1,1-Trichloro-2,2-bis(4-chlorophenyl)ethane (Synonym: DDT)	50-29-3	4-910
Polychloro-2,2-dimethyl-3-methylidenebicyclo[2.2.1]heptane (Synonym: Toxaphene)	8001-35-2	—
Dodecachloropentacyclo[5.3.0.0(2,6).0(3,9).0(4,8)]decane (Synonym: Mirex)	2385-85-5	—
2,2,2-Trichloro-1,1-bis(4-chlorophenyl)ethanol (Synonym: Kelthane or Dicofol)	115-32-2	4-226
Hexachlorobuta-1,3-diene	87-68-3	2-121
Perfluoro(octane-1-sulfonyl) fluoride (Synonym: PFOSF)	307-35-7	2-2803
Pentachlorobenzene	608-93-5	3-76
r-1,c-2,t-3,c-4,t-5,t-6-Hexachlorocyclohexane (Synonym: alpha-Hexachlorocyclohexane)	319-84-6	3-2250、9-1652
r-1,t-2,c-3,t-4,c-5,t-6-Hexachlorocyclohexane (Synonym: beta-Hexachlorocyclohexane)	319-85-7	
r-1,c-2,t-3,c-4,c-5,t-6-Hexachlorocyclohexane (Synonym: gamma-Hexachlorocyclohexane or Lindane)	58-89-9	
Decachloropentacyclo[5.3.0.0(2,6).0(3,9).0(4,8)]decan-5-one (Synonym: Chlordecone)	143-50-0	—

TABLE 5-A22. Industrial Safety and Health Act (Substances specified by first paragraph of Article 16 of Industrial Safety and Health Law Enforcement Ordinance)*15

Legislative requirements		Major legislative
Prohibited from intentional using in any products		Industrial Safety and Health Law (harmful substances prohibited from manufacturing)
Cabinet Order No.	Substance name	
1	Yellow phosphorus match	
2	Benzidine and its salts	
3	4-aminodiphenyl and its salts	
5	4-nitrodiphenyl and its salts	
6	Bis (chloromethyl) ether	
7	Beta-naphthylamine and its salts	
8	Gum containing benzene in a quantitative amount of more than 5% by volume of the solvent (containing dilutants) of the saidgum	
9	The preparations and other substances containing the substances listed in items (ii), (iii) or (v) to (vii) exceeding 1 % of the weight of the said preparations and other substances, or containing the substances listed in item (iv) exceeding 0.1% of the weight of the said preparations and other substances	

TABLE 5-B01 Volatile chlorinated organic compound (Designated Hazardous Substances specified by Soil Contamination Countermeasures Act)

Legislative requirement	Major legislation
Intentional use and inclusion above 1wt% prohibited in any products	Soil Contamination Countermeasures Act (volatile chlorinated organic compound specified as designated Hazardous Substances)
Substance name	CAS No.
Dichloromethane	75-09-2
Carbon Tetrachloride	56-23-5
1,1-Dichloroethylene	75-35-4
cis-1,2-Dichloroethylene	156-59-2, 540-59-0 (cis-, trans-)
Trichloroethylene	79-01-6
Tetrachloroethylene	127-18-4
1,2-Dichloroethane	107-06-2
1,1,1-Trichloroethane	71-55-6
1,1,2-Trichloroethane	79-00-5
1,3-Dichloropropene	542-75-6

*9: Total content of heavy metal, lead, cadmium, mercury and hexavalent chromium, shall be less than 100 parts per million in each homogeneous material, like resin, ink or paint.

*10: As metallic tin equivalent weight.

*11: Where the threshold value established by law is provided, inclusion with or without intention more than threshold value is prohibited.

(e.g. In transformer oil: above 0.5 ppm inclusion restricted (Law Concerning Special Measures against PCB Waste). In organic pigments: above BAT (#) level inclusion will be restricted. In other article: above 50 ppm inclusion restricted (Stockholm convention on Persistent Organic Pollutants.)

Where threshold value is not provided recognized inclusion in substance, mixture or article is prohibited.

#: "Best available technology": When used in the forms of "BAT level" it refers to best purity by BAT manufacturing. As to BAT level for PCB in organic pigments is under study now by METI.

*12: Azo colorants and azo dyes from which one of specific aromatic amine listed in TABLE 5-A17 might be formed by reductive cleavage of azo groups are restricted by European law.

*13: TABLE.5-A18 does not include all the isomer of each substance. The missing isomer to be listed will be included to this table after its CAS No. registration.

*14: Refer to URL below for class 1 specified chemical substances of Act on the Evaluation of Chemical Substances and Regulation of their Manufacture, etc.]

<http://www.safe.nite.go.jp/japan/sougou/view/IntrmSrchSpecifyList.jp.faces>

*15: Asbestos, cabinet order number 4 of substances of first paragraph of Article 16 of Industrial Safety and Health Law Enforcement Ordinance, is specified as Control Rank A substances for SEI group and is not listed in TABLE 5-B01.

TABLE 6. Terms and definitions

Term	Definition
Prohibited Substances	<p>Refers to substances specified as below and having high possibility of inclusion in goods sold to or products manufactured by SEI group and listed in TABLE 1 of this standard.</p> <ul style="list-style-type: none"> -Class 1 specified chemical substances of act on the evaluation of chemical substances and regulation of their manufacture, etc., -Substances prohibited from manufacturing of industrial safety and health law -Restricted substances of EU RoHS -Restricted substances of EU REACH <p>Any goods sold to SEI group shall not contain these substances except for exemption or inclusion under legal threshold value. And as to these substances "non-inclusion certification" shall be submitted to SEI group by supplier.</p> <p>In case where goods contain one or more these substances with applying legal exemption or under legal threshold value, supplier shall disclose relevant information about their inclusion[#] to SEI.</p>
Controlled Substances	Substances listed in TABLE 2 of this standard. When goods contain these substances, relevant information about their inclusion [#] shall disclose to SEI group by supplier.
Substances to be eliminated from supplier's manufacturing process	Substances listed in TABLE 3 of this standard to be eliminated from supplier's manufacturing process of goods sold to SEI group. (Substances to be eliminated of Montreal Protocol and Law concerning the Protection of the Ozone Layer through the Control of Specified Substances and Other Measures)
Intentional use (addition)	Intentional use (or addition) during production process where a continuous inclusion in products is desirable for obtaining certain performance, shape, character and quality of them.
Non-intentional inclusion	Inclusion without intentional use of substances, e.g. inclusion of impurities, reaction byproducts, degradation product or residual monomers in polymer.
Impurity	Naturally obtained materials or unintentionally formed materials during reaction process which complete removing is impossible.
Dry state	A state of certain materials originally containing solvent, like paint or ink, after solvent (organic solvent, water) volatilized to the equal degree in use phase.

[#]: "Relevant information about inclusion" shall involve chemical identification, like name and CAS No., concentration, containing part and use of included substances at least.