FDK Group
Specified Chemical Substances List

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FDK CORPORATION
Product Chemical Substances Management Committee

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[Definition of terms]

Containment	: This term indicates that chemical substances (including impurities) are, whether intentionally or not, added, filled, mixed or adhered to FDK's procured parts, products and packing materials.(This term also indicates that chemical substances are unintentionally mixed or adhered to products during the production process.)
Concentration	: Content rate of chemical substances Its unit is used with [ppm] (parts per million by weight) or [wt%] (weight percent). (In terms of concentration calculation methods, please refer to the notation of each table.)
Intentional addition	: Deliberate use in the formulation of Deliverables where its presence is desired to provide a specific characteristic, appearance or quality regardless of concentration of the chemical substance
Ban of intentional addition	: The intentional addition of substances for technical or other purposes is prohibited. Substances unintentionally included shall be in accordance with the content rate indicated side by side.
homogeneous material	: one material of uniform composition throughout or a material, consisting of a combination of materials, that cannot be disjointed or separated into different materials by mechanical actions such as unscrewing, cutting, crushing, grinding and abrasive processes.
Impurities	: This term indicates substances which are contained in natural materials and cannot be technically removed completely by refinery processes as industry materials, or substances which are generated in synthetic reaction and cannot be technically removed completely.
Preparation	: A mixture or solution composed of two or more substances (e.g. adhesives, plating solutions, coating materials)
Deliverables	: All the parts (including raw materials), sub-materials and production subsidiary materials constituting comprise FDK's products.
Packaging materials	: They are used as packaging, packing, and packaging materials for our products. For example, cardboard boxes and bundling bands are typical packaging materials. Other packaging materials include inks, paints, labels, adhesives, etc. *Excludes items that are not used for shipping.
Sub-materials	: Materials used to make up a product or fulfill a function. Examples include adhesive tapes, solder materials, adhesives, paints (including coatings and plating), etc.
Production subsidiary materials	: Items that are not directly related to the function of the product, but are used in the product manufacturing process and adhered to the product. Examples include inks used for inspection (if adhered), labels, residual substances from wax/tape used for temporary fixation, etc.
Chemical product	: Chemical substance and/or mixture
Chemical Substance	: A chemical element or compound that either exists in nature or is obtained through a manufacturing process
Mixture	: A mixture intentionally comprising two or more chemical substances
Article	: An item of specific shape, appearance or design created during manufacture which substantially determines functions in final use rather than functions provided by its chemical composition
Electrical and electronic equipment	: Equipment which is dependent on electric currents or electromagnetic fields in order to work properly and equipment for the generation, transfer and measurement of such currents and fields and designed for use with a voltage rating not exceeding 1000 volts for alternating current and 1,500f volts for direct current (From EU RoHS II Directive 2011/65/EU)
Constituent articles	: The smallest units of articles constituting a product. For example, articles identified by the Article flag (*2) in the composition information of chemSHERPA.(*1). *1 chemSHERPA: A scheme that Joint Article Management Promotion-consortium (JAMP) provides to facilitates sharing information on chemical substances in products. https://chemsherpa.net/english *2 Article flag: Category that identifies the Article corresponding to the SVHC denominator in the EU REACH Regulation in chemSHERPA.
Battery	: Battery means such batteries that consist of one or more primary or secondary cells, having outer casing, termination, marking or so. Battery may also involve all components integrated in one unit of Battery that is delivered by FDK and actually used in the market. As these components, protection elements like PTC element or thermal fuse, and connective component with equipment like lead wire, connector, screw or so are involved, however, packing material which will be disposed of in actual use is not involved.
Purchased Battery	: Purchased Battery means all batteries that are bought directly or indirectly from Battery manufacturer other than FDK. E.g.: Button cell, Lithium coin cell, Carbon zinc Battery, Sealed lead acid Battery
Battery material	: Battery material means all components and law materials consisted of Battery. Packaging materials are subject to requirements other than those in Section 5.
Banned Substances	: Substances that must not be intentionally added to Chemical products or Articles, contained in excess of standards, or used for purposes other than those specified.
Reportable Substances	: Substances that must be reported when used in excess of the specified contentrate.

Control Substances	: Substances that require record keeping when they are known to be intentionally added or contained.
Prohibited Substances in manufacturing process	: Substances whose use in manufacturing is prohibited for environmental protection.

1. Banned Substances

Table 1: Banned Substances (Refer to Note 1)

No	Substances	CAS No (Note 8)	Standards of ban	Remark	Reference (Note 9)
001	Asbestos	1332-21-4 and others	< All Products > [1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		[1] EU REACH regulation (Restriction) [2] FDK Standards
002	Azo colorants and Azo dyes which form certain aromatic amines	Refer to Table 1a	< Leather and textile products and parts thereof that may come into direct and prolonged contact with the skin of the human body > [1] Ban of intentional addition [2] The concentrations in homogeneous material must not exceed 30ppm.		EU REACH regulation (Restriction)
003	Cadmium /Cadmium Compounds	7440-43-9 and others	< Battery body > See section 5		See section 5
			< Packing material > [1] Ban of intentional addition [2] The rate of content should be 100ppm or less in total of 4 substances (refer to Note 3) in the packaging material quantity.		[1] FDK Standards [2] EU Packing and Packing waste directive
			< Other than above > [1] Ban of intentional addition [2] Content in homogeneous material mass shall be 0.01% (100ppm) or less.	Refer to Exempted Application in Table 1e This does not apply to textiles used under the conditions specified in Table 1 No.054.	[1] FDK Standards [2] EU RoHS directive
004	Chromium（VI）Compounds	1333-82-0 and others	< Battery body > See section 5		See section 5
			< Packing material > [1] Ban of intentional addition [2] The rate of content should be 100ppm or less in total of 4 substances (refer to Note 3) in the packaging material quantity.		[1] FDK Standards [2] EU Packing and Packing waste directive
			< In the case of leather articles or articles containing leather parts coming into contact with the skin > [1] Ban of intentional addition [2] However, if contained concentrations in total dry weight of the leather of those leather part must be less than 3ppm.		[1] FDK Standards [2] EU REACH regulation (Restriction)
			< Other than above > [1] Ban of intentional addition [2] Content in homogeneous material mass shall be 0.1% (1000ppm) or less.	Refer to Exempted Application in Table 1e This does not apply to textiles used under the conditions specified in Table 1 No.054.	[1] FDK Standards [2] EU RoHS directive

No	Substances	CAS No (Note 8)	Standards of ban	Remark	Reference (Note 9)
005	Lead/Lead Compounds	7439-92-1 and others	< Battery body > See section 5		See section 5
			< Packaging material > [1] Ban of intentional addition [2] The rate of content should be 100ppm or less in total of 4 substances (refer to Note 3) in the packaging material quantity.		[1] FDK Standards [2] EU Packing and Packing waste directive
			< Cables/cords with thermoset or thermoplastic coatings > [1] Ban of intentional addition [2] The rate of content should be 0.03%（300ppm）or less in the surface coating material.		[1] FDK Standards [2] California proposition 65
			< Molded Articles that children may put in their mouths > [1] Ban of intentional addition [2] The rate of content in the molding quality articles shall be 500ppm or less.	It is considered that an article or accessible part of an article may be placed in the mouth by children if it is smaller than 5 cm in one dimension or has a detachable or protruding part of that size.	[1] FDK Standards [2] EU REACH regulation (Restriction)
			< Other than above > [1] Ban of intentional addition [2] However, if contained concentration in homogeneous material must not exceed 0.1%(1,000ppm) ppm. In this regard,	Refer to Exempted Application in Table 1e This does not apply to textiles used under the conditions specified in Table 1 No.054.	[1] FDK Standards [2] EU RoHS Directive
006	Mercury/Mercury Compounds	7439-97-6 and others	< Battery body > See section 5		See section 5
			< Battery material > [1] Ban of intentional addition [2] Contained concentration in homogeneous material must not exceed 5 ppm.		[1] FDK Standards [2] Canada Products Containing Mercury Regulations
			< Packaging material > [1] Ban of intentional addition [2] The rate of content should be 100ppm or less in total of 4 substances (refer to Note 3) in the packaging material quantity.		[1] FDK Standards [2] EU Packing and Packing waste directive
			< Other than above > [1] Ban of intentional addition [2] Content in homogeneous material mass shall be 0.1% (1000ppm) or less.		[1] FDK Standards [2] EU RoHS directive

No	Substances	CAS No (Note 8)	Standards of ban	Remark	Reference (Note 9)
007	Ozone Depleting Substances (CFCs, HCFCs, HBFCs, carbon tetrachloride, etc.)	Refer to Table 1b	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		EU Ozone Depleting Substances Regulation
008	PFOS / PFOS-related substances	1691-99-2 and others	< Chemicals Products > [1] Ban of intentional addition and ban of attachment, mix,or production of the substances in the manufacturing process. [2] The rate of content should be 10mg/kg (10ppm) or less in the chemical products quantity.		[1] FDK Standards [2] EU POPs Regulation
			< Textiles or other coated materials > [1] Ban of intentional addition and ban of attachment, mix,or production of the substances in the manufacturing process. [2] The rate of content should be less than 1μg/m^2 in the mass of the coating material.		
			< Material in parts > [1] Ban of intentional addition and ban of attachment, mix,or production of the substances in the manufacturing process. [2] The rate of content should be less than 0.1% (1,000ppm) in material mass.		
009	Polybrominated Biphenyls (PBBs)	36355-01-8 and others	< Battery body> See section 5		See section 5
			< Other than above > [1] Ban of intentional addition [2] Content in homogeneous material mass shall be 0.1% (1000ppm) or less.		[1] FDK Standards [2] EU RoHS Directive
010	Polybrominated Diphenylethers (PBDEs) Examples TetraBDE PentaBDE HexaBDE HeptaBDE DecaBDE	 40088-47-9 32534-81-9 36483-60-0 68928-80-3 1163-19-5	< Battery body > See section 5		See section 5
			< Electrical and Electronic equipment > [1] Ban of intentional addition and ban of attachment, mix, or production of the substances in the manufacturing process. [2] Content in homogeneous material mass shall be 0.1% (1000ppm) or less.		[1] FDK Standards [2] EU RoHS Directive
			< Other than above > The rate of content should be 500mg/kg (500ppm) or less in mixture and molding quality quantity.		EU POPs Regulation

No	Substances	CAS No (Note 8)	Standards of ban	Remark	Reference (Note 9)
011	Polychlorinated Biphenyls (PCBs) and specific substitutes	Refer to Table 1c	< Equipment with a volume exceeding 0.05d ㎥ > The rate of content should be 0.005% (50ppm) or less.		EU POPs Regulation
			< Other than above > [1] Ban of intentional addition [2] Ban of attachment, mix,or production of the substances in the manufacturing process.		FDK Standards
012	Polychlorinated Terphenyls (PCTs)	61788-33-8 and others	< Chemical Product, Article > [1] Ban of intentional addition [2] Concentration in homogeneous Material must not exceed 50 ppm.		[1] FDK Standards [2] EU REACH Regulation(Restriction)
013	Shortchain Chlorinated Paraffins (C10-13)	85535-84-8 and others	< Chemical Product > The rate of content should be less than 1% (10,000ppm) in the chemical quality quantity.		EU POPs Regulation
			< Article > [1] Ban of intentional addition [2] Concentration in article must not exceed 1,000 ppm.		FDK Standards
014	Tri-substituted organostannic compounds (except for TBTO)	563-20-2 and others	< Article > Concentration of Tin in the article, or part thereof, must not exceed 0.1% (1,000 ppm).		EU REACH Regulation (Restriction)
015	Tributyl Tin Oxide (TBTO)	56-35-9	< Article > [1] Ban of intentional addition [2] Concentration of Tin in the article, or part thereof, must not exceed 0.1% (1,000 ppm).		FDK Standards
016	Dimethylfumarate (DMF)	624-49-7	< Article > Concentration in the article, or part thereof, must not exceed 0.1 mg/kg (0.1 ppm).		EU REACH Regulation (Restriction)
017	Dibutyltin compounds (DBT)	818-08-6 and others	< Chemical Product, Article > Concentration of Tin in the mixture and article, or part thereof, must not exceed 0.1% (1,000 ppm).		EU REACH Regulation (Restriction)
018	Dioctyltin compounds (DOT)	870-08-6 and others	< Textile products and parts thereof that may come into direct contact with the skin of the human body > Concentration of Tin in the article, or part thereof, must not exceed 1,000 ppm.		EU REACH Regulation (Restriction)
019	Fluorinated greenhouse gases (HFC, PFC, SF6)	Refer to Table 1d	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix,or production of the substances in the manufacturing process.	Unless confined system and a recovery scheme for the substances have been established.	EU Fluorinated greenhouse gases Regulation
020	Formaldehyde	50-00-0	< Textile products and parts thereof intended for skin contact > [1] Ban of intentional addition [2] Concentration in homogeneous material must not exceed 75 ppm.	This does not apply to textiles used under the conditions specified in Table 1 No.054.	[1] FDK Standards [2] EU REACH Regulation (Restriction)

No	Substances	CAS No (Note 8)	Standards of ban	Remark	Reference (Note 9)
021	Tris(2,3-dibromopropyl)phosphate (TRIS)	126-72-7	< Textile products and parts thereof intended for skin contact > [1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		EU REACH Regulation (Restriction)
022	Tris（1-aziridinyl）phosphine oxide (TEPA)	545-55-1	< Textile products and parts thereof intended for skin contact > [1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		EU REACH Regulation (Restriction)
023	Polychlorinated Naphthalenes (More than 1 chlorine atom)	70776-03-3 and others	< Article > [1] Ban of intentional addition [2] Ban of attachment, mix,or production of the substances in the manufacturing process.		EU POPs Regulation
			< Other than above > [1] Ban of intentional addition [2] Ban of attachment, mix,or production of the substances in the manufacturing process.		FDK Standards
024	Hexachlorobenzene	118-74-1	< Chemical Product, Article > [1] Ban of intentional addition and Ban of attachment,mix, or production of the substances in the manufacturing process. [2] The rate of content should be 10mg/kg (10ppm) or less in a chemical products or article quantity.		[1] FDK Standards [2] EU POPs Regulation
025	Aldrin	309-00-2	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix,or production of the substances in the manufacturing process.		EU POPs Regulation
026	Dieldrin	60-57-1	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix,or production of the substances in the manufacturing process.		EU POPs Regulation
027	Endrin	72-20-8	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix,or production of the substances in the manufacturing process.		EU POPs Regulation
028	DDT Chlorophenothane	50-29-3	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix,or production of the substances in the manufacturing process.		EU POPs Regulation

No	Substances	CAS No (Note 8)	Standards of ban	Remark	Reference (Note 9)
029	Chlordanes	57-74-9 and others	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix,or production of the substances in the manufacturing process.		EU POPs Regulation
030	N,N'-ditolyl-p-phenylenediamine, N-tolyl-N'-xylyl-p-phenylenediamine and N,N'-dixylyl-p-phenylenediamine	27417-40-9 28726-30-9 74-31-7	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix,or production of the substances in the manufacturing process.		FDK Standards
031	2,4,6-tri-tert-butylphenol	732-26-3	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix,or production of the substances in the manufacturing process.		FDK Standards
032	Toxaphene	8001-35-2	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix,or production of the substances in the manufacturing process.		EU POPs Regulation
033	Mirex	2385-85-5	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix,or production of the substances in the manufacturing process.		EU POPs Regulation
034	Kelthane (Dicofol)	115-32-2	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix,or production of the substances in the manufacturing process.		EU POPs Regulation
035	Hexachlorobutadiene (HCBD)	87-68-3	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix,or production of the substances in the manufacturing process.		EU POPs Regulation
036	Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethlethyl)-;2-benzotriazol-2-yl-4,6-di-tert-Butylphenol (UV-320)	3846-71-7	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix,or production of the substances in the manufacturing process.		FDK Standards
037	Pentachlorobenzene	608-93-5	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		EU POPs Regulation
038	α-Hexachlorocyclohexane	319-84-6	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		EU POPs Regulation

No	Substances	CAS No (Note 8)	Standards of ban	Remark	Reference (Note 9)
039	β-Hexachlorocyclohexane	319-85-7	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		EU POPs Regulation
040	γ-Hexachlorocyclohexane	58-89-9	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		EU POPs Regulation
041	Chlordecone	143-50-0	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		EU POPs Regulation
042	Nickel / Nickel Compounds	7440-02-0 and others	< Products intended for direct and prolonged skin contact > Nickel emission rate from sites in direct and prolonged contact with the skin must be less than 0.5μg/cm^2		EU REACH Regulation (Restriction)
043	Polycyclic aromatic hydrocarbons (PAH)	Refer to Table 1f	< Rubber/plastic parts that come into direct and prolonged/short-term contact with human skin/oral cavity > [1] Ban of intentional addition [2] The rate of content should be 1mg/kg (1ppm) or less in an article.	This does not apply to textiles used under the conditions specified in Table 1 No.054.	[1] FDK Standards [2] EU REACH Regulation (Restriction)
044	Perfluorooctanoic acid (PFOA) its salts and PFOA-related compounds.	335-67-1、3825-26-1、33496-48-9 and others	< Chemical Product, Article > [1] Ban of Intentional addition [2] In the mass of the article or in the mixture - It must be 0.025mg/kg (0.025ppm) or less. - For PFOA related compound, one or a combination thereof be 1mg/kg (1ppm) or less in total. (Refer to Note 4)	Refer to Exempted Application in Table 1e	[1] FDK Standards [2] EU POPs Regulation
045	Hexabromocyclododecane (HBCDD)	Refer to Table 1h	< Chemical Product, Article > The rate of content should be 75mg/kg (75ppm) or less in a chemical product or article quantity.		EU POPs Regulation
			< Articles > [1] Ban of Intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process. [3] Concentration in homogeneous material must not exceed 100mg/kg (100ppm) by weight.		FDK Standards
046	Endosulfan	115-29-7 and others	< Chemical Product, Article > [1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		EU POPs Regulation

No	Substances	CAS No (Note 8)	Standards of ban	Remark	Reference (Note 9)
047	Bis(2-ethylhexyl) phthalate (DEHP)	117-81-7	< Battery body > See section 5		See section 5
			< Electrical and Electronic equipment > [1] Ban of intentional addition [2] Contained in homogeneous material must not exceed 0.1% (1,000 ppm).		[1] FDK Standards [2] EU RoHS Directive
			< Other than above > [1] Ban of intentional addition [2] Contained sum of concentration of the four substances in the plasticised material (refer to Note 6) in the article must not be equal to or greater than 1,000 ppm.		[1] FDK Standards [2] EU REACH Regulation (Restriction)
048	Butyl benzyl phthalate (BBP)	85-68-7	< Battery body > See section 5		See section 5
			< Electrical and Electronic equipment > [1] Ban of intentional addition [2] contained in homogeneous material must not exceed 0.1% (1,000 ppm).		[1] FDK Standards [2] EU RoHS Directive
			< Other than above > [1] Ban of intentional addition [2] contained sum of concentration of the four substances in the plasticised material (refer to Note 6) in the article must not be equal to or greater than 1,000 ppm.		[1] FDK Standards [2] EU REACH Regulation (Restriction)
049	Dibutyl phthalate (DBP)	84-74-2	< Battery body > See section 5		See section 5
			< Electrical and Electronic equipment > [1] Ban of intentional addition [2] contained in homogeneous material must not exceed 0.1% (1,000 ppm).		[1] FDK Standards [2] EU RoHS Directive
			< Other than above > [1] Ban of intentional addition [2] contained sum of concentration of the four substances in the plasticised material (refer to Note 6) in the article must not be equal to or greater than 1,000 ppm.		[1] FDK Standards [2] EU REACH Regulation (Restriction)
050	Diisobutyl phthalate (DIBP)	84-69-5	< Battery body > See section 5		See section 5
			< Electrical and Electronic equipment > [1] Ban of intentional addition [2] contained in homogeneous material must not exceed 0.1% (1,000 ppm).		[1] FDK Standards [2] EU RoHS Directive

No	Substances	CAS No (Note 8)	Standards of ban	Remark	Reference (Note 9)
			< Other than above > [1] Ban of intentional addition [2] contained sum of concentration of the four substances in the plasticised material (refer to Note 6) in the article must not be equal to or greater than 1,000 ppm.		[1] FDK Standards [2] EU REACH Regulation (Restriction)
051	Pentachlorophenol, Pentachlorophenol-salts, Pentachlorophenol-esters	87-86-5 and others	< Chemical Product, Article > [1] Ban of intentional addition ban of attachment, mix, or production of the substances in the manufacturing process. [2] The rate of content should be 5mg/kg (5ppm) or less in a chemical products or article quantity.		[1] FDK Standards [2] EU POPs Regulation
052	Cobalt dichloride	7646-79-9	＜Silica gel or other chemicals ＞ Concentration in silica gel or other chemicals must be less than 0.01 wt%(100ppm).		FDK Standards
053	4,4'-isopropylidenediphenol(Bisphenol A)	80-05-7	＜Thermal paper＞ Concentration in the thermal paper mass must be less than 0.02 %(200ppm).		EU REACH Regulation (Restriction)
054	Certain substances classified as carcinogenic, mutagenic or toxic for reproduction (CMRs)	Refer to Table 1i	< Textiles in contact with human skin to the same degree as clothing and footwear > [1] Ban of intentional addition [2] Concentration in homogeneous Material must not be equal to or greater than that specified for that substance in Table 1i.		EU REACH Regulation (Restriction)

No	Substances	CAS No (Note 8)	Standards of ban	Remark	Reference (Note 9)
055	Phenol, isopropylated, phosphate (3:1) (PIP (3:1))	68937-41-7	< Chemical Product, Article > [1] Ban of intentional addition [2] The rate of content should be less than 0.1% (1,000ppm) in a chemical products or article quantity.	This section does not apply in the following cases. *Content derived from recycled plastics *Parts for vehicles (until May 20, 2039) *Replacement parts for vehicles (until May 18, 2054) *New manufacturing equipment, power generation equipment, and commercial electronic equipment (until May 19, 2034) *Replacement parts for power generation equipment and commercial electronic equipment (until May 19, 2049) *Replacement parts for consumer electronic equipment (until May 18, 2031) *Circuit boards and wiring harnesses, including terminals, fuse covers, cable sleeves, casings, connectors, and tapes	US TSCA
056	Pentachlorothiophenol (PCTP)	133-49-3	< Article > Concentration in the article must not exceed 1%(10,000ppm) by weight.		US TSCA

No	Substances	CAS No (Note 8)	Standards of ban	Remark	Reference (Note 9)
057	Perfluorocarboxylic acids containing 9 to 14 carbon atoms in the chain (C9-C14 PFCAs), their salts and C9-C14 PFCArelated substances	375-95-1 and others	< Chemical Product, Article > [1] The rate of content should be less than 25ppb(0.025ppm) in total for C9-C14 PFCA and their salts in the chemical products and article mass quantity. [2] The rate of content should be less than 260ppb (0.26ppm) in total for C9-C14 PFCA related substances in chemical products and article mass quantity.	This shall apply from July 1, 2030(Note 7) to semiconductors used in spare or replacement parts for finished electronic equipment shipped before Dec. 31, 2023. Refer to Exempted Application in Table 1e	EU REACH Regulation (Restriction) Dec. 31, 2030 (Note 7)
058	Perfluorohexane sulfonic acid (PFHxS)including its salts and related substances	355-46-4、3878-77-1、335-57-9 and others	< Chemical Product, Article > [1] Ban of intentional addition [2] The rate of content in the mass of chemical products and article should below ・The total concentration of PFHxS and its salt must be less than 0.025mg/kg (0.025ppm). ・The total amount of PFHxS and its salt must be less than 1mg/kg (1ppm).		[1] FDK Standard [2] EU POPs Regulation
059	Mineral oil aromatic hydrocarbons (MOAH) comprising from 1 to 7 aromatic rings. Hydrocarbons saturated with mineral oil(MOSH) containing 16 to 35 carbon atoms.	71-43-2、544-76-3 and others	< In the printing Ink of packaging materials and printed matter > [1] The content of mineral oil aromatic Hydrocarbons (MOAH) comprising from 1 to 7 aromatic rings must be 1%(10,000ppm) or less. [2] The content of mineral oil Hydrocarbons (MOAH) comprising from 1 to 7 aromatic rings and hydrocarbons saturated with mineral oil (MOSH) comprising from 16 to 35 carbon atoms must be 0.1%(1,000ppm) or less. [3] The content of mineral oil aromatic hydrocarbon (MOAH) comprising from 3 to 7 aromatic rings must be 1 ppm or less.	・Labels attached to Packaging materials are target. ・Labels attached directly to the target items are not target. ・Printed matters made by paper are target. ※This standard applies only to products shipped to France.	France Circular Economy Law
060	4,4'-sulphonyldiphenol (Bisphenol S)	80-09-1	< Thermal paper > Content in thermal paper mass is less than 0.02%(200ppm)		Swiss ORRChem

No	Substances	CAS No (Note 8)	Standards of ban	Remark	Reference (Note 9)
061	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo [12.2.1.16,9.02,13.05,10] octadeca-7,15-diene (“Dechlorane Plus”TM) [covering any of its individual anti- and syn- isomers or any combination thereof]	13560-89-9、135821-03-3、135821-74-8 and others	< Chemical Product, Article > Ban of intentional addition		Japan CSCL
062	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol(UV-328)	25973-55-1	< Chemical Product, Article > Ban of intentional addition		Japan CSCL
063	1,1,1-Trichloro-2,2-bis(4-methoxyphenyl)ethane （Methoxychlor）	72-43-5 and others	< Chemical Product, Article > The rate of content should be 0.01mg/kg (0.01ppm) or less in a chemical product or article quantity.		EU POPs Regulation
064	Methylene chloride （Dichloromethane）	75-09-2	< Chemicals > The rate of content should be less than 0.1wt%(1,000ppm)		US TSCA
065	Octamethylcyclotetrasiloxane (D4)	556-67-2	< Chemicals > The rate of content should be 0.1wt% (1,000ppm) or less by total of No.065,No.066,No.067	Dec. 6, 2025 (Note 7)	EU REACH Regulation (Restriction) Jun. 6, 2026 (Note 7)
066	Decamethylcyclopentasiloxane (D5)	541-02-6	< Chemicals > The rate of content should be 0.1wt% (1,000ppm) or less by total of No.065,No.066,No.067	Dec. 6, 2025 (Note 7)	EU REACH Regulation (Restriction) Jun. 6, 2026 (Note 7)
067	Dodecamethylcyclohexasiloxane (D6)	540-97-6	< Chemicals > The rate of content should be 0.1wt% (1,000ppm) or less by total of No.065,No.066,No.067	Dec. 6, 2025 (Note 7)	EU REACH Regulation (Restriction) Jun. 6, 2026 (Note 7)

Notes regarding Table 1:

1) Deliverables shall meet all of "Standards of ban" specified in the above table.

In terms of "Banned Substances", methodology of how to calculate concentration shall follow below:

- In this article, the denominator in calculations of the concentration shall be the mass of the “Material”, or the mass of the constituent article. You can decide which mass to choose complying with the "Standards of ban" in Table 1 in individual substances.
- In the case of complex substances or materials, the following will be the “Material”.
  - Chemical compounds, polymer alloys, metal alloys
    In the case that Deliverables are raw material such as paint, adhesive, ink, paste, polymer resin, glass powder, ceramic powder, each finally formed product by means of expected normal usage.

    Examples: - Dried and hardened material for paints or adhesives
    - Molded article for polymer resins
    - Hardened material for glass or ceramic powder

  - Single layer of paint, printing, or plating. Or, in the case of multi layers, each single layer shall be defined as the “Material”.
  - In the case of packaging material, corrugated board (base material), adhesive, tape, ink, etc.
- The numerator in calculations of the concentration shall be mass of the applicable chemical substance. In the case of metal alloy, metal element in the metal alloy will be the numerator.

2) This applies to cases that azo colorants and azo dyes are used for leather products, textile products or their parts that are possible to contact human skins directly for a long time and that form certain aromatic amines listed in Table 1a

as a result of decomposition of azo group.

3) Four (4) substances in packaging materials:
Cadmium, Lead, Mercury and each compound and Chromium VI Compounds

4) PFOA related compounds are substances that decompose into PFOA, including as one of the structural elements a substance (Contain salts and polymers) having a linear or branched perfluoroheptyl group with a moiety (C7F 15) C.

Not applicable to the following related substances.
*In C8F 17 X, X is F (fluorine), Cl (chlorine), Br (bromine).
*A fluoropolymer covered by CF3 [CF2] n-R, R '= any group, n > 16.
*Perfluorinated 8-carbon or more perfluoroalkyl carboxylic acids (including their salts, esters, halides and anhydrides).
*Perfluorinated 9-carbon or more perfluoroalkanesulfonic acid and perfluorophosphonic acid (including their salts, esters, halides and anhydrides).
* No. 008 “PFOS / PFOS-related substances” in the table 1.

5) Class I specified chemical substances on Japanese Chemical Substances Control Law (Japan CSCL)

6) ‘Plasticised material’ means any of the following homogeneous materials:
- polyvinyl chloride (PVC), polyvinylidene chloride (PVDC),polyvinyl acetate (PVA), polyurethanes,
- any other polymer (including, inter alia, polymer foams and rubber material) except silicone rubber and natural latex coatings,
- surface coatings, non-slip coatings, finishes, decals, printed designs,
- adhesives, sealants, paints and inks.

7) The date in the "Remark" column is the date of application of the FDK (in principle, six months before the start date of each country's laws and regulations). The date in the "Reference" column is the date of commencement of each country's laws and regulations.
8) For substance groups (salts, isomers, analogous substances, analogous compounds, etc.), SN numbers are assigned in the “Common Scheme for the Communication of Information on Chemical Substances in Products (chemSHERPA)” of the Joint Article Management Promotion-consortium (JAMP). If it is difficult to identify the substance, it may be reported by SN number.

9) The names of the “Reference” laws and regulations are common names in common use. The official names are listed in Table 8 in Section 6.The law listed in the “Reference” section is one typical example. In some cases, laws other than those listed in the “Reference” section are referenced.

Table 1a: Aromatic Amines formed from azo colorants and azo dyes

Substances	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 1b: Ozone Depleting Substances

Substances		CAS No.	Remark
CFCs Chlorofluorocarbons	CFC-11	75-69-4	
	CFC-12	75-71-8	
	CFC-13	75-72-9	
	CFC-111	354-56-3	
	CFC-112	76-12-0 76-11-9	
	CFC-113	76-13-1 354-58-5 26523-64-8	
	CFC-114	76-14-2 1320-37-2 374-07-2	
	CFC-115	76-15-3	
	CFC-211	422-78-6 422-81-1 135401-87-5	
	CFC-212	3182-26-1 134452-44-1	
	CFC-213	134237-31-3 2354-06-5	
	CFC-214	29255-31-0 2268-46-4	
	CFC-215	1599-41-3 76-17-5 4259-43-2 1652-81-9 812-30-6	
	CFC-216	661-97-2	
	CFC-217	422-86-6	
Halons	Halon-1011(Bromochloromethane)	74-97-5	
	Halon-1202	75-61-6	Refer to Note 1
	Halon-1211	353-59-3	
	Halon-1301	75-63-8	
	Halon-2402	124-73-2 25497-30-7 27336-23-8	
Tetrachloromethane (Carbon tetrachloride)		56-23-5	
1,1,1-Trichloroethane (Methylchloroform)		71-55-6	
Bromomethane (Methyl bromide)		74-83-9	
Bromoethane (Ethyl bromide)		74-96-4	Refer to Note 1
1-Bromopropane (n-propyl bromide)		106-94-5	Refer to Note 1
Trifluoroiodomethane (Trifluoromethyl iodide)		2314-97-8	Refer to Note 1
Chloromethane (Methyl chloride)		74-87-3	Refer to Note 1
HBFCs Hydrobromofluorocarbons	Dibromofluoromethane (HBFC-21 B2)	1868-53-7	
	Bromodifluoromethane (HBFC-22 B1)	1511-62-2	
	Bromofluoromethane (HBFC-31 B1)	373-52-4	
	Tetrabromofluoroethane (HBFC-121 B4)	306-80-9 353-93-5	
	Tribromodifluoroethane (HBFC-122 B3)	353-97-9 677-34-9 7304-53-2	
	Dibromotrifluoroethane (HBFC-123 B2)	354-04-1	
	Bromotetrafluoroethane (HBFC-124 B1)	127-72-1	
	Tribromofluoroethane (HBFC-131 B3)	420-88-2 598-67-4	
	Dibromodifluoroethane (HBFC-132 B2)	75-82-1 359-19-3	
	Bromotrifluoroethane (HBFC-133 B1)	421-06-7	
	Dibromofluoroethane (HBFC-141 B2)	358-97-4	

Substances		CAS No.	Remark
HBFCs Hydrobromofluorocarbons	Bromodifluoroethane (HBFC-142 B1)	420-47-3 359-07-9	
	Bromofluoroethane (HBFC-151 B1)	762-49-2	
	Hexabromofluoropropane (HBFC-221 B6)	-	
	Pentabromodifluoropropane (HBFC-222 B5)	-	
	Tetrabromotrifluoropropane (HBFC-223 B4)	-	
	Tribromotetrafluoropropane (HBFC-224 B3)	666-48-8	
	Dibromopentafluoropropane (HBFC-225 B2)	431-78-7	
	Bromohexafluoropropane (HBFC-226 B1)	2252-78-0	
	Pentabromofluoropropane (HBFC-231 B5)	-	
	Tetrabromodifluoropropane (HBFC-232 B4)	148875-98-3	
	Tribromotrifluoropropane (HBFC-233 B3)	421-90-9	
	Dibromotetrafluoropropane (HBFC-234 B2)	460-86-6	
	Bromopentafluoropropane (HBFC-235 B1)	460-88-8 22692-16-6 26391-11-7 422-01-5 53692-43-6 53692-44-7 677-52-1 677-53-2 679-94-7	
	Tetrabromofluoropropane (HBFC-241 B4)	148875-95-0	
	Tribromodifluoropropane (HBFC-242 B3)	70192-80-2 666-25-1	
	Dibromotrifluoropropane (HBFC-243 B2)	431-21-0	
	Bromotetrafluoropropane (HBFC-244 B1)	679-84-5 19041-01-1 29151-25-5 460-67-3 70192-71-1 70192-84-6	
	Tribromofluoropropane (HBFC-251 B3)	75372-14-4	
	Dibromodifluoropropane (HBFC-252 B2)	460-25-3	
	Bromotrifluoropropane (HBFC-253 B1)	421-46-5 460-32-2	
	Dibromofluoropropane (HBFC-261 B2)	51584-26-0 1786-38-5 453-00-9 62135-10-8 62135-11-9	
	Bromodifluoropropane (HBFC-262 B1)	111483-20-6 2195-05-3 420-89-3 420-98-4 430-87-5 461-49-4	
	Bromofluoropropane (HBFC-271 B1)	1871-72-3 352-91-0	
HCFCs Hydrochlorofluorocarbons	HCFC-21	75-43-4	Refer to Note 1
	HCFC-22	75-45-6	Refer to Note 1
	HCFC-31	593-70-4	Refer to Note 1
	HCFC-121	134237-32-4 354-11-0 354-14-3	Refer to Note 1
	HCFC-122	41834-16-6 354-21-2 354-15-4 354-12-1	Refer to Note 1

Substances		CAS No.	Remark
HCFCs Hydrochlorofluorocarbons HCFCs Hydrochlorofluorocarbons	HCFC-123	34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4	Refer to Note 1
	HCFC-124	63938-10-3 2837-89-0 354-25-6	Refer to Note 1
	HCFC-131	27154-33-2 134237-34-6 359-28-4 811-95-0 2366-36-1	Refer to Note 1
	HCFC-132	25915-78-0 1649-08-7 1842-05-3 471-43-2 431-06-1	Refer to Note 1
	HCFC-133	1330-45-6 431-07-2 75-88-7 421-04-5	Refer to Note 1
	HCFC-141	1717-00-6 25167-88-8 430-57-9 430-53-5	Refer to Note 1
	HCFC-142	25497-29-4 338-65-8 75-68-3 338-64-7 55949-44-5	Refer to Note 1
	HCFC-151	110587-14-9 762-50-5 1615-75-4	Refer to Note 1
	HCFC-221	134237-35-7 29470-94-8 422-26-4	Refer to Note 1
	HCFC-222	134237-36-8 422-49-1 422-30-0 116867-32-4	Refer to Note 1
	HCFC-223	134237-37-9 422-52-6 422-50-4	Refer to Note 1
	HCFC-224	134237-38-0 422-54-8 422-53-7 422-51-5	Refer to Note 1
	HCFC-225	127564-92-5 128903-21-9 422-48-0 422-44-6 422-56-0 507-55-1 13474-88-9 431-86-7 136013-79-1 111512-56-2 2713-09-9	Refer to Note 1
	HCFC-226	134308-72-8 431-87-8 28987-04-4	Refer to Note 1
	HCFC-231	134190-48-0 421-94-3	Refer to Note 1
	HCFC-232	134237-39-1 460-89-9	Refer to Note 1
	HCFC-233	134237-40-4 7125-83-9	Refer to Note 1

Substances		CAS No.	Remark
	HCFC-234	127564-83-4 425-94-5	Refer to Note 1
	HCFC-235	134237-41-5 460-92-4 108662-83-5	Refer to Note 1
	HCFC-241	134190-49-1 666-27-3	Refer to Note 1
	HCFC-242	134237-42-6 460-63-9	Refer to Note 1
	HCFC-243	134237-43-7 7125-99-7 338-75-0 460-69-5 116890-51-8	Refer to Note 1
	HCFC-244	134190-50-4 679-85-6 421-75-0	Refer to Note 1
	HCFC-251	134190-51-5 818-99-5 421-41-0	Refer to Note 1
	HCFC-252	134190-52-6 819-00-1	Refer to Note 1
	HCFC-253	134237-44-8 460-35-5 26588-23-8	Refer to Note 1
	HCFC-261	134237-45-9 7799-56-6 420-97-3 127404-11-9	Refer to Note 1
	HCFC-262	134190-53-7 420-99-5 102738-79-4 421-02-3	Refer to Note 1
	HCFC-271	134190-54-8 420-44-0 430-55-7	Refer to Note 1
BCMs	BCM	74-97-5	

Note regarding Table 1b:
1) The substances are exempted from the Prohibited Substances in manufacturing process specified in Table 4.

Table 1c: Polychlorinated Biphenyls (PCBs) and specific substitutes

Substances	CAS No.
Polychlorinated Biphenyls (all isomers and congeners)	1336-36-3, etc.
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

Table 1d: Fluorinated Greenhouse Gases (HFC, PFC and SF6)

Substances		CAS No.
PFCs (Perfluorocarbons)	Carbon tetrafluoride (Perfluoromethane)	75-73-0
	Perfluoroethane (Hexafluoroethane)	76-16-4
	Perfluoropropane (Octafluoropropane)	76-19-7
	Perfluorobutane (Decafluorobutane)	355-25-9
	Perfluoropentane (Dodecafluoropentane)	678-26-2
	Perfluorohexane (Tetradecafluorohexane)	355-42-0
	Perfluorocyclobutane	115-25-3
Sulfur Hexafluoride (SF6)		2551-62-4
HFCs (Hydrofluorocarbons)	Trifluoromethane (HFC-23)	75-46-7
	Difluoromethane (HFC-32)	75-10-5
	Methyl fluoride (HFC-41)	593-53-3
	2H,3H-Decafluoropentane (HFC-43-10mee)	138495-42-8
	Pentafluoroethane (HFC-125)	354-33-6
	1,1,2,2-Tetrafluoroethane (HFC-134)	359-35-3
	1,1,1,2-Tetrafluoroethane (HFC-134a)	811-97-2
	Difluoroethane	25497-28-3
	1,1-Difluoroethane (HFC-152a)	75-37-6
	1,2- Difluoroethane	624-72-6
	Trifluoroethane	27987-06-0
	1,1,2-Trifluoroethane (HFC-143)	430-66-0
	1,1,1-Trifluoroethane (HFC-143a)	420-46-2
	2H-Heptafluoropropane (HFC-227ea)	431-89-0
	1,1,1,2,2,3,3- Heptafluoropropane	2252-84-8
	1,1,1,2,2,3-Hexafluoro-propane (HFC-236cb)	677-56-5
	1,1,1,2,3,3-Hexafluoropropane (HFC-236ea)	431-63-0
	Hexafluoropropane	27070-61-7
	1,1,1,3,3,3-Hexafluoropropane (HFC-236fa)	690-39-1
	1,1,2,2,3-Pentafluoropropane (HFC-245ca)	679-86-7
	1,1,1,3,3-Pentafluoropropane (HFC-245fa)	460-73-1
	1,1,1,2,2- Pentafluoropropane	1814-88-6
	1,1,1,3,3-Pentafluorobutane (HFC-365mfc)	406-58-6

Table 1e: Exempted applications from the containment restriction

The table includes only Exempted applications to FDK products.
The numbers in the table are exemption numbers for the EU RoHS Directive.

No	Substances	Exempted applications（Refer to Note 1）		Scope and dates of applicability (Note 1)	Reference (Note 1)
003	Cadmium/ Cadmium Compounds	13(b)	Cadmium and lead in filter glasses and glasses used for reflectance standards	Applies to categories 8, 9 and 11.	EU RoHS Directive
005	Lead/Lead Compounds	6(a)	Lead as an alloying element in steel for machining purposes and in galvanised steel containing up to 0.35 %(3,500ppm) lead by weight	Applies to categories 8, 9 and 11.	EU RoHS Directive
		6(a)-I	Lead as an alloying element in steel for machining purposes containing up to 0.35 %(3,500ppm) lead by weight and in batch hot dip galvanised steel components containing up to 0.2 %(2,000ppm) lead by weight	Expires on: ・categories 1-7 and 10.	EU RoHS Directive
		6(b)	Lead as an alloying element in aluminium containing up to 0.4 %(4,000ppm) lead by weight	Applies to categories 8, 9 and 11.	EU RoHS Directive
		6(b)-I	Lead as an alloying element in aluminium containing up to 0.4 %(4,000ppm) lead by weight, provided it stems from lead-bearing aluminium scrap recycling	Expires on: ・categories 1-7 and 10.	EU RoHS Directive
		6(b)-II	Lead as an alloying element in aluminium for machining purposes with a lead content up to 0.4 %(4,000ppm) by weight	Expires on: ・categories 1-7 and 10.	EU RoHS Directive
		6(c)	Copper alloy containing up to 4 %(40,000ppm) lead by weight	Applies to all categories.	EU RoHS Directive
		7(a)	Lead in high melting temperature type solders (i.e. lead based alloys containing 85 %(850,000ppm) by weight or more lead).	Applies to all categories. categories 1-7 and 10 (except applications covered by point 24 of this Annex).	EU RoHS Directive
		7(c)-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound	Applies to all categories. (excluding 34 uses)	EU RoHS Directive
		7(c)-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher	Applies to all categories. Does not apply to applications covered by point 7(c)-I and 7(c)-IV.	EU RoHS Directive

No	Substances	Exempted applications（Refer to Note 1）		Scope and dates of applicability (Note 1)	Reference (Note 1)
		7(c)-Ⅳ	Lead in PZT based dielectric ceramic materials for capacitors which are part of integrated circuits or discrete semiconductors	Applies to all categories.	EU RoHS Directive
		13(a)	Lead in white glasses used for optical applications	Applies to all categories.	EU RoHS Directive
		13(b)	Cadmium and lead in filter glasses and glasses used for reflectance standards	Applies to categories 8, 9 and 11.	EU RoHS Directive
		15	Lead in solders to complete a viable electrical connection between semiconductor die and carrier with in integrated circuit flip chip packages	Applies to categories 8, 9 and 11.	EU RoHS Directive
		15(a)	Lead in solders to complete a viable electrical connection between the semiconductor die and carrier within integrated circuit flip chip packages where at least one of the following criteria applies: - a semiconductor technology node of 90 nm or larger: - a single die of 300 mm2 or larger in any semiconductor technology node; - stacked die packages with die of 300 mm2 or larger, or silicon interposers of 300 mm2 or larger.	Applies to categories 1 to 7 and 10.	EU RoHS Directive
		34	Lead in cermet-based trimmer potentiometer elements	Applies to all categories.	EU RoHS Directive

No	Substances	Exempted applications（Refer to Note 1）		Scope and dates of applicability (Note 1)	Reference (Note 1)
		41	Lead in solders and termination finishes of electrical and electronic components and finishes of printed circuit boards used in ignition modules and other electrical and electronic engine control systems, which for technical reasons must be mounted directly on or in the crankcase or cylinder of hand-held combustion engines (classes SH:1, SH:2, SH:3 of Directive 97/68/EC of the European Parliament and of the Council (1))	Applies to all categories.	EU RoHS Directive
044	Perfluorooctanoic acid (PFOA) and its salts and PFOA-related compounds.	Photolithography or etching process in semiconductor manufacturing.			EU REACH Regulation July 4, 2025
058	Perfluorocarboxylic acids containing 9 to 14 carbon atoms in the chain (C9-C14 PFCAs), their salts and C9-C14 PFCA related substances	Photolithography or etching process in semiconductor manufacturing.			EU REACH Regulation July 4, 2025

Note regarding Table 1e:

1) The date in the "Scope and dates of applicability" column is the date of application of the FDK (in principle, six months before the date of commencement of national laws and regulations). The date in the "Reference" column is the start date of each country's legal regulation.
The categories of exemptions from the EU RoHS Directive that do not have a date are those that have already exceeded the expiration date, but the law is valid until the Official Journal of the renewal contents is promulgated, so they should be reported to FDK Corporation and the response should be discussed.

Table 1f: Polycyclic aromatic hydrocarbons (PAH)

Substances	CAS No.
Benzo[a]pyrene (BaP)	50-32-8
Benzo[e]pyrene (BeP)	192-97-2
Benzo[a]anthracene (BaA)	56-55-3
Chrysen (CHR)	218-01-9
Benzo[b]fluoranthene (BbFA)	205-99-2
Benzo[j]fluoranthene (BjFA)	205-82-3
Benzo[k]fluoranthene (BkFA)	207-08-9
Dibenzo[a,h]anthracene(DBAhA)	53-70-3

Table 1g: Missing number

Table 1h: Hexabromocyclododecane (HBCDD)

Substances	CAS No.
Hexabromocyclododecane	25637-99-4
	4736-49-6
	65701-47-5
	138257-17-7
	138257-18-8
	138257-19-9
	169102-57-2
	678970-15-5
	678970-16-6
	678970-17-7
1,2,5,6,9,10-hexabromocyclododecane	3194-55-6
α-hexabromocyclododecane	134237-50-6
β-hexabromocyclododecane	134237-51-7
γ-hexabromocyclododecane	134237-52-8

Table 1i: Banned Standard of CMRs

No.	Substances	CAS No	Banned Standards (*1)
1	Cadmium and its compounds	7440-43-9 and others	1ppm expressed as Cd metal
2	Chromium VI compounds	1333-82-0 and others	1ppm expressed as Cr VI
3	Arsenic compounds	7440-38-2 and others	1ppm expressed as As metal
4	Lead and its compounds	7439-92-1 and others	1ppm expressed as Pb metal
5	Benzene	71-43-2	5ppm
6	Benz[a]anthracene	56-55-3	1ppm
7	Benz[e]acephenanthrylene	205-99-2	
8	benzo[a]pyrene; benzo[def]chrysene	50-32-8	
9	Benzo[e]pyrene	192-97-2	
10	Benzo[j]fluoranthene	205-82-3	
11	Benzo[k]fluoranthene	207-08-9	
12	Chrysene	218-01-9	
13	Dibenz[a,h]anthracene	53-70-3	
14	α, α,α,4-tetrachlorotoluene; p-chlorobenzotrichloride	5216-25-1	
15	α, α,α-trichlorotoluene; benzotrichloride	98-07-7	
16	α-chlorotoluene; benzyl chloride	100-44-7	
17	Formaldehyde	50-00-0	75ppm
18	1,2-benzenedicarboxylic acid; di-C 6-8-branched alkylesters, C 7-rich	71888-89-6	1,000ppm (individually or in combination with other phthalates of No. 18 - 22 in this table or in other phthalates (*2))
19	Bis(2-methoxyethyl) phthalate	117-82-8	
20	Diisopentylphthalate	605-50-5	
21	Di-n-pentyl phthalate (DPP)	131-18-0	
22	Di-n-hexyl phthalate (DnHP)	84-75-3	
23	N-methyl-2-pyrrolidone; 1-methyl-2-pyrrolidone (NMP)	872-50-4	3,000ppm
24	N,N-dimethylacetamide (DMAC)	127-19-5	
25	N,N-dimethylformamide; dimethyl formamide (DMF)	68-12-2	
26	1,4,5,8-tetraaminoanthraquinone; C.I. Disperse Blue 1	2475-45-8	50ppm
27	Benzenamine, 4,4′-(4-iminocyclohexa-2,5-dienylidenemethylene)dianilinehydrochloride; C.I. Basic Red 9	569-61-9	

No.	Substances	CAS No	Banned Standards (*1)
28	[4-[4,4′-bis(dimethylamino)benzhydrylidene] cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride; C.I. Basic Violet 3 with ≥ 0,1 % (1,000ppm) of Michler's ketone (EC no. 202-027-5)	548-62-9	50ppm
29	4-chloro-o-toluidinium chloride	3165-93-3	30ppm
30	2-Naphthylammoniumacetate	553-00-4	
31	4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	39156-41-7	
32	2,4,5-trimethylaniline hydrochloride	21436-97-5	
33	Quinoline	91-22-5	50ppm

(*1) Calculation method of content as a metal
Example) Cadmium Sulfite: [Content of Cadmium Sulfite] * [Atomic weight of Cd] / [molecular weight of Cadmium Sulfite] = [Content of Cadmium Sulfite] * 112.4 / 192.5

(*2) Phthalates that are classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 in any of the hazard classes carcinogenicity, germ cell mutagenicity or reproductive toxicity, category 1A or 1B
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008
https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1550794756233&uri=CELEX:32008R1272

2. Reportable Substances

Table 2: Reportable Substances

No.	Substances	CAS No. (Note 5)	Conditions of reporting	Reference (Note 6)
001	Substance of Very High Concern (SVHC)	—	Please check the latest SVHC list published by ECHA (European Chemicals Agency) from time to time via the external link below. If the substance is contained, it should be reported regardless of intentional or unintentional use or content. However, if inclusion is banned by Table 1, follow the inclusion standards of ban in Table 1. 【External Link】 https://echa.europa.eu/web/guest/candidate-list-table	EU REACH Regulation (Candidate for Authorization)
002	Per- and polyfluoroalkyl substances (PFAS)	—	Intentional addition This is only applied to excluding the prohibition usage of “PFOS/PFOS-related substances”, “PFOA, its salts and PFOA-related compounds”, “C9-C14 PFCAs, their salts and C9-C14 PFCA- related substances”, and “PFHxS including its salts and related substances” in Table 1.	US TSCA
003	Biocidal Active Substances	-	Substance with biocidal activity (action against pests). See Note 3	EU BPR regulation
004	synthetic polymer microparticles A polymer that is solid and meets both of the following conditions (a) It is contained in a particle and constitutes at least 1% of its particle weight or forms a continuous surface coating on the particle. (b) At least 1% of the particle weight of (a) meets one of the following conditions. (i) all dimensions of the particles are 5 mm or less (ii) the length of the particles is 15 mm or less and the length to diameter ratio of the particles is greater than 3.	—	Any rate of content greater than 0.01% (100ppm) in the chemical product mass.	EU REACH Regulation (Candidate for Authorization)

Notes regarding Table 2

1) Contents of management
- If deliverables meet "Conditions of reporting" defined in the above table, total mass of the applicable chemical substance, purpose of use, and application area, etc., shall be reported to FDK Group.

2) In terms of "Reportable Substances", methodology of how to calculate concentration shall follow below:
- Denominator on calculating concentration is mass of the constituent article
- Numerator is mass of the applicable chemical substance.

3) About Biocidal Active Substances
Search for the CAS No. of the substance in the database of biocidal active substances listed at the following access method/URL and report whether the substance is listed or not.
Access: ECHA HP→INFOMATION ON CHEMICALS→BPR）Biocidal Active Substances
URL: Information on biocides - ECHA (europa.eu)

4) The date in the "Conditions of reporting" column is the date of application of the FDK (in principle, six months before the start date of each country's laws and regulations). Dates in the "Reference" column is the start dates of the laws and regulations in each country.

5) For substance groups (salts, isomers, analogous substances, analogous compounds, etc.), SN numbers are assigned in the “Common Scheme for the Communication of Information on Chemical Substances in Products (chemSHERPA)” of the Joint Article Management Promotion-consortium (JAMP). If it is difficult to identify the substance, it may be reported by SN number.

6) The names of the “Reference” laws and regulations are common names in common use. The official names are listed in Table 8 in Section 6.The law listed in the “Reference” section is one typical example. In some cases, laws other than those listed in the “Reference” section are referenced.

3. Control Substances

Table 3: Control Substances (Note 1,2)

No	Substances	CAS No.	Conditions of Deliverables to be controlled	Remark
001	Brominated Flame Retardants (Other than PBBs, PBDEs or HBCDD)	Refer to Table 3a	Intentionally added	
002	Polyvinyl Chloride (PVC)	9002-86-2	Manage the material weights in cases where this substance is intentionally added	
003	Carcinogenic, mutagenic or toxic substances for reproduction (CMRs)	Refer to Note 3	Intentionally added	
004	Persistent, bioaccumulative and toxic substances (PBTs), Very persistent and very bioaccumulative substances (vPvBs)	Refer to Note 4	Intentionally added	

Notes regarding Table 3:

1) Contents of management
In the case that Deliverables meet "Conditions of Deliverables to be controlled" defined in the above table, with respect to "Control Substance", its total mass, purpose of use, and application area, etc., shall be managed and recorded.

2) In terms of "Control Substances", methodology of how to calculate concentration shall follow below:
- In this article, the denominator in calculations of the concentration shall be the mass of the target item.
- In the case of complex substances or materials, the following will be the “Material”.
  - Chemical compound, polymer alloy, metal alloy
  - In the case that Deliverables are raw material such as paint, adhesive, ink, paste, polymer resin, glass powder, ceramic powder, each finally formed product by means of expected normal usage.
    Examples: - Dried and hardened material for paints or adhesives
    - Molded article for polymer resins
    - Hardened material for glass or ceramic powder
  - Single layer of paint, printing, or plating. Or, in the case of multi layers, each single layer shall be defined as the ”Material”.
  - In the case of packaging material, corrugated board (base material), adhesive, tape, ink, etc.
- The numerator in calculations of the concentration shall be mass of the applicable chemical substance. In the case of metal alloy, metal element in the metal alloy will be the numerator.

3) Carcinogenic (Carc.), mutagenic (Muta.) or toxic substances for reproduction (Repr.) (CMRs) are substances meeting the criteria for classification as
Carc. 1A/1B, Muta. 1B, Repr. 1A/1B, 1A/1B and Carc. Cat. 1,2、Muta. Cat. 1,2、Repr. Cat. 1,2 in accordance with ANNEX VI Table 3.1 , Table 3.2 in REGULATION (EC) No 1272/2008 and COMMISSION REGULATION (EU) No 605/2014 Annex III(1)(2) shown as the following URL.

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 ANNEX VI Table 3.1 , Table 3.2:
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF

COMMISSION REGULATION (EU) No 605/2014 of 5 June 2014 Annex III (1)(2)
http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0605&from=EN

4) Persistent, bioaccumulative and toxic substances (PBTs) and very persistent and very bioaccumulative substances (vPvBs) are substances in accordance with the criteria set out in Annex XIII of EU REACH Regulation.

Table 3a: Brominated flame retardants (other than PBBs, PBDEs or HBCDD)

Brominated flame retardants (other than PBBs, PBDEs or HBCDD)	CAS No.
Brominated flame retardant which comes under notation of ISO1043-4 code number FR(14) [Aliphatic/alicyclic brominated compounds]	—
Brominated flame retardant which comes under notation of ISO1043-4 code number FR(15) [Aliphatic/alicyclic brominated compounds in combination with antimony compounds]	—
Brominated flame retardant which comes under notation of ISO1043-4 code number FR(16) [Aromatic brominated compounds excluding brominated diphenyl ether and biphenyls]	—
Brominated flame retardant which comes under notation of ISO1043-4 code number FR(17) [Aromatic brominated compounds excluding brominated diphenyl ether and biphenyls in combination with antimony compounds]	—
Brominated flame retardant which comes under notation of ISO1043-4 code number FR(22) [Aliphatic/alicyclic chlorinated and brominated compounds]	—
Brominated flame retardant which comes under notation of ISO1043-4 code number FR(42) [Brominated organic phosphorus compounds]	—
Poly(2,6-dibromo-phenylene oxide)	69882-11-7
Tetra-decabromo-diphenoxy-benzene	58965-66-5
1,2-Bis(2,4,6-tribromo-phenoxy)ethane	37853-59-1
3,5,3',5'-Tetrabromo-bisphenol A (TBBA)	79-94-7
TBBA, unspecified	30496-13-0
TBBA-epichlorhydrin oligomer	40039-93-8
TBBA-TBBA-diglycidyl-ether oligomer	70682-74-5
TBBA carbonate oligomer	28906-13-0
TBBA carbonate oligomer, phenoxy end capped	94334-64-2
TBBA carbonate oligomer, 2,4,6-tribromo-phenol terminated	71342-77-3
TBBA-bisphenol A-phosgene polymer	32844-27-2
Brominated epoxy resin end-capped with tribromophenol	139638-58-7
Brominated epoxy resin end-capped with tribromophenol	135229-48-0
TBBA-(2,3-dibromo-propyl-ether)	21850-44-2
TBBA bis-(2-hydroxy-ethyl-ether)	4162-45-2
TBBA-bis-(allyl-ether)	25327-89-3
TBBA-dimethyl-ether	37853-61-5
Tetrabromo-bisphenol S	39635-79-5
TBBS-bis-(2,3-dibromo-propyl-ether)	42757-55-1
2,4-Dibromo-phenol	615-58-7
2,4,6-Tribromo-phenol	118-79-6
Pentabromo-phenol	608-71-9
2,4,6-Tribromo-phenyl-allyl-ether	3278-89-5
Tribromo-phenyl-allyl-ether, unspecified	26762-91-4
Bis(methyl)tetrabromo-phthalate	55481-60-2
Bis(2-ethylhexyl)tetrabromo-phthalate	26040-51-7
2-Hydroxy-propyl-2-(2-hydroxy-ethyl)-ethyl-TBP	20566-35-2
TBPA, glycol-and propylene-oxide esters	75790-69-1
N,N'-Ethylene-bis-(tetrabromo-phthalimide)	32588-76-4
Ethylene-bis(5,6-dibromo-norbornane-2,3-dicarboximide)	52907-07-0
2,3-Dibromo-2-butene-1,4-diol	3234-02-4
Dibromo-neopentyl-glycol	3296-90-0
Dibromo-propanol	96-13-9
Tribromo-neopentyl-alcohol	36483-57-5
Poly tribromo-styrene	57137-10-7
Tribromo-styrene	61368-34-1
Dibromo-styrene grafted PP	171091-06-8
Poly-dibromo-styrene	31780-26-4
Bromo-/Chloro-paraffins	68955-41-9
Bromo-/Chloro-alpha-olefin	82600-56-4
Vinylbromide	593-60-2
Tris-(2,3-dibromo-propyl)-isocyanurate	52434-90-9
Tris(2,4-dibromo-phenyl) phosphate	49690-63-3
Tris(tribromo-neopentyl) phosphate	19186-97-1
Chlorinated and brominated phosphate ester	125997-20-8

Brominated flame retardants (other than PBBs, PBDEs or HBCDD)	CAS No.
Pentabromo-toluene	87-83-2
Pentabromo-benzyl bromide	38521-51-6
1,3-Butadiene homopolymer, brominated	68441-46-3
Pentabromo-benzyl-acrylate, monomer	59447-55-1
Pentabromo-benzyl-acrylate, polymer	59447-57-3
Decabromo-diphenyl-ethane	84852-53-9
Tribromo-bisphenyl-maleinimide	59789-51-4
Brominated trimethylphenyl-lindane	―
Other Brominated Flame Retardants	―
Tetrabromo-cyclo-octane	31454-48-5
1,2-Dibromo-4-(1,2-dibromo-methyl)-cyclo-hexane	3322-93-8
TBPA Na salt	25357-79-3
Tetrabromo phthalic-anhydride	632-79-1
Octabromo-1,1,3-trimethyl-1-phenylindane (FR-1808)	155613-93-7

4. Prohibited Substances in manufacturing process

Table 4: Prohibited Substances in manufacturing process

Substances	Details
Ozone Depleting Substances in Table 1b	The following cases are exempted: The substances are used for indirect manufacturing process such as analytical determination and product development. The substances are used for freezing machines and/or air-conditioning machines. The following substances are exempted from the substances: Substances of Note 1 of Table 1b: HCFCs Halon-1202 Bromoethane (Ethyl bromide) Bromopropane (n-propyl bromide) Trifluoroiodomethane (Trifluoromethyl iodide) Chloromethane (Methyl chloride) [Note] If you use HCFCs, please work to reduce the emission and/or the use.

5. Prohibition about Battery

5.1 Standard about Battery

Some batteries are purchased by FDK and some are produced by FDK, and the standards are different for "Battery body" and "Battery material".
The "Battery body" shall satisfy the substances and standards shown in Table 6, and the "Battery material" shall satisfy the substances and standards shown in Table 1.
Substances and criteria shown in Table 1 shall be observed for substances and packaging materials that are not covered in Table 6 for the Battery body (see Table 5).
The criteria follow stricter values, taking into account the denominator when calculating the content rate.
Table 6 covers the EU Battery Directive and the relevant national laws and regulations as well as the substances of the EU RoHS Directive.
The EU RoHS Directive does not cover batteries, but is applied as an environmental policy of FDK Corporation.
Exemptions from the EU RoHS Directive are explained in section 5.2.

Table 5: standard about Battery

Battery		Packaging material (denominator is homogeneous material weight)
Battery body (denominator is Battery wight)	Battery material and other than Table 6 substances (denominator is homogeneous material weight)	
Table 6	Table 1	Table 1

Table 6: standard about Battery body

Substance	**CAS No** (Note 4)	**Scope of coverage**	**Standard（Note 2）**	**Denominator**	**Reference** (Note 5)
Mercury	7439-97-6	All batteries	Ban of intentional addition or less than 1ppm	Battery weight	EU REACH Regulation (Restriction)
Cadmium	7440-43-9	Manganese battery (exclude button cell) Alkaline manganese battery (exclude button cell) NiMH rechargeable battery (exclude button cell)	Less than10ppm		Korea Electrical Safety Law
		Other than above batteries	Less than 20ppm		EU Battery Regulation
Lead	7439-92-1	Alkaline manganese battery (include button cell)	Less than 40ppm		China GB24427-2021
		Zinc air button battery Under than 5 cm in 1 dimension battery (Note 3)	Less than 500ppm		China GB24427-2021
		Portable battery（Note 1） Zinc air button battery（Note 1）	Less than 100ppm		EU Battery Regulation
		Other than above batteries (exclude lead-acid battery)	Less than 1,000ppm		EU RoHS Directive
Hexavalent Chromium	1333-82-0 他	All batteries	Less than 1,000ppm		EU RoHS Directive
PBB	36355-01-8 他				
PBDE	40088-47-9 他				
DEHP	117-81-7		Less than 1,000ppm for total 4 substance		EU REACH Regulation (Restriction)
BBP	3072-84-2				
DBP	84-74-2				
DIBP	84-69-5				

Notes regarding Table 6:
1) FDK effective date shall be 2024/2/18 for all batteries except zinc air button battery and 2028/2/18 for zinc air battery. (The legal regulation start date are 2024/8/18 for all batteries except zinc air button battery and

2028/8/18 for zinc air button battery.)
Also, for portable battery, please refer to the definition in Article 3 of the EU Battery Regulation.

2) Substances that do not meet the criteria in Table 6 shall be promptly reported to FDK Corporation. Which shall check and comply with customer requirements and laws and regulations of the destination country and discuss how to deal with them.
3) Batteries with a single dimension of less than 5 cm or with a removable or protruding part of that size that could be placed in a child's mouth.
4) For substance groups (salts, isomers, analogous substances, analogous compounds, etc.), SN numbers are assigned in the “Common Scheme for the Communication of Information on Chemical Substances in Products (chemSHERPA)” of the Joint Article Management Promotion-consortium (JAMP). If it is difficult to identify the substance, it may be reported by SN number.
5) The names of the “Reference” laws and regulations are common names in common use. The official names are listed in Table 8 in Section 6.The law listed in the “Reference” section is one typical example. In some cases, laws other than those listed in the “Reference” section are referenced.

5.2 About exemption on EU RoHS Directive

EU RoHS Directive Annex III has a list of exemptions. These exemptions are applicable to electrical and electronic equipment in Annex I (Table 7), but FDK Corporation interprets them as applicable to Battery body and Battery material, assuming that they are incorporated into the electrical and electronic equipment in Table 7.
The exemptions have a validity period for each category of electrical and electronic equipment, but the battery body shall fall under No. 11 in Table 7 and shall be dealt with accordingly.
For battery components, the exemptions are for categories No. 1 to 10 that can be assumed to be incorporated, and for those that cannot be assumed, the exemptions are for No. 11 and should be addressed.

Table 7: Categories of Products covered by EU RoHS Directive

No.	Categories of Products	Sub category
1	Large household appliances	
2	Small household appliances	
3	IT and telecommunications equipment	
4	Consumer equipment	
5	Lighting equipment	
6	Electrical and electronic tools	
7	Toys, leisure and sports equipment	
8	Medical devices	Medical devices
		In Vitro Diagnostic Medical Devices
9	Monitoring and control instruments including industrial monitoring and control instruments	Monitoring and Control Equipment
		Industrial Monitoring and Control Equipment
10	Automatic dispensers	
11	Other EEE not covered by any of the categories above	

6. Common name / Official name of the reference law

The names of the "Reference" up to this section are the commonly recognized common names. In the table below, the official names are also given for accessibility to the original text of the laws and regulations.

Table 8: **Common name / Official name of the reference law**

Common name	Official name
EU POPs Regulation	REGULATION (EU) 2019/1021 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 June 2019 on persistent organic pollutants
EU REACH Regulation	REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
EU RoHS Directive	DIRECTIVE 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment
EU Battery Regulation	REGULATION (EU) 2023/1542 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 12 July 2023 concerning batteries and waste batteries, amending Directive 2008/98/EC and Regulation (EU) 2019/1020 and repealing Directive 2006/66/EC
EU Packing and Packing waste Directive	EUROPEAN PARLIAMENT AND COUNCIL DIRECTIVE 94/62/EC of 20 December 1994 on packaging and packaging waste
EU Ozone Depleting Substances Regulation	REGULATION (EC) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer
EU Fluorinated Greenhouse Gases Regulation	REGULATION (EC) No 842/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 May 2006 on certain fluorinated greenhouse gases
EU BPR	REGULATION (EU) No 528/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 22 May 2012 concerning the making available on the market and use of biocidal products
France Circular Economy Law	LOI n° 2020-105 du 10 février 2020 relative à la lutte contre le gaspillage et à l'économie circulaire
Swiss ORRChem	Ordinance on the Reduction of Risks relating to the Use of Certain Particularly Dangerous Substances, Preparations and Articles (Chemical Risk Reduction Ordinance, ORRChem) of 18 May 2005
US TSCA	The Toxic Substances Control Act of 1976 [15 U.S.C. §2601 et seq. (1976)]
California Proposition 65	Safe Drinking Water and Toxic Enforcement Act of 1986.
Canada Products Containing Mercury Regulation	Products Containing Mercury Regulations SOR/2014-254
China GB24427-2021	锌负极原电池汞镉铅含量的限制要求
Korea Electrical Safety Law	전기용품 및 생활용품 안전관리법

[Revision record]

Feb 16, 2015	Edition 1	Completely revised Based on Fujitsu Group specified chemical substances list of Fujitsu Ltd., it was designated to add some FDK own requirements chemical substance list. This makes to abolish previous designated chemical substance list, to be replaced with this.
Feb 20, 2015	Edition 2	Followings are modified in accordance with revision of Fujitsu Group Specified Chemical Substances List (Edition 2.3); Changed criteria of Banned Substances (5 substances) and added one substance name. Changed criteria of Reportable Substances (1 Substance) and added five substances.
Sept 1, 2015	Edition 3	Followings are modified in accordance with revision of Fujitsu Group Specified Chemical Substances List (Edition 2.4); Added Terms of Definition. Changed criteria of Banned Substances (1 substance) and added five substances. Changed contents in Table 1e (added expire date of exempted application and delete PFOA). Added Reportable Substances (2 substances).
Mar 1, 2016	Edition 4	Followings are modified in accordance with revision of Fujitsu Group Specified Chemical Substances List (Edition 2.5.1); Changed criteria of Banned Substances (2 substances) and added one substance. Changed criteria of Reportable Substances (2 substances) and added five substances. Changed contents in Table 1e (delete two exempted applications already expired).
Sept 1, 2016	Edition 5	Followings are modified in accordance with revision of Fujitsu Group Specified Chemical Substances List (Edition 2.6); Added 1 substance as “Reportable Substances” in Table 2.
Dec 5, 2016	Edition 6	Changed effective date of 4 phthalate esters in Table 1. Full revise of article 5
Mar 31,2017	Edition 7	Followings are modified in accordance with revision of Fujitsu Group Specified Chemical Substances List (Edition 2.7); - Criteria change of 1 substance and Addition of 2 substances in Table 1 - Addition of 4 substances as “Reportable Substances” in Table 2. Modification of content regarding RoHS compliance of article 5. Change category of applicable regulation for Lead in table 6 of article 5.
Oct 10,2017	Edition 8	Followings are modified in accordance with revision of Fujitsu Group Specified Chemical Substances List (Edition 2.8); Criteria change of one substance in Table 1 Criteria change of Exempted applications in Table 1e Added one substance as “Reportable Substances” in Table 2
May 15,2018	Edition 9	Followings are modified in accordance with revision of Fujitsu Group Specified Chemical Substances List (Edition 2.9); Criteria change of 5 substances in Table 1 Added 7 substances as “Reportable Substances” in Table 2
Sept 26,2018	Edition 10	Followings are modified in accordance with revision of Fujitsu Group Specified Chemical Substances List (Edition 3.0); Deleted one substance as “Banned Substances” in Table 1 Added one substance as “Banned Substances” in Table 1 Change of Exempted Applications (Table 1e) Added 10 substances as “Reportable Substances” in Table 2
Aug 19, 2019	Edition 11	Followings are modified in accordance with revision of Fujitsu Group Specified Chemical Substances List (Edition 3.1, Edition 3.2); Partial amending in criteria of banned substances One substance group is added in Table 1 Table 2, “Reportable Substances” is thoroughly amended Partial amending of table 6 Partial amending of 5
Nov 6, 2019	Edition 12	Followings are modified in accordance with revision of Fujitsu Group Specified Chemical Substances List (Edition 3.3); Deleted Exempted applications ”8(b) ”and ”15” in Table 1
June 1,2020	Edition 13	Followings are modified in accordance with revision of Fujitsu Group Specified Chemical Substances List (Edition 3.4); Deleted exempted applications for PFOS and PFOS-related substances in Table 1
Dec 21,2020	Edition 14	Followings are modified in accordance with revision of Fujitsu Group Specified Chemical Substances List (Edition 3.5); Changed exemption ban date in Table 1e

June 28,2021	Edition 15	Followings are modified in accordance with revision of Fujitsu Group Specified Chemical Substances List (Edition 3.6); Added 3 substances as “Banned Substances” in Table 1 Changed exemption ban date in Table 1e
Nov 15,2021	Edition 16	Followings are modified in accordance with revision of General Specification on Substance Control Requirements (Edition 39); Partial amending of Table 1
June 1,2022	Edition 17	Followings are modified in accordance with revision of Fujitsu Group Specified Chemical Substances List (Edition 3.8); Criteria change of 3 “Banned Substances” in Table 1 Added 1 substance as “Banned Substances” in Table 1 Added exempted applications for PFCAs ,their salts and PFCA-related substances in Table 1e Deleted exempted applications for mercury and mercury compound in Table 1e
Sept. 12.2022	Edition 18	Followings are modified in accordance with revision of Fujitsu Group Specified Chemical Substances List (Edition 3.9); Table 1：Added 1 substances as “Banned Substances” Table 2：Changed external link to notation Table 2：Added 7 substances to "Conditions of reporting" Table 2：Added 1 substances as “Reportable Substances”
Dec. 1.2022	Edition 19	Followings are modified in accordance with revision of Fujitsu Group Specified Chemical Substances List (Edition 4.0); Table 1：Added 1 substances as “Banned Substances” Table 1：Changed “Remark” of 2 substances. Table 2：Added CAS No to 1 substance. Table 2：Added 1 substances as “Reportable Substances”
July.24.2023	Edition 20	Table 1：Added Remark and Reference to No.050「Diisobutyl phthalate」 Table 1：Added No.061「4,4’-sulphonyldiphenol(Bisphenol S)」 Table 1：Fixed typo in substance name of No.053「4,4'-isopropylidenediphenol;bisphenol A」 Table 1：Deleted 「Exempted uses: Table 1e」 from the Remark of No.006「Mercury/Mercury compounds」 Table 1：Added 「The Toxic Substances Control Act (TSCA) for USA」 to the Reference of No.031「2,4,6-tri-tert-butylphenol」 Table 1：Some Remark of No.058「C9-C14 PFCAs」 are deleted. Table 1：Some Remark of No.060「MOAH,MOSH」 are deleted. Table 1e：Added applicable RoHS exemptions and removed non-applicable exemptions for FDK products found in 2023 internal investigation Table 1e：Added "Scope and dates of applicability" to the right column, and fixed Note 2 Table 1e：Added Note 3. Table 2：No.068「Perfluorotridecanoic acid」 and No.069「Perfluorododecanoic acid」 and No.070「Perfluoroundecanoic acid」 and No.071「Perfluorotetradecanoic acid」 and No.144「Perfluorononanoic acid」 and No.151「Nonadecafluorodecanoic acid (PFDA) and its sodium salts and ammonium salts」 were Conditions of reporting and Reference revised and added. Table 2：Deleted part of CAS No. of “Reportable Substances” No.155「Chrysene」 Table 2：Added No.205「1,1'-[ethane-1,2-diylbisoxy]bis[2,4,6-tribromobenzene]」 and No.206「2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol」 and No.207「4,4'-sulphonyldiphenol (Bisphenol S)」 and No.208「Barium diboron tetraoxide」 and No.209「bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof」 and No.210「Isobutyl 4-hydroxybenzoate」 and No.211「Melamine」 and No.212「Perfluoroheptanoic acid and its salts」 and No.213「reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine」 and No.214「Diphenyl(2,4,6-trimethylbenzoyl) Phosphine oxide」 and No.215「Bis(4-chlorophenyl) sulphone」 Table 2：Added the substances name not described in No.088「Methyloxirane (Propylene oxide)」 Table 2：Deleted Notes regarding3 and 4 and corrected the corresponding part in the table Table 5：Added 「The most severe value is shown under the Condition of Prohibition in Table 5.」 at Reference Table 6：Fixed Reference of Marcury,Cadmium,Lead 「Considering the denominator

		(weight of homogeneous material, weight of Battery) among the values of EU RoHS and applicable conditions in Table 5, follow the stricter value.」
Feb.16.2024	Edition 21	[Definition of terms]: Moved「Battery」,「Purchased battery」,「Battery material」from section 5. Added「Packaging material」,「Sub-material」,「Production subsidiary materials」. Unified「material」to「homogeneous material」. Table 1 general: Supplemental wording. Classification by battery body/packaging materials, etc. See section 5 for battery body. Table 1: Revised standard No.006「Mercury/Mercury Compounds」 Table 1: Revised standard No.013「Shortchain Chlorinated Paraffins」 Table 1: Revised standard No.015「Table 1: Revised standard No.006「Mercury/Mercury Compounds」」 Table 1: Revised the date of Remarks for No.056「Isopropylphenyl phosphate」to the date of application of FDK (6 months before the date of commencement of legal control). Added legal regulation start date to the main cited law. Table 1: Revised the date of Remarks for No.058「C9-C14 PFCAs」to the date of application of FDK (6 months before the date of commencement of legal control). Added legal regulation start date to the main cited law. Table 1: Revised the date of Remarks for No.062「MOAH,MOSH」to the date of application of FDK (6 months before the date of commencement of legal control). Added legal regulation start date to the main cited law. Table 1: Added No.062「Halogenated flame retardants」, No.063「Decloramp Plus」, No.064「UV-328」, No.065「Methoxychlor」. Table 1: Note 5: The date in the "Remarks" column is the date of application of the FDK (in principle, 6 months prior to the date of commencement of each country's law regulation). The date in the "Reference" column is the date of the start of the legislation in each country. Addition. Table 1e: Note 1 and Note 3 have been moved to the top of the table and the note numbers deleted. Table 1e: Deleted expiration dates that have already been exceeded. Table 1e: Deleted "(Note 1)". Table 1e: Added "(Note 1)" in the "Scope and Date of Application" column. The date listed was revised to the date of application of the FDK (in principle 6 months prior to the date of commencement of the legal regulation). Table 1e: Added "Reference" column. The date of commencement of the legal regulation is also listed. Table 1e: Note 1: Dates in the "Scope and date of application" column are the FDK application dates (in principle, 6 months before the start date of the legal regulation in each country). The date in the "Reference" column is the date of commencement of the legal regulation in each country." Addition. Note 2 has been integrated into Note 1 and the wording has been revised. Table 2: In No.068,069,070,071,144,151, the date in the "Remarks" column was changed to the date of application of the FDK (in principle, 6 months prior to the date of commencement of national laws and regulations). The date of commencement of the legal regulation is indicated in the "Reference" column. Table 2: Deleted No.139「UV-328」and No.160「Decloramp Plus」. Table 2: Revised No.213「Substances consisting of 2,2,3,3,5,5,6,6,6-octafluoro-4-(1,1,1,2,3,3,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6,6-octafluoro-4-morpholine」. Table 2: Added No. 216「Biocidal substances」, No. 217「Bumetrizole」, No. 218「2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol」, No. 219「2-(Dimethylamino)-2-[(4-methylphenyl)methyl]-1 -[4-(morpholin-4-yl)phenyl]butan-1-one」, No. 220「Oligomerization and alkylation reaction products of 2-phenylpropene and phenol」. Table 2: Note 3: Added of「Biocidal Active Substances」confirmation method. Table 2: Note 4: The date in the "Conditions of reporting" column is the date of application of the FDK (in principle, 6 months before the date of commencement of the law regulation in each country). The date in the "Reference" column is the date of commencement of the national legislation. Addition. Section 5: Revised title “Prohibition about Purchased battery and Battery Material" was revised to “Prohibition about Battery". Section 5: Overall layout was revised. Table 6 was modified to be consistent with the battery body and Table 1 was modified to be consistent with the battery material standards.

		Old Table 5: Clarified "Purchased Lead acid battery is not applicable" to Table 6 "exclude Lead-acid battery". Old Table 5:Deleted Cadmium "Nickel-Cadmium Battery (prohibit to purchase)". Table 6: Added of lead standard on EU Battery Regulation. Table 6: Added FDK application date (in principle, 6 months before the start date of national legal regulation) and legal regulation start date for lead criteria based on EU Battery Regulation in Annex 1. Added reference to the definition of portable battery. Table 6: Note 2: Added to reference the case where the criteria cannot be met. Section 5: Added "5.2 About exemption on EU RoHS" as the concept of EU RoHS exemption and expiration date.
Oct. 3. 2024	Edition 22	Table 1: Deleted No. 062 “Halogenated flame retardants” from the previous edition (21st edition). Substance No. has been moved down since then. Table 1: CAS No. was added to No.047 “DEHP”, No.048 “BBP”, No.049 “DBP” and No.050 “DIBP”. Table 1: No.065 “Methylene chloride” was added. Table 1: Date of enforcement of No.062 “Decloramp Plus”, No.063 “UV-328” and No.064 “Methoxychlor” was revised. No.064 “Methoxychlor” was supplemented with substance name. Table 1: No.059 “PFHxS and its salts and PFHxS related substances” criteria and cited laws were revised. Table 1: No.066 “Octamethylcyclotetrasiloxane”, No.067 “Decamethylcyclopentasiloxane” and No.068 “Dodecamethylcyclohexasiloxane” were added. Table 1: Criteria for No. 006 “Mercury/mercury compounds” were revised. Table 1: No.060 “Mineral Oils of Aromatic Hydrocarbons (MOAH) consisting of 1 to 7 aromatic rings and Mineral Oils of Saturated Hydrocarbons (MOSH) consisting of 16 to 35 carbon atoms” The scope of the criteria was reduced to only products shipped to France. Table 1: No. 005 “Lead” ties each criterion to the cited law. Table 2: Deleted No.003 “DBP”, No.008 “DEHP”, No.010 “BBP” and No.021 “DIBP” from the previous edition (21st edition). Substance No. has been moved down since then. Table 2: No. 216 “Methylene chloride” was added. Table 2: Addition of No. 215 “Bis(α,α-dimethylbenzyl)peroxide Each table: Excessive application dates and expiration dates were deleted. Each table: Unified the unit of content rate to ppm.When the notation in laws and regulations is different from ppm, (ppm) is also shown. Overall: “RoHS, REACH, POPs, and CSCL .” was unified as “EU RoHS Directive, EU REACH Regulation, EU POPs Regulation, and Japan CSCL” except for Table 6.
Apr. 10. 2025	Edition 23	Table of contents: section 6 “Common name / Official name of the reference law” Definition of terms: “Banned Substances”, “Reportable Substances”, “Controll Substances”, and “Prohibited Substances in manufacturing process” were added. Table 1, Table 2, Table 6: Added columns for listing CAS No. Added note for cases where CAS No. cannot be specified. Table 1, Table 2, Table 6: Added note that the names of laws and regulations in the “Reference” column are common names. Tables: Deleted the excess of applicable dates and expiration dates. Tables: Deleted criteria not related to FDK and exempted uses. Table 1: Standards are linked to “Reference”. If the cited law associated with the standards cannot be identified, the standard is referred to as “FDK Standards”. Table 1: Criteria for No.010 “PBDEs” were revised. Table 1: Criteria for No.56 “PIP (3:1)” were modified. Table 1: Deleted former No.55 “DecaBDE” and integrated into No.010 “PBDEs”. Table 1b: Added of “BCMs”. Table 2: Deleted individual “Candidate Substances of Very High Concern (SVHC)” and integrated into No.001 “Substances of Very High Concern (SVHC)”. Table 2: Deleted former No. 216 “Methylene chloride”. Table 8: Added of a separate table with the common and official names of the “Reference”.

