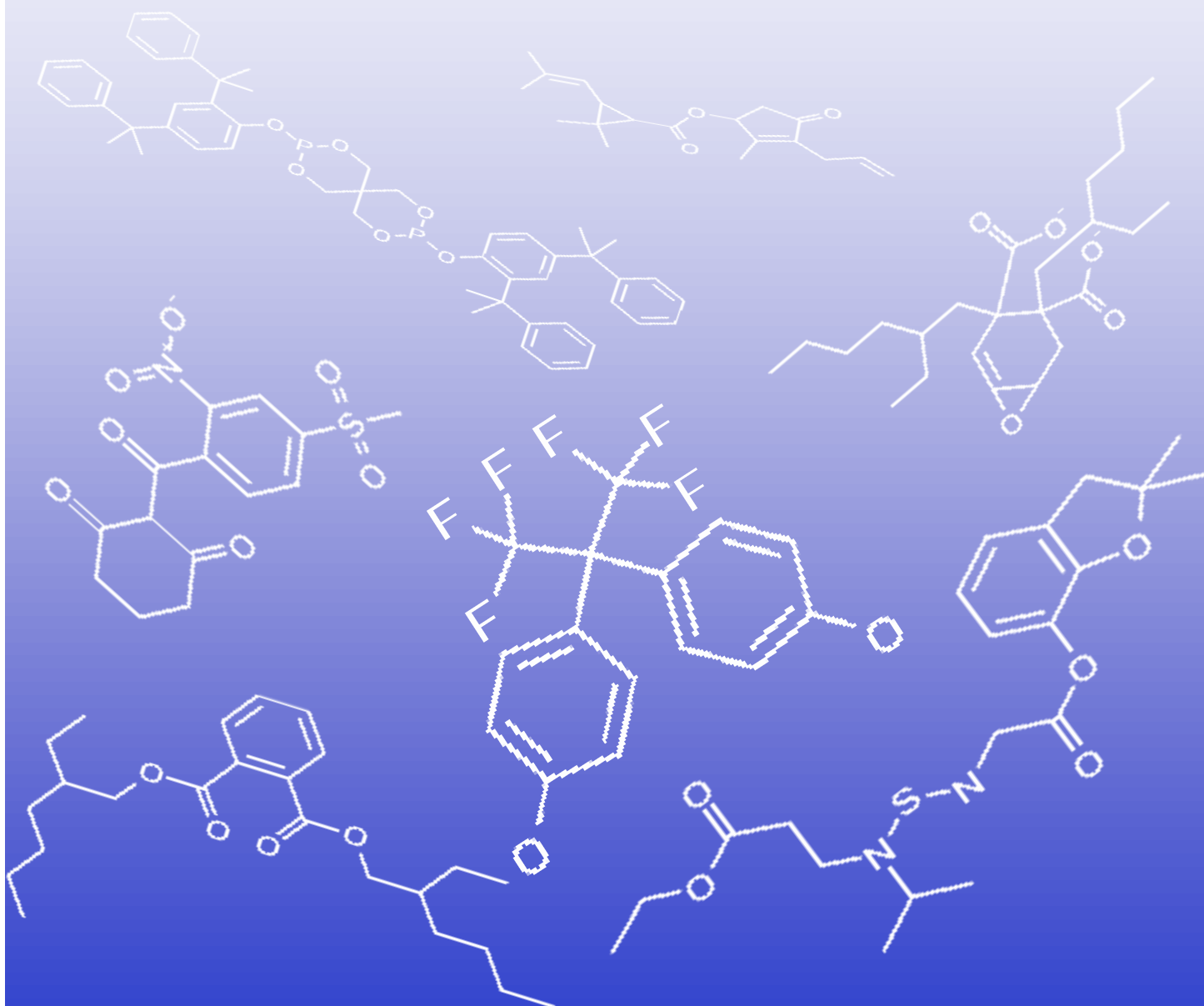


Sumitomo Electric Group Standards for Chemical Substance Management



Ver 7.0, Apr. 2026

Sumitomo Electric Industries, Ltd.

Sumitomo Electric Group Standards for Chemical Substance Management

Safety & Environment Department
Sumitomo Electric Industries, Ltd.

This standard is an annex to the “Sumitomo Electric Group Guidelines for Green Quality Purchases” and specifies “Prohibited substances,” “Controlled substances,” and “Complete abolition substances,” including due dates for complete abolition and cases exempt from such restrictions, in the following tables. As essential requirements for supplying goods to Sumitomo Electric Group (hereinafter SEG), suppliers shall guarantee that no “Prohibited substances” are included, disclose information regarding the inclusion of “Controlled substances,” and guarantee no “Complete abolition substances” are included throughout their manufacturing processes.

Table 1. Prohibited substances

Table 2. Controlled substances

Table 3. Complete abolition substances in manufacturing process

Table 4. Criteria for providing composition information of controlled substances

Table 5. List of the regulation contents for prohibited substances (A01-A27, B01)

Table 6. Terms and definitions

Table 7. List of examples prohibited substances (A01-A26, B01)

In SEG, chemical substances subject to control are classified into four control ranks. For reference, the four control ranks are summarized in the following table.

Substance category	Control rank	Objects		
		Single Substance	Mixtures	Articles
Prohibited substances	A	●	●	●
	B	●	●	-
Controlled substances	C	○	○	○
	D	○	○	-

● : Concentration over the threshold value is prohibited for goods supplying to SEG, unless it is the exempted case of applicable regulation. Even in the exempted case or lower concentration than the threshold value, related information (relating to the exemption and concentration) shall be disclosed.

○ : The information (existence of the substance, containing amount, containing part, application, etc.) of containing the substances for goods supplying to SEG shall be disclosed.

Even if it isn't a specified substance or series of substances in this standard, because certain substance or series of substances specified legal obligation with local regulations (e.g., Hazardous materials in JPN Fire Service Act, Specified chemical substances in JPN Industrial Safety and Health Act, etc.) shall be controlled complying the applicable legal regulation and added company rules (rule-book, BR, etc.) of SEG, it is needed to pay attention.

Understanding and cooperation on this standard would be highly appreciated.

<Revision History>

Within the newly issued title “SEG Standard for Chemical Substances Management.”

The history before the version 1.0 is archived in “SEG Guidelines for Green Quality Purchases.”

Ver. 2.0a	Document ID No.	Date of issue
	E13-003	Nov. 01, 2013
Contents & grounds	<ul style="list-style-type: none"> • Adding definitions of terms such as “Prohibited Substances,” “Controlled Substances,” etc. • Deleting exemptions of each legal regulation and substituting with references of relating legal regulations instead. • Chemical substances to be prohibited or controlled are classified into four (4) ranks from rank A to D. Specifying the rank A and B as the prohibited substances and the rank C and D as the controlled substances respectively. • Adding missing footnotes. • Substance group of “PCBs and PCTs” was divided into two independent groups, “PCBs” and “PCTs.” • “Specific benzotriazole” was added to the list of prohibited substance as A21 of the rank A substances. (Table 5-A21) • Class I Specified Chemical Substances under the Act on the Regulation of Manufacture and Evaluation of Chemical Substances (Chemical Substances Control Law: CSCL, JPN) and Substances Prohibited for Manufacturing under the Industrial Safety and Health Act (JPN) were changed from controlled substances to prohibited substances. (Tables 5-A22 & -A23) • Added definitions of terms. • For details of the changes, refer to the attached “Changes in the Standard for Chemical Substance Management from Ver. 1.0 to Ver. 2.0.” <p>(Ver.2.0 → Ver.2.0a)</p> <ul style="list-style-type: none"> • Changing the title of A07 from “Dibutyltin compounds” to “Dibutyltin compounds & Dioctyltin compounds” for adding dioctyltin compounds as the prohibited substances. • Changing the title of A06 from “TBTs, TOTs” to “Tri-substituted organostannic compounds (such as TBTs, TPTs, etc.)” in accordance with the contents of Annex XVII of REACH (EU). 	
Ver. 3.0a	Document ID No.	Date of issue
	E19-001	Apr. 10, 2019
Contents & grounds	<ul style="list-style-type: none"> • Annexed Table 1-1. Added four specific phthalates as A16 to control rank A (prohibiting inclusion in single substances, mixtures, and articles), and renumbered the subsequent numbers. • Because the information sharing scheme “JAMP MSDSplus/AIS” will be expired in June 2018, controlled substances of the rank C are newly selected with criteria for transferring composition information under alternative information sharing scheme “chemSHERPA,” and the contents of Note No. 1 & 2 are accordingly renewed. • Annexed Table 2-2. The materials from the Ministry of the Environment in Note 8 (*8) were replaced with the relevant regulations: “Act on Promotion of Global Warming Countermeasures” and “Order for Enforcement of the Act on Promotion of Global Warming Countermeasures,” including a link. • Annexed Table 4. Rank C controlled substances were changed to “Declarable Substances of chemSHERPA,” and the criteria for providing composition information were made equivalent to those of the “Rules on the Use of Information on Chemicals in Products Under the chemSHERPA.” In addition, the content of Note 10 (*10) was changed. • Annexed Table 5-A1 and A4. “Dir. 2013/56/EU on batteries and accumulators (EU)” was added side by side to “Dir. 2006/66/EC on batteries and accumulators (EU)” under Major regulations. • Annexed Tables 5-A01 to A04, A08, and A09. The description of the “Law for Promotion of Effective Utilization of Resources (J-Moss) under Major regulations was changed to “J-MOSS (JIS C 0950)” to match the other descriptions. • Annexed Tables 5-A2 to A4, and A13. Descriptions of EC Nos. were added to some of the listed substances. • Annexed Table 5-A03. Trilead bis(carbonate) dihydroxide (CAS RN 13009-77-3) was deleted because it was deleted from CAS RN. • Annexed Table 5-A04. Mercury(II) dichloride (CAS RN.33631-63-9) was deleted because the relevant material and CAS RN did not match. • Annexed Table 5-A12. The number of chlorine atoms was revised to “(limited to those containing at least two chlorine atoms)” in accordance with the revision of the Chemical Substances Control Law (JPN). • Annexed Table 5-A16. Four phthalates that fall under controlled substance A16 were added as A16, and the subsequent table numbers were renumbered. • Annexed Table 5-A19. The order of the description, substance name, and CAS RN were reviewed in accordance with the contents of the Montreal Protocol. <p>(Ver. 3.0 → Ver. 3.0a)</p>	

Ver. 4.0	Document No.	Date of Release
	E20-018	February 1, 2021
Revisions and Their Reasons	<ul style="list-style-type: none"> Annexed Table 1-1. Perfluorooctanoic acid (PFOA) and its salts, and PFOA-related substances have been added to control rank A (prohibiting containing to single substance, mixtures and assembly) as A15, and the following numbers have been renumbered. Annexed Table 1-2. The substances in control rank B (prohibiting containing to single substance and mixtures) have been changed from chlorinated volatile organic compounds to Class 1 Specified Substances subject to the Soil Contamination Countermeasures Act (JPN). Annexed Table 2-1. Following the revision of the target standards of chemSHERPA, “EU (Medical Device Regulation (MDR)) (EU) 2017/745 Annex I 10.4 Chemical Substances” has been added to control rank C (needing information of containing for single substance, mixtures and articles). Annexed Table 2-1. A description of the disclosure of information required for registration in the SCIP database, which is made mandatory by the revised Waste Framework Directive (WFD) (EU), has been added as Note 3 (*3), and the following numbers have been renumbered. Annexed Table 2-2. The “Specified substances under the Ozone Layer Protection Law (JPN)” have been added to control rank D (needing information of containing for single substance and mixtures), and together with the “Greenhouse gases specified under the Act on Promotion of Global Warming Countermeasures (JPN),” have been classified under D02. Annexed Table 2-2. A related treaty, “Vienna Convention for the Protection of the Ozone Layer” covered by Montreal Protocol Annex F, Groups I and II, has been added as Note 9 (*9). Annexed Table 3. Complete abolition substances in manufacturing process has been re-edited and the exemption has been updated. Annexed Table 4. JAMP MSDSplus/AIS has been deleted from Note 10 (*10), and JAMA/JAPIA has been changed to JAPIA integrated data sheets. Annexed Table 5-A1 to A4. “Dir. 2004/12/EC on packaging and packaging waste (EU)” has been added side-by-side with the “Dir. 94/62/EC on packaging and packaging waste (EU)” under Major regulation. Annexed Table 5-A05. “Bis(tributyltin)oxide=oxide” has been specified as a substance name and the regulation contents (contents, application) have been changed to “Prohibiting intentional use.” Annexed Table 5-A06. The substances listed as tri-substituted organotin substances (tributyltins (TBTs), triphenyltin chlorides (TPTs), etc.) have been reviewed. Two substances, bis(tributan-1-ylstannyl)=but-2-enedioate (CAS RN 24291-45-0) and bis(tributyltin)= 2,3- dibromosuccinate (CAS RN 56323-17-2) have been added, and CAS RN 7342-38-3 has been deleted from tributyltin=chloride. Annexed Table 5-A10. The table has been changed to “Polychlorobiphenyls (PCBs) and specified substitutes” to square with the actual conditions. Annexed Table 5-A15. “Perfluorooctanoic acid (PFOA) and its salts, and PFOA-related substances” have been added as A15, listing eight substances and their salts, and other related substances, and the following numbers have been renumbered. Annexed Table 5-A19. Following a revision of the Montreal Protocol, A19 “Ozone-Depleting Substances” has been modified as follows: B-I. 1-Chloro-1,1,2,2,3,3,3-heptafluoropropane (CFC-217) (CAS RN 422-86-6) C-II. 2-Bromo-1,1-difluoroethane (CAS RN 359-07-9) Annexed Table 5-A23. The following substance has been added to A23 “Class 1 Specified Substance subject to the Chemical Substances Control Law (JPN).” 2,2,2-trichloro-1-(2-chlorophenyl)-1-(4-chlorophenyl) ethanol (Synonym: o,p’-dicofol) (CAS RN 10606-46-9) “Will be added as a Class 1 Specified Substance subject to the Chemical Substances Control Law in April 2021” has been added as Note 17 (*17). Annexed Table 5.-B01 “Volatile organic compounds (Class 1 Specified Substances under the Soil Contamination Countermeasures Act (JPN))” has been modified as follows: Chloroethylene (Synonym: vinyl chloride or vinyl chloride polymer) (CAS RN 75-01-4) has been added. cis-1,2-Dichloroethylene has been changed to 1,2-Dichloroethylene, with CAS RN of the trans product appended. The CAS RNs of the Z product and E product have been appended to 1,3-Dichloropropene (Synonym: D-D). Benzene (CAS RN 71-43-2) has been added. 	

Ver. 5.0	Document No.	Date of Release
	E23-054	February 19, 2024
Revisions and Their Reasons	<ul style="list-style-type: none"> Annexed Table 1-1. Perfluorohexanesulfonic acid (PFHxS) and its salts have been added to control rank A (prohibiting inclusion in single substances, mixtures, and articles) as A16, and the subsequent numbers were renumbered. Annexed Table 2-1. Following the revision of the target standards of chemSHERPA, “China Administrative Measures on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Products (China RoHS)” was added to control rank C (requiring information on inclusion for single substances, mixtures, and articles). Annexed Table 3. A description was added above the table, and “Refrigerants for air conditioners, etc. (only C-I)” was removed from Exemptions in response to the agreement on complete abolition of HCFC (C-I) in 2020. Annexed Tables 5-A1 and A4. Major regulations were changed to “Reg (EU)2023/15422006/66/EC (EU battery regulation).” Annexed Table 5-A14. “POPs” was deleted from Major regulations, and “POPs Regulation (EU)” was added to Major regulations. Annexed Table 5-A15. “Chemical Substances Control Law (Class I Specified Chemical Substances)” was added to Major regulations, while POPs Regulation was deleted from Major regulations. The regulation content was changed to “Prohibiting intentional use”^{*12}. Annexed Tables 5-A23 and A24. ^{*12} was added to “Prohibiting intentional use” under the regulation content. Annexed Table 5-A24. The following three substances were added to the Chemical Substances Control Law, Class I Specified Chemical Substance, JPN. <ul style="list-style-type: none"> Methoxy-[2,2,2-trichloro-1-(methoxyphenyl)ethyl]benzene (Synonym: Methoxychlor) 1,2,3,4,7,8,9,10,13,13,14,14-dodecachloro-1,4,4a,5,6,6a,7,10,10a,11,12,12a-dodecahydro-1,4,7,10-dimethanodibenzo[a,e][8]annulene (Synonym: Dechlorane Plus) 2-(2H-1,2,3-Benzotriazol-2-yl)-4,6-bis(2-Methylbutan-2-yl) phenol (Synonym: UV-328) “Will be added as a Class I Specified Chemical Substance subject to the Chemical Substances Control Law in April 2024 or later” was added as Note 17 (^{*17}). 	
Ver. 6.0a	Document No.	Date of Release
	E24-042	January 20, 2025
Revisions and Their Reasons	<ul style="list-style-type: none"> Annexed Table 1-1. “Non-approved active substances and active substances with non-approved uses under the European Biocidal Products Regulation (BPR)” was added as A26 to Table 1-1 Rank A Prohibited Substances (Prohibiting containing to single substance, mixtures and articles). Annexed Table 5-A15. 159 substances were added as PFOA-related substances to Table 5-A15 Perfluorooctanoic acid (PFOA) and its salts, and PFOA-related substances. Annexed Table 5-A24. Note ^{*17} was added to the following three substances listed in Table 5-A24 CSCL, Class I Specified Chemical Substance, JPN was deleted and the subsequent notes were renumbered accordingly since a Cabinet Order for the Partial Revision of the Order for Enforcement of the Act on the Regulation of Manufacture and Evaluation of Chemical Substances related to these substances was promulgated on December 18, 2024: <ul style="list-style-type: none"> Methoxy-[2,2,2-Trichloro-1-(methoxyphenyl)ethyl]benzene (Synonym: Methoxychlor) 1,2,3,4,7,8,9,10,13,13,14,14-Dodecachloro-1,4,4a,5,6,6a,7,10,10a,11,12,12a-dodecahydro-1,4,7,10-dimethanodibenzo[a,e][8]annulene (Synonym: Dechlorane Plus) 2-(2H-1,2,3-Benzotriazol-2-yl)-4,6-bis(2-Methylbutan-2-yl) phenol (Synonym: UV-328) Annexed Table 5-A26. Table 5-A26 Non-approved Active Substances and Active Substances with Non-approved Uses Under the European Biocidal Products Regulation has been newly established and a link to a website providing information on active substances was included as note ^{*18}. 	

(For the past revision history (Ver. 2.0 or before), see “Sumitomo Electric Group Guidelines for Green Quality Purchases.”)

Ver. 7.0	Document No.	Date of Release
	E26-002	April 02, 2026
Revisions and Their Reasons	<ul style="list-style-type: none"> Annexed Table 5 now only contains regulation contents, and the list of example substances has been transferred to a newly created Table 7. Annexed Table 1-1. Control rank A (prohibiting inclusion in single substances, mixtures, and articles) Medium-chain chlorinated paraffin has been added as A13 and perfluorohexane-1-sulphonic acid and related substances as A16. Long-chain perfluorinated carboxylic acid (LC PFCA) and its salts, as well as related substances have been added as A17, and the numbering of subsequent items has been shifted accordingly. The description of JAMP has been changed to CMP Consortium in line with JAMP's reorganization. Annexed Table 5-A. 0.1 wt% has been added side-by-side to 1000 ppm. The notes for Annexed Tables 5-A01 to A04 have been moved from outside to inside the tables, and conditions for EU REACH restricted substances have been added. Annexed Tables 5-A05, A08, A09, A10, A12 to A16, A24 and A25. Explanations of Class I Specified Chemical Substances under the Act on the Regulation of Manufacture and Evaluation of Chemical Substances have been added. The notes for Annexed Tables 5-A06 and A07 have been moved from outside to inside the tables Annexed Tables 5-A08 and A09. The names of relevant substances have been added. Annexed Table 5-A11. The conditions for the Canadian Prohibition of Certain Toxic Substances Regulations have been added. Annexed Table 5-A18. The note has been moved from outside to inside the table, and conditions for substances subject to authorization under EU REACH have been added. Annexed Table 5-A20. The conditions for substances subject to authorization under EU REACH have been added. Annexed Table 5-B01. The conditions for substances subject to restriction under EU REACH and the names of the relevant substances have been added. Annexed Table 7. In addition to the contents being moved to this separate file, chemSHERPA flags and information on SDS requirements have been added. Annexed Table 7-A03. Lead tetraethyl (CAS RN 78-00-2) has been added. Annexed Table 7-A13. 9 types of medium-chain chlorinated paraffins have been added. Annexed Table 7-A15. Perfluorooctanoic acid (PFOA) and its salts as well as 3 types of PFOA related substances have been added. Annexed Table 7-A16. 121 types of perfluorohexanesulfonic acid (PFHxS) related substances have been added. Annexed Table 7-A17. Long-chain perfluorinated carboxylic acid (LC PFCA) and its salts as well as 174 types of related substances have been added. Annexed Table 7-A20. Specific toxic & carcinogenic amines have been deleted, and 15 types of example dye and pigment substances have been added. Annexed Table 7-A24. UV-328 (CAS RN 24973-55-1) has been moved from A25. Annexed Table 7-A25. Pentachlorophenol (CAS RN 87-86-5) Chlorpyrifos (CAS RN 2921-88-2) have been added. Annexed Table 7-B01. Benzene (CAS RN 71-43-2) has been added. 	

Table 1. Prohibited substances

The prohibited substances of SEG are aggregated in Tables 1-1 and 1-2. Table 1-1 covers substances of control rank A (prohibiting containing to single substance, mixtures and assembly.) and Table 1-2 covers substances of control rank B (prohibiting containing to single substance and mixtures.) respectively. The details such as threshold concentration, applications, etc. can be referred at individual Table of Table 5. If the goods correspond to an exempted application of a local legal regulation, such an exemption can be applied only in a case that the final products are consumed within the region. (e.g.; drinking water for our workers.)

Table 1-1 Rank A Prohibited Substances (Prohibiting containing to single substance, mixtures and articles)

No.	Classification	Name of substance / series of substances	Detail of substance
A01	Metals and Metallic compounds	Cadmium and its compounds	Table 5, 7-A01
A02		Hexavalent chromium (chromium(VI), Cr(VI), chromium 6) compounds	Table 5, 7-A02
A03		Lead and its compounds	Table 5, 7-A03
A04		Mercury and its compounds	Table 5, 7-A04
A05		Bis(tributyltin)oxide	Table 5, 7-A05
A06		Tri-substituted organostannic compounds (such as TBTs, TPTs, etc.)	Table 5, 7-A06
A07		Dibutyltin (DBT) and Dioctyltin (DOT) compounds	Table 5, 7-A07
A08	Halogenated organic compounds	Polybrominated biphenyls (PBBs)	Table 5, 7-A08
A09		Polybrominated diphenyl ethers (PBDEs)	Table 5, 7-A09
A10		Polychlorobiphenyls (PCBs) and specified substitutes	Table 5, 7-A10
A11		Polychlorinated terphenyls (PCTs)	Table 5, 7-A11
A12		Polychlorinated naphthalenes (PCNs, excluding C ₁₀ H ₇ Cl)	Table 5, 7-A12
A13		Some short-chain and medium-chain chlorinated paraffins (carbon numbers 10–17)	Table 5, 7-A13
A14		Perfluorooctane sulfonic acid (PFOS) and its salts	Table 5, 7-A14
A15		Perfluorooctanoic acid (PFOA) and its salts, and PFOA-related substances	Table 5, 7-A15
A16		Perfluorohexanesulfonic acid (PFHxS) and its salts, as well as PFHxS related substances	Table 5, 7-A16
A17		Long-chain perfluorinated carboxylic acid (carbon number C9-21, LC PFCA) and its salts, as well as LC PFCA related substances.	Table 5, 7-A17
A18	Others	Specific phthalates (DEHP, BBP, DBP & DIBP)	Table 5, 7-A18
A19		Asbestos	Table 5, 7-A19
A20		Azo dyes liberating specific toxic & carcinogenic amines.	Table 5, 7-A20
A21		Ozone-Depleting Substances (Details of Table 3 “Complete Abolition Substances”)	Table 5, 7-A21
A22		Radioactive isotopes	Table 5, 7-A22
A23		Dimethyl fumarate (DMF)	Table 5, 7-A23
A24		Specified Benzotriazol	Table 5, 7-A24
A25		Substances/substance groups specified as Class I Specified Chemical Substances under the Chemical Substances Control Law (JPN) that are not listed as specified substances/substance groups in Annexed Table 1 of this Standard	Table 5, 7-A25
A26		Substances/substance groups specified as substances prohibited for manufacturing under the Industrial Safety and Health Act (JPN) that are not specified as Rank A substances. (Substances specified in Industrial Safety and Health Act Cabinet Order Article 16, paragraph 1)	Table 5, 7-A26
A27		Non-approved active substances and active substances with non-approved uses under the European Biocidal Products Regulation (BPR)	Table 5-A27

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

No.	Name of substance / series of substances	Detail of substance
B01	Volatile organic compounds (Class I Specified Hazardous Substances under the Soil Contamination Countermeasures Act)	Table 5, 7-B01

Table 2. Controlled substances

The controlled substances of SEG are aggregated in Table 2-1 and 2-2. Table 2-1 covers substances of control rank C (needing information of containing for single substance, mixtures and articles.) and Table 2-2 covers substances of control rank D (needing information of containing for single substance and mixtures.) respectively. If certain substances are categorized in both Table 1 and Table 2, the substances shall be managed with the regulation of Rank A. The criteria of minimum concentration of controlled substances to report are specified in Table 4.

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

No.	Scope	Relevant standards (Laws, regulations, and, industrial criteria)	Notes
C01	Declarable Substances of chemSHERPA *1 *2	Class I Specified Chemical Substances under the Chemical Substances Control Law (CSCL, JPN)	Excluding substance groups and substances which have been designated as the rank A and B in this standard.*2
		Chemicals under Section 6 of the Toxic Substances Control Act (TSCA, US)	
		Substances under Article 4 of Dir. 2000/53/EC on End-of Life Vehicles (ELV, amended with Dir. 2011/37/EU, EU)	
		Substances listed in Annex II of Dir. 2011/65/EU on Restriction of the use of certain Hazardous Substances (RoHS2, EU)	
		Substances listed in Annex I of Reg. 850/2004/EC on Persistent Organic Pollutants (POPs, EU)	
		Substances in the Candidate List of Substances of Very High Concern (SVHC) for Authorisation and ANNEX XIV (List of substances subject to authorisation) of EU Regulation EC (No.) 1907/2006 (Registration, Evaluation, Authorisation and Restriction of Chemicals: REACH)*3	
		Substances restricted under Annex XVII to Reg. 1907/2006/EC (Restricted substances, REACH, EU)	
		Chemical substances under Annex I 10.4 to Reg. 2017/745/EU (Medical Device Regulation (MDR)) (EU)	
		China Administrative Measures on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Products (China RoHS)	
		Substances requiring declaration specified in Global Automotive Declarable Substance List (GADSL).	
		Declarable substance groups and declarable substances of IEC 62474 DB	

*1: The declarable substances of chemSHERPA have been revised in accordance with amendments of relevant regulations and their annexes. When checking substances to be supplied to us, please utilize the latest version of the “Data Entry Support Tool (chemSHERPA-CI/-AI).” The list of controlled substances (for a fee) is available on the website of the CMP Consortium mentioned above.

“Data Entry Support Tool”; <https://cmp-consortium.com/chemsherpa/tool>

*2: Substances such as Class I Specified Chemical Substances under the Chemical Substances Control Law (CSCL, JPN) are specified as declarable substances in chemSHERPA. However, in this Standard, all such substances belong to control rank A (prohibiting inclusion in single substances, mixtures, and articles). Although “C01” is specified as “Declarable Substances of chemSHERPA” in Annexed Table 2-1, this does not mean that inclusion of substances of this rank into articles is approved.

*3: For the articles containing SVHCs under the REACH Regulation that are obligated to be registered in the Substances of Concern In Products (SCIP) database by the revised Waste Framework Directive (WFD) (EU) 2018/851 (EU), the information required for registration shall be disclosed.

Revised Waste Framework Directive (WFD) (EU) 2018/851

<https://op.europa.eu/en/publication-detail/-/publication/21299800-6f9e-11e8-9483-01aa75ed71a1/language-en>

Waste Framework Directive (WFD) 2008/98/EC

<https://op.europa.eu/en/publication-detail/-/publication/a32ddb30-1a98-4911-964a-e4f4f638f20d/language-en>

ECHA SCIP database

<https://echa.europa.eu/scip>

Table 2-2 Rank D (needing information of containing for single substance and mixtures)

No.	Contents	Notes
D01*4	Deleterious substances specified under the Poisonous and Deleterious Substances Control Act. (JPN)*5	Excluding substance groups and substances which have been designated as the rank A, B and C in this standard.
	Class 1 and Class 2 Designated Chemical Substances under the Act on the Assessment of Releases of Specified Chemical Substances in the Environment and the Promotion of Management Improvement (Pollutant Release and Transfer Register (PRTR) Law) (JPN)*6	
	Labeling and SDS issuance obligatory substances under Industrial Safety & Health Act (JPN)*7	
D02	Greenhouse gases specified under the Act on Promotion of Global Warming Countermeasures (JPN)*8	
	Substances alternative to specified substances*9 under the Ozone Layer Protection Law (JPN)	

*4: Need to declare information on inclusion by provision of an SDS.

*5: Poisonous and Deleterious Substances Control Act (Ministry of Health, Labour and Welfare)
Deleterious substances: https://www.chem-info.nite.go.jp/chem/chrip/chrip_search/intSrhSpcLst?_e_trans=&slScNm=RJ_03_001

*6: Chemical substances subject to the SDS system under the Act on the Assessment of Releases of Specified Chemical Substances in the Environment and the Promotion of Management Improvement (Ministry of Economy, Trade and Industry)
https://www.nite.go.jp/en/chem/chrip/chrip_search/intSrhSpcLst?_e_trans=&slScNm=RJ_02_002

*7: Dangerous Articles and Harmful Substances Whose Names, etc. Should Be Indicated (Substances Subject to Notice) under the Industrial Safety and Health Act (Ministry of Health, Labour and Welfare)
https://www.nite.go.jp/en/chem/chrip/chrip_search/intSrhSpcLst?_e_trans=&slScNm=RJ_04_021

*8: Ministry of the Environment, Greenhouse Gas Emissions Calculation, Reporting and Publication System.
Related regulations: Article 2, paragraph 3 of the “Act on Promotion of Global Warming Countermeasures”
Articles 2 and 3 of the “Order for Enforcement of the Act on Promotion of Global Warming Countermeasures”
<https://policies.env.go.jp/earth/ghg-santeikohyo/law.html>

*9: Substances alternative to specified substances under the Ozone Layer Protection Law (Ministry of Economy, Trade and Industry)
Vienna Convention for the Protection of the Ozone Layer (related treaty)
Group I and Group II, Montreal Protocol Annex F
https://www.meti.go.jp/policy/chemical_management/ozone/files/outline/Annex_F.pdf

Table 3. Complete abolition substances in manufacturing process

Substances required by SEG to be completely abolished from manufacturing processes are listed in Annexed Table 3. All of these substances are listed in Annexes A to C and E of the Montreal Protocol as specified substances under the Act on the Protection of the Ozone Layer Through the Control of Specified Substances, etc. and Other Measures (JPN). Accordingly, their use in the manufacturing processes of products supplied to SEG is prohibited.

No.	Substance group	Substance group of Montreal Protocol	Exemption
1	Chlorofluorocarbons (CFCs)	A-I	•Items falling under the exception rules in the Montreal Protocol
2	Halons	A-II	
3	Other chlorofluorocarbons (CFCs)	B-I	
4	Carbon tetrachloride	B- II	
5	1,1,1-trichloroethane	B-III	
6	Hydrochlorofluorocarbons (HCFCs)	C-I	
7	Hydrobromofluorocarbons (HBFCs)	C-II	
8	Bromochloromethane	C-III	
9	Methyl bromide	E-I	

Table 4. Criteria for providing composition information

(Cited from “chemSHERPA Rules on the Use [Version 1.5].” “chemSHERPA” is a scheme sharing information on chemical substances in products. <https://chemsherpa.net/chemSHERPA/english/doc/>)*¹⁰

- ☐ Criteria for transferring composition information shall be as shown in below table. These criteria are applicable to weight concentration on a per-product basis for chemicals and on a per-material basis for articles.
- ☐ For facilitating transfer of composition information, the chemSHERPA introduces the threshold of 0.1 wt% as its own voluntary criteria.

Threshold under Regulations		Concentration of declarable substance	Whether to transfer composition information
Clarified as reportable application, or application unknown	Prescribed threshold is greater than 0.1 wt%	Equal to or greater than allowable concentration under Regulations	Requires providing composition information, including declarable substances.
		Equal to or greater than 0.1 wt% of chemSHERPA's voluntary criteria and below allowable concentration under Regulations	Provide composition information including declarable substances, in line with voluntary criteria under chemSHERPA.
		Below 0.1 wt% of chemSHERPA's voluntary criteria	Not required to provide composition information on declarable substances. Optional reporting.
	Prescribed threshold is equal to or below 0.1 wt%	Equal to or greater than allowable concentration under Regulations	Requires providing composition information of declarable substances in products.
		Below allowable concentration under Regulations	Not required to provide composition information of declarable substances in products. Optional reporting.
	Clarified as other than reportable application	Equal to or greater than 0.1 wt% of chemSHERPA's voluntary criteria	Provide composition information including declarable substances, in line with voluntary criteria under chemSHERPA.
		Below 0.1 wt% of chemSHERPA's voluntary criteria	Not required to provide composition information of declarable substances in products. Optional reporting.

[Note] “Threshold under Regulations” in this table indicates allowable concentration of declarable substances under a relevant standard selected from Regulations. If there is more than one value, the most stringent shall be used in principle.

- ☐ Product suppliers shall determine whether to transfer information depending on applicability to reportable application. If possible, the determination result shall be shared with us through appropriate communication. If the supplier is unable to identify how products would be used by us, it falls under “application unknown.”

(Note 1) Examples of “clarified as other than reportable application” may include cases where: product suppliers have been informed by the receiving party that the usage of supplied products is not relevant to reportable application; the usage of products is restricted by suppliers within non-reportable application.

(Note 2) Regarding Japan's Chemical Substances Control Law (herein after “CSCL”), suppliers shall consider the threshold value at zero (“0”) in principle. When content of a declarable substance under CSCL is not intentional and the product is applied to best available technology (BAT) or the content is below the voluntary management threshold authorized by Japan's Ministry of Economy, Trade and Industry (METI), suppliers should conduct information transfer with explanations on such conditions as Remarks. Where the threshold value is “0,” the term “equal to or greater than the threshold” means to include least content and “below threshold” means no content. Any intentional addition is subject to control as Class I Specified Chemical Substances and virtually banned from production.

*10: When using information transmission tools other than chemSHERPA, such as JAPIA integrated data sheets, IMDS, etc., their specifications shall be followed.

Table 5. List of the regulation contents for prohibited substances

- In a case that a relevant regulation is revised, suppliers shall comply the latest one.
- In a case that an exception to the relevant regulation can be applied to supplied goods, suppliers can follow such an exception. Please refer the requirement of the regulation and specification (application) of the goods for detailed procedures.

Table 5-A01 Cadmium and its compound

SEG's regulation contents		Major regulations
Contents	Application	
The sum of the concentration levels of lead, cadmium, mercury and hexavalent chromium present in any homogeneous mixture ^{*11} of package or packaging component shall not exceed 100 ppm by weight of those elements.	Packaging or packaging components	<ul style="list-style-type: none"> • Dir. 94/62/EC on packaging and packaging waste (EU) • Dir. 2004/12/EC on packaging and packaging waste, revised (EU)
Prohibiting containing more than 20 ppm by weight.	Portable batteries or accumulators, including those incorporated into appliances	<ul style="list-style-type: none"> • Reg. (EU)2023/1542 (EU battery regulation)
Inclusion is prohibited.	Mixtures and assemblies made from organic polymer. Refer to REACH Regulation, Annex XVII (restricted substances), Entry No. 23.	<ul style="list-style-type: none"> • REACH Regulation (Annex XVII, Restricted substances, EU)
No more than 100 ppm by weight	Other goods. (For paints, ink, pigments, dyes, polymers including rubbers, the threshold is applied to concentration in dry state.)	<ul style="list-style-type: none"> • JIS C 0950 (J-MOSS, JPN) • EU RoHS directive, ELV directive • Testing methods for hazardous substances in electronic information products (China RoHS, CHN) • The Act for Resource Recycling of Electrical and Electronic Equipment and Vehicles (Korea RoHS, KOR)

*11: Examples of the homogeneous mixture of package or packaging component: polymer compound, ink, paint, etc.

Table 5-A02 Hexavalent chromium (chromium(VI), Cr(VI), chromium 6) compounds

SEG's regulation contents		Major regulations
Contents	Application	
The sum of the concentration levels of lead, cadmium, mercury and hexavalent chromium present in any homogeneous mixture ^{*11} of package or packaging component shall not exceed 100 ppm by weight of those elements.	Packaging or packaging components	<ul style="list-style-type: none"> • Dir. 94/62/EC on packaging and packaging waste (EU) • Dir. 2004/12/EC on packaging and packaging waste, revised (EU)
Concentration exceeding 0.0002 wt% (2 ppm) is prohibited.	Cement and cement content Refer to REACH Regulation, Annex XVII (Restricted substances), Entry No. 47.	<ul style="list-style-type: none"> • REACH Regulation (Annex XVII, Restricted substances, EU)
Concentration exceeding 1000 ppm (0.1 wt%) is prohibited.	Other goods.	<ul style="list-style-type: none"> • JIS C 0950 (J-MOSS, JPN) • EU RoHS directive, ELV directive • Testing methods for hazardous substances in electronic information products (China RoHS, CHN) • The Act for Resource Recycling of Electrical and Electronic Equipment and Vehicles (Korea RoHS, KOR)

*11: Examples of the homogeneous mixture of package or packaging component: polymer compound, ink, paint, etc.

Table 5-A03 Lead and its compounds

SEG's regulation contents		Major regulations
Contents	Application	
The sum of the concentration levels of lead, cadmium, mercury and hexavalent chromium present in any homogeneous mixture ^{*11} of package or packaging component shall not exceed 100 ppm by weight of those elements.	Packaging or packaging components	<ul style="list-style-type: none"> • Dir. 94/62/EC on packaging and packaging waste (EU) • Dir. 2004/12/EC on packaging and packaging waste, revised (EU)
Concentration shall not exceed 100 ppm.	Portable batteries	<ul style="list-style-type: none"> • Reg. (EU)2023/1542 (EU battery regulation)
Prohibiting intentional use and refusing contamination exceeding over 300 ppm in weight.	Most outer jacket of electric wire	<ul style="list-style-type: none"> • The Safe Drinking Water and Toxic Enforcement Act (Proposition 65, California, US)
Concentration shall not exceed 500 ppm.	Jewelry Refer to REACH Regulation, Annex XVII (Restricted substances), Entry No. 63.	<ul style="list-style-type: none"> • REACH Regulation (Annex XVII, Restricted substances, EU)
Prohibition of intentional use	When contained in paint as a substance or mixture. Refer to REACH Regulation, Annex XVII (Restricted substances), Entry Nos. 16 and 17.	<ul style="list-style-type: none"> • REACH Regulation (Annex XVII, Restricted substances, EU)
Concentration exceeding 1000 ppm (0.1 wt%) is prohibited.	Other goods.	<ul style="list-style-type: none"> • JIS C 0950 (J-MOSS, JPN) • EU RoHS directive, ELV directive • Testing methods for hazardous substances in electronic information products (China RoHS, CHN) • The Act for Resource Recycling of Electrical and Electronic Equipment and Vehicles (Korea RoHS, KOR)

*11: Examples of the homogeneous mixture of package or packaging component: polymer compound, ink, paint, etc.

Table 5-A04 Mercury and its compounds

SEG's regulation contents		Major regulations
Contents	Application	
The sum of the concentration levels of lead, cadmium, mercury and hexavalent chromium present in any homogeneous mixture ^{*11} of package or packaging component shall not exceed 100 ppm by weight of those elements.	Packaging or packaging components	<ul style="list-style-type: none"> • Dir. 94/62/EC on packaging and packaging waste (EU) • Dir. 2004/12/EC on packaging and packaging waste, revised (EU)
Prohibiting containing more than 5 ppm by weight.	Portable batteries or accumulators, including those incorporated into appliances	<ul style="list-style-type: none"> • Reg. (EU)2023/1542 (EU battery regulation)
Inclusion is prohibited.	Biocides (e.g., hull coatings, equipment for aquaculture of fish and shellfish, and tools or devices used in water), wood preservatives, industrial textiles, yarn impregnation agents, industrial water treatment agents, and various measuring instruments. Refer to REACH Regulation, Annex XVII (Restricted substances), Entry Nos. 18 and 18a.	<ul style="list-style-type: none"> • REACH Regulation (Annex XVII, Restricted substances, EU)
Concentration exceeding 1000 ppm (0.1 wt%) is prohibited.	Other goods.	<ul style="list-style-type: none"> • JIS C 0950 (J-MOSS, JPN) • EU RoHS directive • Testing methods for hazardous substances in electronic information products (China RoHS, CHN) • The Act for Resource Recycling of Electrical and Electronic Equipment and Vehicles (Korea RoHS, KOR)

*11: Examples of the homogeneous mixture of package or packaging component: polymer compound, ink, paint, etc.

Table 5-A05 Bis(tributyltin)oxide

SEG's regulation contents (Contents and Application)	Major regulations
Prohibition of intentional use Even if the substance isn't used intentionally, where the presence of the substance is known, goods supplied shall not be contaminated with the substance over the specified threshold value ^{*12} . If inclusion is known and there is no threshold value, inclusion is prohibited.	<ul style="list-style-type: none"> • Chemical Substances Control Law (CSCL, Class I Specified Chemical Substance, JPN) • REACH Regulation (Annex XVII, Restricted substances, EU)

*12: Example specified threshold values: Transformer oil (< 0.5 ppm, in accordance with the Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes (PCB Special Measures Act)), organic pigments (< BAT level^(Note) (Advance confirmation of 3 ministries is required), other articles (< 50 ppm, in accordance with the Stockholm Convention on Persistent Organic Pollutants (POPs))

(Note) "BAT" is an abbreviation for "Best Available Technology." The "BAT level" refers to the lowest concentration that can be reduced by technically and economically feasible means, and is used as a provisional concentration threshold for hazardous impurities.

Table 5-A06 Tri-substituted organostannic compounds (such as TBTs, TPTs, etc.)

SEG's regulation contents (Contents and Application)	Major regulations
Content exceeding 1000 ppm (0.1 wt%) as metallic tin equivalent is prohibited.	<ul style="list-style-type: none"> • Chemical Substances Control Law (CSCL, Class II Specified Chemical Substance, JPN) • REACH Regulation (Annex XVII, Restricted substances, EU)

Table 5-A07 Dibutyltin (DBT) and Dioctyltin (DOT) compounds

SEG's regulation contents (Contents and Application)	Major regulations
Content exceeding 1000 ppm (0.1 wt%) as metallic tin equivalent is prohibited.	<ul style="list-style-type: none"> • REACH Regulation (Annex XVII, Restricted substances, EU)

Table 5-A08 Polybrominated biphenyls (PBBs)

SEG's regulation contents (Contents and Application)	Major regulations
Concentration exceeding 1000 ppm (0.1 wt%) is prohibited.	<ul style="list-style-type: none"> • JIS C 0950 (J-MOSS, JPN) • EU RoHS directive • Testing methods for hazardous substances in electronic information products (China RoHS, CHN) • The Act for Resource Recycling of Electrical and Electronic Equipment and Vehicles (Korea RoHS, KOR)
[Hexabromobiphenyl] Prohibiting intentional use Even if the substance isn't used intentionally, where the presence of the substance is known, goods supplied shall not be contaminated with the substance over the specified threshold value* ¹² . If inclusion is known and there is no threshold value, inclusion is prohibited.	<ul style="list-style-type: none"> • Chemical Substances Control Law (CSCL, Class I Specified Chemical Substance, JPN)

*12: Example specified threshold values: Transformer oil (< 0.5 ppm, in accordance with the Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes (PCB Special Measures Act)), organic pigments (< BAT level^(Note) (Advance confirmation of 3 ministries is required), other articles (< 50 ppm, in accordance with the Stockholm Convention on Persistent Organic Pollutants (POPs))

(Note) "BAT" is an abbreviation for "Best Available Technology." The "BAT level" refers to the lowest concentration that can be reduced by technically and economically feasible means, and is used as a provisional concentration threshold for hazardous impurities.

Table 5-A09 Polybrominated diphenyl ethers (PBDEs)

SEG's regulation contents (Contents and Application)	Major regulations
No more than 1000 ppm by weight	<ul style="list-style-type: none"> • JIS C 0950 (J-MOSS, JPN) • EU RoHS directive • Testing methods for hazardous substances in electronic information products (China RoHS, CHN) • The Act for Resource Recycling of Electrical and Electronic Equipment and Vehicles (Korea RoHS, KOR)
[Tetrabromodiphenyl ether] [Pentabromodiphenyl ether] [Hexabromodiphenyl ether] [Heptabromodiphenyl ether] [Decabromodiphenyl ether] Prohibiting intentional use Even if the substance isn't used intentionally, where the presence of the substance is known, goods supplied shall not be contaminated with the substance over the specified threshold value* ¹² . If inclusion is known and there is no threshold value, inclusion is prohibited.	<ul style="list-style-type: none"> • Chemical Substances Control Law (CSCL, Class I Specified Chemical Substance, JPN)

Table 5-A10 Polychlorobiphenyls (PCBs) and specified substitutes

SEG's regulation contents (contents, application)	Major regulations
Prohibiting intentional use Even if the substance isn't used intentionally, where the presence of the substance is known, goods supplied shall not be contaminated with the substance over the specified threshold value* ¹² . If inclusion is known and there is no threshold value, inclusion is prohibited.	<ul style="list-style-type: none"> • Chemical Substances Control Law (CSCL, Class I Specified Chemical Substance, JPN) • Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes • REACH Regulation (Annex XVII, Restricted substances, EU) • EU POPs Regulation

Table 5-A11 Polychlorinated terphenyls (PCTs)

SEG's regulation contents (contents, application)	Major regulations
No more than 50 ppm by weight	<ul style="list-style-type: none"> • REACH Regulation (Annex XVII, Restricted substances, EU)
Prohibiting intentional use	<ul style="list-style-type: none"> • The Canadian Prohibition of Certain Toxic Substances Regulations 2012, SOR/2012-285

Table 5-A12 Polychlorinated naphthalenes (PCN) (limited to those containing at least two chlorine atoms)

SEG's regulation contents (contents, application)	Major regulations
Prohibiting intentional use Even if the substance isn't used intentionally, where the presence of the substance is known, goods supplied shall not be contaminated with the substance over the specified threshold value* ¹² . If inclusion is known and there is no threshold value, inclusion is prohibited.	<ul style="list-style-type: none"> • Chemical Substances Control Law (CSCL, Class I Specified Chemical Substance, JPN) • EU POPs Regulation

*12: Example specified threshold values: Transformer oil (< 0.5 ppm, in accordance with the Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes (PCB Special Measures Act)), organic pigments (< BAT level^(Note) (Advance confirmation of 3 ministries is required), other articles (< 50 ppm, in accordance with the Stockholm Convention on Persistent Organic Pollutants (POPs))

(Note) "BAT" is an abbreviation for "Best Available Technology." The "BAT level" refers to the lowest concentration that can be reduced by technically and economically feasible means, and is used as a provisional concentration threshold for hazardous impurities.

Table 5-A13 Some short-chain and medium-chain chlorinated paraffins (carbon numbers 10–17)

SEG's regulation contents (contents, application)	Major regulations
Prohibiting intentional use Even if the substance isn't used intentionally, where the presence of the substance is known, goods supplied shall not be contaminated with the substance over the specified threshold value* ¹² . If inclusion is known and there is no threshold value, inclusion is prohibited.	<ul style="list-style-type: none"> • Chemical Substances Control Law (CSCL, Class I Specified Chemical Substance, JPN) • EU POPs Regulation

Table 5-A14 Perfluorooctane sulfonic acid (PFOS) and its salts

SEG's regulation contents (contents, application)	Major regulations
Prohibiting intentional use Even if the substance isn't used intentionally, where the presence of the substance is known, goods supplied shall not be contaminated with the substance over the specified threshold value* ¹² . If inclusion is known and there is no threshold value, inclusion is prohibited.	<ul style="list-style-type: none"> • Chemical Substances Control Law (CSCL, Class I Specified Chemical Substance, JPN) • EU POPs Regulation

Table 5-A15 Perfluorooctanoic acid (PFOA) and its salts, and PFOA-related substances

SEG's regulation contents (contents, application)	Major regulations
Prohibiting intentional use Even if the substance isn't used intentionally, where the presence of the substance is known, goods supplied shall not be contaminated with the substance over the specified threshold value* ¹² . If inclusion is known and there is no threshold value, inclusion is prohibited.	<ul style="list-style-type: none"> • Chemical Substances Control Law (CSCL, Class I Specified Chemical Substance, JPN) • EU POPs Regulation

Table 5-A16 Perfluorohexanesulfonic acid (PFHxS) and its salts as well as related substances

SEG's regulation contents (contents, application)	Major regulations
Prohibiting intentional use Even if the substance isn't used intentionally, where the presence of the substance is known, goods supplied shall not be contaminated with the substance over the specified threshold value* ¹² . If inclusion is known and there is no threshold value, inclusion is prohibited.	<ul style="list-style-type: none"> • Chemical Substances Control Law (CSCL, Class I Specified Chemical Substance, JPN) • EU POPs Regulation

Table 5-A17 Long-chain perfluorinated carboxylic acid (carbon number C9-21, PFCA) and its salts as well as long-chain PFCA related substances^{*13}

SEG's regulation contents (contents, application)	Major regulations
Prohibiting intentional use Even if the substance isn't used intentionally, where the presence of the substance is known, goods supplied shall not be contaminated with the substance over the specified threshold value ^{*12} . If inclusion is known and there is no threshold value, inclusion is prohibited.	<ul style="list-style-type: none"> • Chemical Substances Control Law (CSCL, Class I Specified Chemical Substance, JPN) • EU POPs Regulation
If the sum of the concentration levels of LC PFCA and its salts exceeds 25 ppb, inclusion is prohibited. If the sum of the concentration levels of LC PFCA and related substances exceeds 260 ppb, inclusion is prohibited.	<ul style="list-style-type: none"> • REACH Regulation (Annex XVII, Restricted substances, EU)

Table 5-A18 Specific phthalates (DEHP, BBP, DBP & DIBP)

SEG's regulation contents (contents, application)	Major regulations
Prohibiting intentional use in a substance or mixture.	<ul style="list-style-type: none"> • REACH Regulation (Annex XIV, Substances subject to authorization, EU)
If the sum of the concentration levels of 4 types of phthalates exceeds 1000 ppm (0.1 wt%), inclusion is prohibited.	<ul style="list-style-type: none"> • EU RoHS directive

Table 5-A19 Asbestos

SEG's regulation contents (contents, application)	Major regulations
Prohibiting intentional use and refusing contamination exceeding over 1000 ppm (0.1 wt%) in supplied goods.	<ul style="list-style-type: none"> • Air Pollution Control Act (Specified Particulates, JPN) • Industrial Safety and Health Act (Prohibited substances for Manufacturing, JPN) • REACH Regulation (Annex XVII, Restricted substances, EU)

Table 5-A20 Azo dyes liberating specific toxic & carcinogenic amines.

SEG's regulation contents		Major regulations
Contents	Application	
If a concentration level exceeds 30 ppm as specific toxic & carcinogenic amines ^{*14} , inclusion is prohibited.	Yarn, textiles, and leather products	<ul style="list-style-type: none"> • REACH Regulation (Annex XVII, Restricted substances, EU)
If a concentration level exceeds 1000 ppm (0.1 wt%) in a substance or mixture, inclusion is prohibited.	When dyeing is intended.	<ul style="list-style-type: none"> • REACH Regulation (Annex XVII, Restricted substances, EU)

^{*14}: The European Community ban on the use of azo dyes applies to specific azo dyes and pigments in which one of the 22 specified aromatic amines is produced by the reductive cleavage of azo groups.

Table 5-A21 Ozone-Depleting Substances (Specified Substances under Act on the Protection of the Ozone Layer Through the Control of Specified Substances and Other Measures)

SEG's regulation contents (contents, application)	Major regulations
Prohibiting intentional use	<ul style="list-style-type: none"> • Act on the Protection of the Ozone Layer Through the Control of Specified Substances and Other Measures (JPN) • The Montreal Protocol

^{*15}: We prohibit not only the described substances, but also all isomers having mentioned chemical formula as ozone-depleting substances.

Table 5-A22 Radioactive isotopes

SEG's regulation contents (contents, application)	Major regulations
Prohibiting intentional use	<ul style="list-style-type: none"> • Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors (JPN) • Act on Prevention of Radiation Hazards due to Radioisotopes, etc. (JPN)

Table 5-A23 Dimethyl fumarate (DMF)

SEG's regulation contents (contents, application)	Major regulations
Any goods containing this substance exceeding 1 ppm (in weight) shall not be delivered to us.	• REACH Regulation (Annex XVII, Restricted substances, EU)

Table 5-A24 Specified Benzotriazol

SEG's regulation contents (contents, application)	Major regulations
Prohibiting intentional use Even if the substance isn't used intentionally, where the presence of the substance is known, goods supplied shall not be contaminated with the substance over the specified threshold value* ¹² . If inclusion is known and there is no threshold value, inclusion is prohibited.	• Chemical Substances Control Law (CSCL, Class I Specified Chemical Substance, JPN) • REACH Regulation (Annex XIV, Substances subject to authorization, EU)

*12: Example specified threshold values: Transformer oil (< 0.5 ppm, in accordance with the Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes (PCB Special Measures Act)), organic pigments (< BAT level^(Note) (Advance confirmation of 3 ministries is required), other articles (< 50 ppm, in accordance with the Stockholm Convention on Persistent Organic Pollutants (POPs))

(Note) "BAT" is an abbreviation for "Best Available Technology." The "BAT level" refers to the lowest concentration that can be reduced by technically and economically feasible means, and is used as a provisional concentration threshold for hazardous impurities.

Table 5-A25 CSCL, Class I Specified Chemical Substance, JPN

(Excluding substances/substance-groups which have been described in other sub-table of Table 5)*¹⁵

SEG's regulation contents (contents, application)	Major regulations
Prohibiting intentional use Even if the substance isn't used intentionally, where the presence of the substance is known, goods supplied shall not be contaminated with the substance over the specified threshold value* ¹² . If inclusion is known and there is no threshold value, inclusion is prohibited.	• Chemical Substances Control Law (CSCL, Class I Specified Chemical Substance, JPN) • REACH Regulation (Annex XIV, Substances subject to authorization, EU)

*15: The list of the latest Class I Specified Chemical Substances (JPN) is available in English with following URL.
https://www.chem-info.nite.go.jp/chem/chrip/chrip_search/sltLst?_e_sl=&slScNm=RJ_01_001

Table 5-A26 Substances Prohibited for Manufacturing under Industrial Safety & Health Act (JPN)

SEG's regulation contents (contents, application)	Major regulations
Prohibiting intentional use	• Industrial Safety and Health Act (Harmful Substances Prohibited for Manufacturing)

Table 5-A27 Non-approved Active Substances and Active Substances with Non-approved Uses Under the European Biocidal Products Regulation (BPR)*¹⁶

SEG's regulation contents (contents, application)	Major regulations
Prohibition of use intended for biocidal function (The regulation only applies to products shipped ultimately to Europe.)	• European Biocidal Products Regulation (BPR)

*16: Check the approved active substances and their uses on the following URL.
 Active substances not listed on this website are non-approved active substances and their use is prohibited.
<https://echa.europa.eu/information-on-chemicals/biocidal-active-substances>

Table 5-B01 Chlorinated volatile organic compounds (Cl-VOCs)
(Only designated hazardous substances under the Soil Contamination Countermeasures Act (JPN).)

Regulation contents		Major regulations
Contents	Application	
Prohibiting intentional use and refusing contamination exceeding over 1.0wt% in supplied goods.	For all applications	<ul style="list-style-type: none"> • Cl-VOCs among the designated hazardous substances under the Soil Contamination Countermeasures Act (JPN) • EU REACH Regulation, Annex XIV (Substances subject to authorization)
[Chloroethylene] Inclusion is prohibited.	Aerosol injection	• REACH Regulation (Annex XVII, Restricted substances, EU)
[1,1-Dichloroethylene] [1,1,2-Trichloroethane] If a concentration level exceeds 1000 ppm (0.1 wt%) in a substance or mixture, inclusion is prohibited.	If the mixture is intended for supply to the general public, including for use in surface cleaning and cleaning applications with dispersive properties.	• REACH Regulation (Annex XVII, Restricted substances, EU)
[Dichloromethane] If a concentration level exceeds 1000 ppm (0.1 wt%), inclusion is prohibited.	Paint stripper	• REACH Regulation (Annex XVII, Restricted substances, EU)

Table 6 Terms & definitions

Terms	Definition
Prohibited substances	Chemical substances that suppliers shall guarantee that goods to supply to us don't contain those substances in principle. Those were designated as restricted substances of RoHS (EU), restricted substances of REACH (EU), Class I Specified Chemical Substances of the Act on the Regulation of Manufacture and Evaluation of Chemical Substances (JPN), substances prohibited manufacturing under Industrial Safety & Health Act (JPN), etc., and were considered as chemical substances liable to be contained to range of applications of supplied goods to us and our products.
Controlled substances	Chemical substances in which suppliers shall disclose us the information of the substances (existence of the substance, containing amount, containing part, application, etc.) concerning goods supplied in principle. These are specified in Table 2 of this standard.
Complete abolition substances	Chemical substances that suppliers shall not use in their manufacturing processes of goods which are supplied to us. Those are designated as ozone depletion substances by the Montreal Protocol and "JPN Act on the Protection of the Ozone Layer Through the Control of Specified Substances and Other Measures," and are specified in Table 3 of this standard.
Intentional use (blending)	It is an action intentionally blending or adding the substance to obtain certain characteristics, appearance, identification or productivity in manufacturing process of goods, components, etc.
Unintentional containing	It is a status that goods contain the substance due to an unintentional cause, such as impurities, sub-delivered substances of chemical reaction, decomposed substances, residual monomer of polymer, etc.
Impurities	It is a substance which is originally contained in natural material or is unintentionally generated in process of chemical reaction and is unable to remove with refining process.
Dry state	It is a state that a flowable material including the substance becomes to solid equivalent to a condition for normal use by evaporating solvent (organic, water, etc.), curing with catalyst, hydrating with water, etc.

Table 7 List of examples prohibited substances

This list does not cover all prohibited substances and contents of regulation information, but it provides representative examples of chemical substances and related information identified by CAS Registry Numbers® or EC numbers.