

# 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 1500 volts for direct current
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 facilitate sharing information on chemical substances in products. <a href="https://chemsherpa.net/english">https://chemsherpa.net/english</a> *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 raw materials consisted of Battery. Packaging materials are subject to requirements other than those in Section 5.

## 1. Banned Substances

**Table 1: Banned Substances (Refer to Note 1)**

No	Substances	Standards of ban	Remark	Reference
001	Asbestos	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		REACH (Restriction)
002	Azo colorants and Azo dyes which form certain aromatic amines	[1] Ban of intentional addition [2] The concentrations in <b>homogeneous</b> material must not exceed 30ppm.	Refer to Note 2	REACH (Restriction)
003	Cadmium /Cadmium Compounds	<Packing material> [1] Ban of intentional addition [2] <b>However, if contained</b> sum of concentration of the 4 substances (refer to Note 3) in <b>homogeneous</b> material must not exceed 100 ppm. <b>&lt;Other than Packaging material&gt;</b> [1] Ban of intentional addition [2] <b>However, if contained</b> it must not exceed 100 ppm. <b>&lt;Battery body&gt;</b> <b>Section 5</b>	Refer to Exempted Application in Table 1e  This does not apply to textiles used under the conditions specified in No. 54.	REACH (Restriction) RoHS Directive China RoHS
004	Chromium (VI) Compounds	<Packing material> [1] Ban of intentional addition [2] <b>However, if contained</b> sum of concentration of the 4 substances (refer to Note 3) in <b>homogeneous</b> materials must not exceed 100 ppm.  < Other than Packaging material > [1] Ban of intentional addition [2] <b>However, if contained</b> concentration in <b>homogeneous</b> material must not exceed 1000 ppm.  <In the case of leather articles or articles containing leather parts coming into contact with the skin> [1] Ban of intentional addition [2] <b>However, if contained</b> concentrations in total dry weight of the leather of those leather part must be less than 3ppm.  <b>&lt;Battery body&gt;</b> <b>Section 5</b>	This does not apply to textiles used under the conditions specified in No. 54.	RoHS Directive China RoHS

No	Substances	Standards of ban	Remark	Reference
005	Lead/Lead Compounds	<p>&lt; Packaging material &gt;</p> <p>[1] Ban of intentional addition</p> <p>[2] <b>However, if contained</b> sum of concentration of the 4 substances (refer to Note 3) in <b>homogeneous</b> materials must not exceed 100 ppm.</p> <p>&lt; <b>Other than</b> Packaging material &gt;</p> <p>[1] Ban of intentional addition</p> <p>[2] <b>However, if contained</b> concentration in <b>homogeneous</b> material must not exceed 1000 ppm. In this regard,</p> <p>[3] <b>[1],[2] and</b> if those articles or accessible parts thereof may, during normal or reasonably foreseeable conditions of use, be placed in the mouth by children, the concentration of lead (expressed as metal) in those articles or accessible parts thereof must not be equal to or greater than 500ppm by weight.</p> <p>[4] <b>[1],[2],[3] and</b> concentration in <b>homogeneous</b> material must not exceed 300 ppm in the case of cables/cords with thermoset or thermoplastic coatings.</p> <p>&lt; <b>Battery body</b> &gt; See section 5</p>	<p>Refer to Exempted Application in Table 1e</p> <p>This does not apply to textiles used under the conditions specified in No. 54.</p> <p>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.</p>	<p>REACH (Restriction)</p> <p>RoHS Directive</p> <p>China RoHS</p> <p>California Proposition 65</p>
006	Mercury/Mercury Compounds	<p>&lt; Packaging material &gt;</p> <p>[1] Ban of intentional addition</p> <p>[2] <b>However, if contained</b> sum of concentration of the 4 substances (refer to Note 3) in <b>homogeneous</b> materials must not exceed 100 ppm.</p> <p>&lt;<b>Other than Packaging material</b>&gt;</p> <p>[1] Ban of intentional addition</p> <p>[2] <b>However, if contained</b> concentration in <b>homogeneous</b> material must not exceed 5 ppm.</p> <p>&lt; <b>Battery body</b> &gt; See section 5</p>	Refer to Exempted	<p>- REACH (Restriction)</p> <p>- RoHS Directive</p> <p>- China RoHS</p> <p>- <b>Low of Canada</b></p>
007	Ozone Depleting Substances (CFCs, HCFCs, HBFCs, carbon tetrachloride, etc.)	<p>[1] Ban of intentional addition</p> <p>[2] Ban of attachment, mix, or production of the substances in the manufacturing process.</p>	Refer to detailed substances in Table 1b	<p>- Montreal Protocol</p> <p>- EC No.2037/2000</p> <p>- EC No.1005/2009</p>
008	PFOS / PFOS-related substances	<p>[1] Ban of intentional addition</p> <p>[2] Ban of attachment, mix, or production of the substances in the manufacturing process.</p> <p>[3] Concentration or amount must not exceed undermentioned numerical numbers in case of being contained as impurities.</p> <p>-Concentration in <b>homogeneous</b> Material: 0.1wt%</p> <p>-Concentration in Preparation (ink, toner, etc.): 0.001wt%</p> <p>-Amount in the coated <b>homogeneous</b> materials:1µg/m<sup>2</sup></p>		- POPs Regulation

No	Substances	Standards of ban	Remark	Reference
009	Polybrominated Biphenyls (PBBs)	<p>&lt; Battery body &gt; See section 5</p> <p>&lt; Other than Battery body &gt; [1] Ban of intentional addition [2] However, if contained concentration in homogeneous material must not exceed 1000 ppm.</p>		- RoHS Directive - China RoHS
010	Polybrominated Diphenylethers (PBDEs)	<p>&lt; Packaging material &gt; [1] Ban of intentional addition [2] However, if contained concentration of the constituent article must not exceed 500 ppm.</p> <p>&lt; Other than Packaging material &gt; [1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process. [3] However, if contained concentration in homogeneous material must not exceed 1000 ppm.</p> <p>&lt; Battery body &gt; See section 5</p>		- RoHS Directive - China RoHS - POPs Regulation
011	Polychlorinated Biphenyls (PCBs) and specific substitutes	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.	Refer to examples of substances in Table 1c	- POPs Regulation
012	Polychlorinated Terphenyls (PCTs)	[1] Ban of intentional addition [2] Concentration in homogeneous Material must not exceed 50 ppm.		- REACH (Restriction)
013	Shortchain Chlorinated Paraffins (C10-13)	[1] Ban of intentional addition [2] Concentration in article must not exceed 1000 ppm.		- POPs Regulation - Laws of Swiss and Norway
014	Tri-substituted organostannic compounds (except for TBTO)	Concentration of Tin in the article, or part thereof, must not exceed 1000 ppm.		- REACH (Restriction)
015	Tributyl Tin Oxide (TBTO)	[1] Ban of intentional addition Concentration of Tin in the article, or part thereof, must not exceed 1000 ppm.		- REACH (Restriction) - CSCL (Refer to Note 5)
016	Dimethylfumarate (DMF) CAS No 624-49-7	[1] Concentration in the article, or part thereof, must not exceed 0.1 ppm.		- REACH (Restriction)
017	Dibutyltin compounds (DBT)	[1] Concentration of Tin in the article, or part thereof, must not exceed 1000 ppm.		- REACH (Restriction)
018	Diocetyl tin compounds (DOT)	[1] Concentration of Tin in the article, or part thereof, must not exceed 1000 ppm.	This applies to cases that are used for textile, leather products or their parts intended to come into contact with the skin directly, and the case that are used for two-component room temperature vulcanisation moulding kits (RTV-2 moulding kits).	- REACH (Restriction)

No	Substances	Standards of ban	Remark	Reference
019	Fluorinated greenhouse gases (HFC, PFC, SF6)	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.	Refer to detailed substances in Table 1d  Unless confined system and a recovery scheme for the substances have been established.	- EU Regulation No.842/2006
020	Formaldehyde	[1] Ban of intentional addition [2] Concentration in <b>homogeneous</b> material must not exceed 75 ppm.	This applies to cases that are used for textile products or their parts.  This does not apply to textiles used under the conditions specified in No. 54.	- Laws of Austria and Lithuania
021	Tris(2,3-dibromopropyl)phosphate (TRIS) CAS No 126-72-7	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.	This applies to cases that are used for textile products or their parts intended to come into contact with the skin directly.	- REACH (Restriction)
022	Tris(1-aziridiny)phosphine oxide (TEPA) CAS No 545-55-1	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.	This applies to cases that are used for textile products or their parts intended to come into contact with the skin directly.	- REACH (Restriction)
023	Polychlorinated Naphthalenes (More than 1 chlorine atom)	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5) - POPs Regulation
024	Hexachlorobenzene	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
025	Aldrin	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
026	Dieldrin	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
027	Endrin	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
028	DDT Chlorophenothane	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
029	Chlordanes	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
030	N,N'-ditolyl-p-phenylenediamine, N-tolyl-N'-xylyl-p-phenylenediamine and N,N'-dixylyl-p-phenylenediamine	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
031	2,4,6-tri-tert-butylphenol	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5) -The Toxic Substances Control Act (TSCA) for USA

No	Substances	Standards of ban	Remark	Reference
032	Toxaphene	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
033	Mirex	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
034	Kelthane (Dicofol)	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
035	Hexachlorobutadiene (HCBd) CAS No. 87-68-3	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5) -The Toxic Substances Control Act (TSCA) for USA
036	Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)-;2-benzotriazol-2-yl-4,6-di-tert-Butylphenol (UV-320)	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
037	Pentachlorobenzene	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
038	$\alpha$ -Hexachlorocyclohexane	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		-CSCL (Refer to Note 5)
039	$\beta$ -Hexachlorocyclohexane	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
040	$\gamma$ -Hexachlorocyclohexane	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
041	Chlordecone	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
042	Nickel (CAS No 7440-02-0) / Nickel Compounds	[1] Ban of use as alloys containing nickel, such as stainless steels or nickel plating.	Use for as a watch that staying in contact with skin for a considerable duration of time.	- REACH (Restriction)
043	Polycyclic aromatic hydrocarbons (PAH)	[1] Ban of intentional addition [2] Concentration must not exceed 0.0001wt% by weight of rubber or plastic component article.	Refer to detailed substances in Table 1f  This applies to rubber or plastic component where direct and prolonged contact, or repeated in short-term contact with the human skin or the oral cavity are expected:  This does not apply to textiles used under the conditions specified in No. 54.	- REACH (Restriction)



No	Substances	Standards of ban	Remark	Reference
044	Perfluorooctanoic acid (PFOA) its salts and PFOA-related compounds.	< Article, Mixture > [1] Ban of Intentional addition [2] In the mass of the article or in the mixture - It must be 25 ppb or less. - For PFOA related compound, one or a combination thereof be 1000 ppb or less in total. (Refer to Note 4)	Refer to Exempted Application in Table 1e	- REACH (Restriction)
045	Hexabromocyclododecane (HBCDD)	< Articles > [1] Ban of Intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process. [3] Concentration in <b>homogeneous</b> material must not exceed 0.01% by weight.  < Chemicals > Concentration in chemicals must not exceed 0.01% by weight.	Refer to detailed substances in Table 1h	- POPs Regulation
046	Endosulfan	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
047	Bis(2-ethylhexyl) phthalate (DEHP)	< Packaging material > [1] Ban of intentional addition [2] <b>However, if contained</b> 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 1000 ppm.		- RoHS Directive - REACH (Restriction)
048	Butyl benzyl phthalate (BBP)			
049	Dibutyl phthalate (DBP)			
050	Diisobutyl phthalate (DIBP)	< Other than Packaging material > [1] Ban of intentional addition [2] <b>However, if contained</b> in <b>homogeneous</b> material must not exceed 1000 ppm.  < Battery body > <b>See section 5</b>		
051	Pentachlorophenol, Pentachlorophenol-salts, Pentachlorophenol-esters	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5) -Law of Turkey
052	Cobalt dichloride	<Silica gel or other chemicals> Concentration in silica gel or other chemicals must be less than 0.01 wt%.		- REACH (Restriction)
053	4,4'-isopropylidenediphenol(Bisphenol A) CAS No. 80-05-7	<Thermal paper> Concentration in the thermal paper must be less than 0.02 wt%.		- REACH (Restriction)
054	Certain substances classified as carcinogenic, mutagenic or toxic for reproduction (CMRs) Details: Table 1i.	[1] Ban of intentional addition [2] Concentration in <b>homogeneous</b> Material must not be equal to or greater than that specified for that substance in Table 1i.	This applies to textiles which under normal or reasonably foreseeable conditions of use, come into contact with human skin to an extent similar to clothing and footwear.	- REACH (Restriction)

No	Substances	Standards of ban	Remark	Reference
055	Bis(pentabromophenyl)ether (decabromodiphenyl ether; decaBDE) CAS No. 1163-19-5	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.	This section does not apply if all of the following are met. *Content derived from recycled plastics * The conditions specified in No.010 of this table	- The Toxic Substances Control Act (TSCA) for USA
056	Phenol, isopropylated, phosphate (3:1) (PIP (3:1)) CAS No. 68937-41-7	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.	This section does not apply in the following cases. *Adhesive and sealant Applications (Until July 5, 2024) (Note 7) *Lubricating oil and grease applications *Content derived from recycled plastics	- The Toxic Substances Control Act (TSCA) for USA  Until Jan. 5, 2025 (Note 7)
057	Pentachlorothiophenol (PCTP) CAS No. 133-49-3	Concentration in the article must not exceed 1% by weight.		- The Toxic Substances Control Act (TSCA) for USA
058	Perfluorocarboxylic acids containing 9 to 14 carbon atoms in the chain (C9-C14 PFCAs), their salts and C9-C14 PFCArealted substances	Concentration in the article or the mixture is below 25 ppb for the sum of C9-C14 PFCAs and their salts or 260 ppb for the sum of C9-C14 PFCA-related substances.	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	- REACH (Restriction)  Dec. 31, 2030 (Note 7)
059	Perfluorohexane sulfonic acid (PFHxS)including its salts and related substances	[1] Ban of intentional addition [2] Concentration in the article or the mixture is below 25 ppb for the sum of PFHxS and its salts or 1000 ppb for the sum of PFHxS-related substances.		-Laws of Swiss
060	Mineral oil aromatic hydrocarbons (MOAH) comprising from 1 to 7 aromatic rings. Hydrocarbons saturated with mineral oil(MOSH) containing 16 to 35 carbon atoms.	<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% 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% or less. [3] The content of mineral oil aromatic hydrocarbon (MOAH) comprising from 3 to 7 aromatic rings must be 1 ppm or less.	[2][3]applies after July 1, 2024(Note 7) (Supplemental information) •Labels attached to Packaging materials are target. •Labels attached directly to the target items are not target. •Printed matters made by paper are target.	-Laws of French Jan. 1, 2025 (Note 7)
061	4,4'-sulphonyldiphenol (Bisphenol S) CAS No.80-09-1	Content in thermal paper is less than 0.02wt%		- Laws of Swiss

No	Substances	Standards of ban	Remark	Reference
062	Halogenated Flame Retardants	<Electronic display enclosures and stands> [1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.	For exclusions, see Article 1 of Commission Regulation (EU)2019/2021 ( <a href="https://eur-lex.europa.eu/eli/reg/2019/2021">https://eur-lex.europa.eu/eli/reg/2019/2021</a> )	- ErP Directive
063	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"™) [covering any of its individual anti- and syn- isomers or any combination thereof]	Ban of intentional addition	Apply after Apr. 1, 2024 (Note 7)	- POPs Regulation (shedule) Oct. 1, 2024 (Note 7)
064	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol(UV-328)	Ban of intentional addition	Apply after Apr. 1, 2024 (Note 7)	- POPs Regulation (shedule) Oct. 1, 2024 (Note 7)
065	1,1,1-Trichloro-2,2-bis(4-methoxyphenyl)ethane	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.	Apply after Apr. 1, 2024 (Note 7)	- POPs Regulation (shedule) Oct. 1, 2024 (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 CF<sub>3</sub> [CF<sub>2</sub>]<sub>n-R</sub>, 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 (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.

**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)	420-88-2598-67-4	
	Dibromodifluoroethane (HBFC-132 B2)	75-82-1 359-19-3	
	Bromotrifluoroethane (HBFC-133 B1)	421-06-7	
	Dibromofluoroethane (HBFC-141 B2)	358-97-4	
	Bromodifluoroethane (HBFC-142 B1)	420-47-3 359-07-9	

	Substances	CAS No.	Remark	
HBFCs Hydrobromofluorocarbons	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		
	Pentabromodifluoropropane (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		Refer to Note 1
		354-11-0		
		354-14-3		
HCFC-122	41834-16-6		Refer to Note 1	
	354-21-2			
	354-15-4			
	354-12-1			
HCFC-123	34077-87-7		Refer to Note 1	
	90454-18-5			
	306-83-2			
	354-23-4			
	812-04-4			

	Substances	CAS No.	Remark
HCFCs Hydrochlorofluorocarbons HCFCs Hydrochlorofluorocarbons	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
	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	



Substances	CAS No.	Remark
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

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 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. Expires on: • other subcategories of categories 8 and 9; • category 8 in vitro diagnostic medical devices; • 21 Jan. 2024 for category 9 industrial monitoring and control instruments and for category 11.	EU RoHS  21 July 2024
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 % lead by weight	Expires on: • categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments. • category 8 in vitro diagnostic medical devices. • 21 Jan. 2024 for category 9 industrial monitoring and control instruments, and for category 11.	EU RoHS  21 July 2024
		6(a)-I	Lead as an alloying element in steel for machining purposes containing up to 0.35 % lead by weight and in batch hot dip galvanised steel components containing up to 0.2 % lead by weight	Expires on: • categories 1-7 and 10.	EU RoHS
		6(b)	Lead as an alloying element in aluminium containing up to 0.4 % lead by weight	Expires on: • categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments. • category 8 in vitro diagnostic medical devices. • 21 Jan. 2024 for category 9 industrial monitoring and control instruments, and for category 11.	EU RoHS  21 July 2024
		6(b)-I	Lead as an alloying element in aluminium containing up to 0.4 % lead by weight, provided it stems from lead-bearing aluminium scrap recycling	Expires on: • categories 1-7 and 10.	EU RoHS
		6(b)-II	Lead as an alloying element in aluminium for machining purposes with a lead content up to 0.4 % by weight	Expires on: • categories 1-7 and 10.	EU RoHS

No	Substances	Exempted applications (Refer to Note 1)	Scope and dates of applicability (Note 1)	Reference (Note 1)
		6(c) Copper alloy containing up to 4% lead by weight	Expires on: <ul style="list-style-type: none"> <li>• categories 1-7 and 10.</li> <li>• categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments.</li> <li>• category 8 in vitro diagnostic medical devices.</li> <li>• 21 Jan. 2024 for category 9 industrial monitoring and control instruments, and for category 11.</li> </ul>	EU RoHS  21 July 2024
		7(a) Lead in high melting temperature type solders (i.e. lead based alloys containing 85% by weight or more lead).	Expires on: <ul style="list-style-type: none"> <li>• categories 1-7 and 10 (except applications covered by point 24 of this Annex).</li> <li>• categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments.</li> <li>• category 8 in vitro diagnostic medical devices.</li> <li>• 21 Jan. 2024 for category 9 industrial monitoring and control instruments, and for category 11.</li> </ul>	EU RoHS  21 July 2024
		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	Expires on: <ul style="list-style-type: none"> <li>• Applies to categories 1-7 and 10 (except applications covered under point 34).</li> <li>• categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments.</li> <li>• category 8 in vitro diagnostic medical devices.</li> <li>• 21 Jan. 2024 for category 9 industrial monitoring and control instruments, and for category 11.</li> </ul>	EU RoHS  21 July 2024
		7(c)-II Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher	Does not apply to applications covered by point 7(c)-I and 7(c)-IV. Expires on: <ul style="list-style-type: none"> <li>• categories 1-7 and 10.</li> <li>• categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments.</li> <li>• category 8 in vitro diagnostic medical devices.</li> <li>• 21 Jan. 2024 for category 9 industrial monitoring and control instruments, and for category 11.</li> </ul>	EU RoHS  21 July 2024
		7(c)-IV Lead in PZT based dielectric ceramic materials for capacitors which are part of integrated circuits or discrete semiconductors	Expires on: <ul style="list-style-type: none"> <li>• categories 1-7 and 10.</li> <li>• categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments.</li> <li>• category 8 in vitro diagnostic medical devices.</li> <li>• 21 Jan. 2024 for category 9 industrial monitoring and control instruments, and for category 11.</li> </ul>	EU RoHS  21 July 2024

No	Substances	Exempted applications (Refer to Note 1)	Scope and dates of applicability (Note 1)	Reference (Note 1)
		13(a) Lead in white glasses used for optical applications	Applies to all categories. Expires on: • all other categories and subcategories. • category 8 in vitro diagnostic medical devices. • 21 Jan. 2024 for category 9 industrial monitoring and control instruments, and for category 11.	EU RoHS  21 July 2024
		13(b) Cadmium and lead in filter glasses and glasses used for reflectance standards	Applies to categories 8, 9 and 11. Expires on: • other subcategories of categories 8 and 9. • category 8 in vitro diagnostic medical devices. • 21 Jan. 2024 for category 9 industrial monitoring and control instruments, and for category 11.	EU RoHS  21 July 2024
		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. Expires on: • categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments. • category 8 in vitro diagnostic medical devices. • 21 Jan. 2024 for category 9 industrial monitoring and control instruments, and for category 11.	EU RoHS  21 July 2024
		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 mm <sup>2</sup> or larger in any semiconductor technology node; - stacked die packages with die of 300 mm <sup>2</sup> or larger, or silicon interposers of 300 mm <sup>2</sup> or larger.	Applies to categories 1 to 7 and 10.	EU RoHS
		34 Lead in cermet-based trimmer potentiometer elements	Applies to all categories. Expires on: • categories 1-7 and 10. • categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments. • category 8 in vitro diagnostic medical devices. • 21 Jan. 2024 for category 9 industrial monitoring and control instruments, and for category 11.	EU RoHS  21 July 2024

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. Expires on: • categories 1 to 7, 10 and 11. • categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments. • category 8 in vitro diagnostic medical devices. • 21 Jan. 2024 for category 9 industrial monitoring and control instruments.	EU RoHS  21 July 2024
044	Perfluorooctanoic acid (PFOA) and its salts and PFOA-related compounds.	Photolithography or etching process in semiconductor manufacturing.	The ban of this exemption shall be applied from Jan. 4, 2025.	EU REACH 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.	The ban of this exemption shall be applied from Jan 4, 2025.	EU REACH 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 RoHS 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
$\alpha$ -hexabromocyclododecane	134237-50-6
$\beta$ -hexabromocyclododecane	134237-51-7
$\gamma$ -hexabromocyclododecane	134237-52-8

**Table 1i: Banned Standard of CMRs**

No.	Substances	Banned Standards (*1)
1	Cadmium and its compounds	1ppm expressed as Cd metal
2	Chromium VI compounds	1ppm expressed as Cr VI
3	Arsenic compounds	1ppm expressed as As metal
4	Lead and its compounds	1ppm expressed as Pb metal
5	Benzene	5ppm
6	Benz[a]anthracene	1ppm
7	Benz[e]acephenanthrylene	
8	benzo[a]pyrene; benzo[def]chrysene	
9	Benzo[e]pyrene	
10	Benzo[j]fluoranthene	
11	Benzo[k]fluoranthene	
12	Chrysene	
13	Dibenz[a,h]anthracene	
14	$\alpha$ , $\alpha$ , $\alpha$ ,4-tetrachlorotoluene; p-chlorobenzotrichloride	
15	$\alpha$ , $\alpha$ , $\alpha$ -trichlorotoluene; benzotrichloride	
16	$\alpha$ -chlorotoluene; benzyl chloride	
17	Formaldehyde	75ppm
18	1,2-benzenedicarboxylic acid; di-C 6-8-branched alkylesters, C 7-rich	1000ppm (individually or in combination with other phthalates of No. 18 - 22 in this table or in other phthalates (*2))
19	Bis(2-methoxyethyl) phthalate	
20	Diisopentylphthalate	
21	Di-n-pentyl phthalate (DPP)	
22	Di-n-hexyl phthalate (DnHP)	
23	N-methyl-2-pyrrolidone; 1-methyl-2-pyrrolidone (NMP)	3000ppm
24	N,N-dimethylacetamide (DMAC)	
25	N,N-dimethylformamide; dimethyl formamide (DMF)	
26	1,4,5,8-tetraaminoanthraquinone; C.I. Disperse Blue 1	50ppm
27	Benzenamine, 4,4'-(4-iminocyclohexa-2,5-dienylidene)methylene)dianilinehydrochloride; C.I. Basic Red 9	
28	[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride; C.I. Basic Violet 3 with $\geq 0,1$ % of Michler's ketone (EC no. 202-027-5)	

No.	Substances	Banned Standards (*1)
29	4-chloro-o-toluidinium chloride	30ppm
30	2-Naphthylammoniumacetate	
31	4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	
32	2,4,5-trimethylaniline hydrochloride	
33	Quinoline	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.	Conditions of reporting	Reference
001	Anthracene	120-12-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
002	4,4'-Diaminodiphenylmethane (4,4'-Methylenedianiline, 4'-MDA)	101-77-9	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
003	Dibutyl phthalate (DBP)	84-74-2	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
004	Cobalt dichloride	7646-79-9	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of cobalt dichloride shown in Table 1.	REACH (Candidate for Authorization)
005	Arsenic pentoxide	1303-28-2	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
006	Diarsenic trioxide	1327-53-3	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
007	5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)	81-15-2	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
008	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
009	Lead hydrogen arsenate	7784-40-9	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
010	Benzyl butyl phthalate (BBP)	85-68-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
011	Triethyl arsenate	15606-95-8	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
012	Anthracene oil	90640-80-5	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
013	Anthracene oil, anthracene paste, distr. Lights	91995-17-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
014	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
015	Anthracene oil, anthracene-low	90640-82-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
016	Anthracene oil, anthracene paste	90640-81-6	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
017	Pitch, coal tar, high-temp.	65996-93-2	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
018	Aluminosilicate, Refractory Ceramic Fibres	-	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] They are fibres covered by index number 650- 017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 and fulfil the three following conditions: a) oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm) c) alkaline oxide and alkali earth oxide (Na <sub>2</sub> O+K <sub>2</sub> O+CaO+MgO+BaO) content less or equal to 18% by weight	REACH (Candidate for Authorization)
019	Zirconia Aluminosilicate, Refractory Ceramic Fibres	-	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] They are fibres covered by index number 650- 017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 and fulfil the three following conditions: a) oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm). c) alkaline oxide and alkali earth oxide (Na <sub>2</sub> O+K <sub>2</sub> O+CaO+MgO+BaO) content less or equal to 18% by weight	REACH (Candidate for Authorization)
020	2,4-dinitrotoluene	121-14-2	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
021	Diisobutyl phthalate (DIBP)	84-69-5	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
022	Tris(2-chloroethyl)phosphate (TCEP)	115-96-8	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
023	Acrylamide	79-06-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
024	Trichloroethylene	79-01-6	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
025	Boric acid	10043-35-3 11113-50-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
026	Disodium tetraborate, anhydrous	1303-96-4 1330-43-4 12179-04-3	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
027	Tetraboron disodium heptaoxide, hydrate	12267-73-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
028	Cobalt(II) sulphate	10124-43-3	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
029	Cobalt nitrate	10141-05-6	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
030	Cobalt(II) carbonate	513-79-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
031	Cobalt acetate	71-48-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
032	2-methoxyethanol	109-86-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
033	2-ethoxyethanol	110-80-5	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
034	2-ethoxyethyl acetate	111-15-9	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
035	1,2-benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
036	Hydrazine	7803-57-8 302-01-2 10217-52-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
037	1-methyl-2-pyrrolidone	872-50-4	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
038	1,2,3-trichloropropane	96-18-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
039	1,2-Benzenedicarboxylic acid; di-C6-8-branched alkylesters, C7- rich (DIHP)	71888-89-6	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
040	Calcium arsenate	7778-44-1	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
041	Bis(2-methoxyethyl) ether	111-96-6	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
042	Lead dipicrate	6477-64-1	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
043	N,N-dimethylacetamide (DMAC)	127-19-5	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
044	Arsenic acid	7778-39-4	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
045	2-Methoxyaniline (o-Anisidine)	90-04-0	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
046	Trilead diarsenate	3687-31-8	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
047	1,2-dichloroethane	107-06-2	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
048	4-(1,1,3,3-tetramethylbutyl) phenol (4-tert-Octylphenol)	140-66-9	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
049	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
050	Bis(2-methoxyethyl) phthalate	117-82-8	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
051	Lead diazide, Lead azide	13424-46-9	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
052	Lead styphnate	15245-44-0	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
053	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
054	Phenolphthalein	77-09-8	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
055	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
056	1,2-dimethoxyethane (ethylene glycol dimethyl ether, EGDME)	110-71-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
057	Diboron trioxide	1303-86-2	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
058	Formamide	75-12-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
059	Lead (II) bis(methanesulfonate)	17570-76-2	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
060	1,3,5-tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	2451-62-9	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
061	1,3,5-tris [(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione(β-TGIC)	59653-74-6	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
062	4,4'-bis(dimethylamino) benzophenone (Michler's ketone)	90-94-8	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
063	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
064	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	2580-56-5	Concentration in the constituent article exceeds 1000 ppm  This condition applies when it contains ≥ 0.1%(1000ppm) of Michler's ketone (CAS No. 90- 94-8s) or Michler's base (CAS No. 101-61-1)	REACH (Candidate for Authorization)
065	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5- dien-1-ylidene] dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9	Concentration in the constituent article exceeds 1000 ppm  This condition applies when it contains ≥ 0.1%(1000ppm) of Michler's ketone (CAS No. 90- 94-8) or Michler's base (CAS No. 101-61-1) This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)



No.	Substances	CAS No.	Conditions of reporting	Reference
066	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1	Concentration in the constituent article exceeds 1000 ppm  This condition applies when it contains $\geq$ 0.1%(1000ppm) of Michler's ketone (CAS No. 90- 94-8) or Michler's base (CAS No. 101-61-1)	REACH (Candidate for Authorization)
067	$\alpha$ , $\alpha$ -Bis[4-(dimethylamino)phenyl]-4(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	Concentration in the constituent article exceeds 1000 ppm  This condition applies when it contains $\geq$ 0.1%(1000ppm) of Michler's ketone (CAS No. 90- 94-8) or Michler's base (CAS No. 101-61-1)	REACH (Candidate for Authorization)
068	Pentacosafuorotridecanoic acid	72629-94-8	Concentration in the constituent article exceeds 25ppb  This is only applied to excluding the prohibition usage of "C9-C14 PFCAs, their salts and C9-C14 PFCA-related substances" shown in Table 1. 1 July 2030 to semiconductors used in spare or replacement parts for finished electronic equipment placed on the market before 31 December 2023. (Note 4)	REACH (Restriction) & (Candidate for Authorization)  31 Dec. 2030 (Note 4)
069	Tricosafuorododecanoic acid	307-55-1	Concentration in the constituent article exceeds 25ppb  This is only applied to excluding the prohibition usage of "C9-C14 PFCAs, their salts and C9-C14 PFCA-related substances" shown in Table 1. 1 July 2030 to semiconductors used in spare or replacement parts for finished electronic equipment placed on the market before 31 December 2023. (Note 4)	REACH (Restriction) & (Candidate for Authorization)  31 Dec. 2030 (Note 4)
070	Henicosafuoroundecanoic acid	2058-94-8	Concentration in the constituent article exceeds 25ppb  This is only applied to excluding the prohibition usage of "C9-C14 PFCAs, their salts and C9-C14 PFCA-related substances" shown in Table 1. 1 July 2030 to semiconductors used in spare or replacement parts for finished electronic equipment placed on the market before 31 December 2023. (Note 4)	REACH (Restriction) & (Candidate for Authorization)  31 Dec. 2030 (Note 4)
071	Heptacosafuorotetradecanoic acid	376-06-7	Concentration in the constituent article exceeds 25ppb  This is only applied to excluding the prohibition usage of "C9-C14 PFCAs, their salts and C9-C14 PFCA-related substances" shown in Table 1. 1 July 2030 to semiconductors used in spare or replacement parts for finished electronic equipment placed on the market before 31 December 2023. (Note 4)	REACH (Restriction) & (Candidate for Authorization)  31 Dec. 2030 (Note 4)
072	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
073	Cyclohexane-1,2-dicarboxylic anhydride [1] cis-cyclohexane-1,2-dicarboxylic	85-42-7 13149-00-3 14166-21-3	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
	anhydride [2] trans-cyclohexane-1,2-dicarboxylic anhydride [3] [Note] The individual cis- [2] and trans-[3] isomer substances and all possible combinations of the cis- and trans-isomers[1] are covered			
074	Hexahydromethylphthalic anhydride [1] Hexahydro-4-methylphthalic anhydride [2] Hexahydro-1-methylphthalic anhydride [3] Hexahydro-3-methylphthalic anhydride [4] [Note] The individual isomers[2], [3] and [4] (including their cis- and trans-stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry	25550-51-0 19438-60-9 48122-14-1 57110-29-9	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
075	4-Nonylphenol, branched and linear [Note] substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well- defined substances which include any of the individual isomers or a combination thereof	-	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
076	4-(1,1,3,3-tetramethylbutyl) phenol, ethoxylated [Note] covering well-defined substances and UVCB substances, polymers and homologues		Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
077	Methoxy acetic acid	625-45-6	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
078	N,N-dimethylformamide	68-12-2	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
079	Dibutyltin dichloride (DBTC)	683-18-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
080	Lead monoxide (lead oxide)	1317-36-8	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
081	Orange lead (Lead tetroxide)	1314-41-6	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
082	Lead bis(tetrafluoroborate)	13814-96-5	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
083	Trilead bis(carbonate)dihydroxide	1319-46-6	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
084	Lead titanium trioxide	12060-00-3	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
085	Lead Titanium Zirconium Oxide	12626-81-2	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
086	Silicic acid, lead salt	11120-22-2	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
087	Silicic acid (H <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), barium salt(1:1), lead-doped [Note] with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD); the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008.	68784-75-8	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
088	Methyloxirane (Propylene oxide)	75-56-9	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
089	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
090	Diisopentylphthalate (DIPP)	605-50-5	Concentration in the constituent article exceeds 1000 ppm This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
091	N-pentyl-isopentylphthalate	776297-69-9	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
092	1,2-diethoxyethane	629-14-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
093	Acetic acid, lead salt, basic	51404-69-4	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
094	Lead oxide sulfate	12036-76-9	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
095	[Phthalato(2-)]dioxotrilead	69011-06-9	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
096	Dioxobis(stearato)trilead	12578-12-0	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
097	Fatty acids, C16-18, lead salts	91031-62-8	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
098	Lead cyanamidate	20837-86-9	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
099	Lead dinitrate	10099-74-8	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
100	Pentalead tetraoxide sulphate	12065-90-6	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
101	Pyrochlore, antimony lead yellow	8012-00-8	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
102	Sulfurous acid, lead salt, dibasic	62229-08-7	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
103	Tetraethyllead	78-00-2	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
104	Tetralead trioxide sulphate	12202-17-4	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
105	Trilead dioxide phosphonate	12141-20-7	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
106	Furan	110-00-9	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
107	Diethyl sulphate	64-67-5	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
108	Dimethyl sulphate	77-78-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
109	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
110	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
111	4,4'-methylenedi-o-toluidine	838-88-0	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
112	4,4'-oxydianiline and its salts	101-80-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
113	4-aminoazobenzene	60-09-3	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
114	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
115	6-methoxy-m-toluidine (p-cresidine)	120-71-8	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
116	iphenyl-4-ylamine	92-67-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
117	o-aminoazotoluene (4-o-tolylazo-o- toluidine)	97-56-3	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
118	o-toluidine	95-53-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
119	N-methylacetamide	79-16-3	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
120	Cadmium	7440-43-9	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "Cadmium compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
121	Cadmium Oxide	1306-19-0	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "Cadmium compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
122	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of "Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds "shown in Table 1.	REACH (Candidate for Authorization)
123	2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Pentadecafluorooctanoic acid	335-67-1	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of "Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds " shown in Table 1.	REACH (Candidate for Authorization)
124	Di-n-pentyl phthalate (DPP)	131-18-0	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
125	4-Nonylphenol, branched and linear, ethoxylated  [Note] substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof	—	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
126	Cadmium sulphide	1306-23-6	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "Cadmium compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
127	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo] [1,1'-biphenyl]-4-yl] azo]-5-hydroxy-6-(phenylazo) naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
128	Dihexyl phthalate	84-75-3	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
129	Imidazolidine-2-thione (2- imidazoline-2-thiol)	96-45-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
130	Trixylyl phosphate	25155-23-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
131	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)] bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
132	Lead di(acetate)	301-04-2	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of lead compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "lead compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
133	Cadmium chloride	10108-64-2	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "Cadmium compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
134	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
135	Sodium peroxometaborate	7632-04-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
136	Sodium perborate; perboric acid, sodium salt	15120-21-5 11138-47-9	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
137	Cadmium fluoride (CdF <sub>2</sub> )	7790-79-6	Concentration in the constituent article exceeds 1000 ppm This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "Cadmium compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
138	Cadmium sulphate	10124-36-4 31119-53-6	Concentration in the constituent article exceeds 1000 ppm  This is only applied to the exempted application of cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "Cadmium compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
140	Diocetyl tin bis(2-ethylhexyl thioglycolate) ;2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
141	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	-	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)



No.	Substances	CAS No.	Conditions of reporting	Reference
142	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane[1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]	-	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
143	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)	68515-51-5 68648-93-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
144	Perfluorononan-1-oi-c-acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4	Concentration in the constituent article exceeds 25ppb  This is only applied to excluding the prohibition usage of "C9-C14 PFCAs, their salts and C9-C14 PFCA-related substances" shown in Table 1. 1 July 2030 to semiconductors used in spare or replacement parts for finished electronic equipment placed on the market before 31 December 2023. (Note 4)	REACH (Restriction) & (Candidate for Authorization)  31 Dec. 2030 (Note 4)
145	Nitrobenzene	98-95-3	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
146	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
147	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl) phenol (UV-327)	3864-99-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
148	1,3-propanesultone	1120-71-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
149	Benzo[a]pyrene	50-32-8	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of polycyclic aromatic hydrocarbons (PAH) shown in Table 1. This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
150	p-(1,1-dimethylpropyl) phenol	80-46-6	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
151	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts  Nonadecafluorodecanoic acid  Ammonium nonadecafluorodecanoate  Decanoic acid, nonadecafluoro-, sodium salt	335-76-2 3108-42-7 3830-45-3	Concentration in the constituent article exceeds 25ppb  This is only applied to excluding the prohibition usage of "C9-C14 PFCAs, their salts and C9-C14 PFCA-related substances" shown in Table 1. 1 July 2030 to semiconductors used in spare or replacement parts for finished electronic equipment placed on the market before 31 December 2023. (Note 4)	REACH (Restriction) & (Candidate for Authorization)  31 Dec. 2030 (Note 4)

No.	Substances	CAS No.	Conditions of reporting	Reference
152	4-heptylphenol, branched and linear substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof	-	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
153	4,4'-isopropylidenediphenol; bisphenol A	80-05-7	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of 4,4'-isopropylidenediphenol; bisphenol A shown in Table 1.	REACH (Candidate for Authorization)
154	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) with $\geq 0.1\%$ w/w 4-heptylphenol, branched and linear (4-HPbl)	-	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
155	Chrysene	218-01-9	Concentration in the constituent article exceeds 1000ppm  This is only applied to excluding the prohibition usage of polycyclic aromatic hydrocarbons (PAH) shown in Table 1 No.43(CAS No. 218-01-9). This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
156	Cadmium nitrate	10325-94-7	Concentration in the constituent article exceeds 1000 ppm  This is only applied to the exempted application of Cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "Cadmium compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
157	Cadmium hydroxide	21041-95-2	Concentration in the constituent article exceeds 1000 ppm  This is only applied to the exempted application of Cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "Cadmium compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
158	Cadmium carbonate	513-78-0	Concentration in the constituent article exceeds 1000 ppm  This is only applied to the exempted application of Cadmium compounds shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "Cadmium compounds". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
159	Benz[a]anthracene	56-55-3	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of polycyclic aromatic hydrocarbons (PAH) shown in Table 1. This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
161	Terphenyl, hydrogenated	61788-32-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
162	Octamethylcyclotetrasiloxane (D4)	556-67-2	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
163	Lead	7439-92-1	Concentration in the constituent article exceeds 1000 ppm  This is only applied to the exempted application of Lead shown in Table 1e. In the other applications, banned standard shown in Table 1 is applied as "Lead". This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
164	Ethylenediamine (EDA)	107-15-3	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
165	Dodecamethylcyclohexasiloxane (D6)	540-97-6	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
166	Disodium octaborate	12008-41-2	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
167	Dicyclohexyl phthalate (DCHP)	84-61-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
168	Decamethylcyclopentasiloxane (D5)	541-02-6	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
169	Benzo[ghi]perylene	191-24-2	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
170	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride; TMA)	552-30-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
171	Pyrene	129-00-0	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
172	Phenanthrene	85-01-8	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
173	Fluoranthene	206-44-0	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
174	Benzo[k]fluoranthene	207-08-9	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of polycyclic aromatic hydrocarbons (PAH) shown in Table 1. This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
175	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
176	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one (3-benzylidene camphor; 3-BC)	15087-24-8	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
177	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP)	—	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
178	4-tert-butylphenol	98-54-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
179	2-methoxyethyl acetate	110-49-6	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
180	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof)	-	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
181	Perfluorobutane sulfonic acid (PFBS) and its salts	-	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
182	Diisohexyl phthalate	71850-09-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
183	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
184	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
185	1-vinylimidazole	1072-63-5	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
186	2-methylimidazole	693-98-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
187	Butyl 4-hydroxybenzoate (Butylparaben)	94-26-8	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
188	Dibutylbis (pentane-2,4-dionato-O,O') tin	22673-19-4	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of Dibutyltin compounds shown in Table 1.	REACH (Candidate for Authorization)
189	Bis(2-(2-methoxyethoxy) ethyl) ether	143-24-8	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
190	Diocetyl tin dilaurate, stannane, dioctyl-, biss (coco acyloxy) derivs., and any other stannane, dioctyl-, bis (fatty acyloxy) derivs. Wherein C12 is the predominant carbon number of the fatty acyloxy moiety	-	Concentration in the constituent article exceeds 1000 ppm  This is only applied to excluding the prohibition usage of Dioctyltin compounds shown in Table 1.	REACH (Candidate for Authorization)
191	1,4-dioxane	123-91-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
192	2,2-bis(bromomethyl)propane-1,3-diol (BMP); 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA);2,3-dibromo-1-propanol(2,3-DBPA)	—	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
193	2-(4-tert-butylbenzyl) propionaldehyde and its individual stereoisomers	—	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
194	4,4'-(1-methylpropylidene) bisphenol	77-40-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
195	Glutaral	111-30-8	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
196	Medium-chain chlorinated paraffins (MCCP) UVCB substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain lengths within the range from C14 to C17	—	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
197	orthoboric acid, sodium salt	—	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
198	Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)	—	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
199	(±)-1,7,7-trimethyl-3-[(4-methylphenyl) methylene] bicyclo [2.2. 1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)	—	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
200	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	119-47-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
201	S-(tricyclo (5.2.1.0'2,6) deca-3-en-8(or 9)-yl O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate	255881-94-8	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
202	tris (2-methoxyethoxy) vinylsilane	1067-53-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
203	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.	The Toxic Substances Control Act (TSCA) for USA
204	N-(hydroxymethyl)acrylamide	924-42-5	Concentration in the constituent article exceeds 1000ppm.	REACH (Candidate for Authorization)
205	1,1'-[ethane-1,2-diylbisoxo] bis[2,4,6-tribromobenzene]	37853-59-1	Concentration in the constituent article exceeds 1000ppm.	REACH (Candidate for Authorization)
206	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol	79-94-7	Concentration in the constituent article exceeds 1000ppm.	REACH (Candidate for Authorization)
207	4,4'-sulphonyldiphenol (Bisphenol S)	80-09-1	Concentration in the constituent article exceeds 1000ppm. This is only applied to excluding the prohibition usage of 4,4'-sulphonyldiphenol (Bisphenol S) shown in Table 1 No.061	REACH (Candidate for Authorization)
208	Barium diboron tetraoxide	13701-59-2	Concentration in the constituent article exceeds 1000ppm.	REACH (Candidate for Authorization)
209	bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof  Bis(2-ethylhexyl) tetrabromophthalate	26040-51-7	Concentration in the constituent article exceeds 1000ppm.	REACH (Candidate for Authorization)
210	Isobutyl 4-hydroxybenzoate	4247-02-3	Concentration in the constituent article exceeds 1000ppm.	REACH (Candidate for Authorization)
211	Melamine	108-78-1	Concentration in the constituent article exceeds 1000ppm.	REACH (Candidate for Authorization)
212	Perfluoroheptanoic acid and its salts  Ammonium perfluoroheptanoate potassium perfluoroheptanoate Perfluoroheptanoic acid Sodium perfluoroheptanoate	6130-43-4 21049-36-5 375-85-9 20109-59-5	Concentration in the constituent article exceeds 1000ppm.	REACH (Candidate for Authorization)
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	-	Concentration in the constituent article exceeds 1000ppm.	REACH (Candidate for Authorization)
214	Diphenyl(2,4,6-trimethylbenzoyl) Phosphine oxide	75980-60-8	Concentration in the constituent article exceeds 1000ppm.	REACH (Candidate for Authorization)
215	Bis(4-chlorophenyl) sulphone	80-07-9	Concentration in the constituent article exceeds 1000ppm.	REACH (Candidate for Authorization)
216	Biocidal Active Substances	-	Substance with biocidal activity (action against pests). See Note 3	BPR regulation
217	Bumetrizole (UV-326)	3896-11-5	Concentration in the constituent article exceeds 1000ppm.	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
218	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)	3147-75-9	Concentration in the constituent article exceeds 1000ppm.	REACH (Candidate for Authorization)
219	2-(dimethylamino)-2-[(4-methylphenyl) methyl]-1-[4-(morpholin-4-yl) phenyl] butan-1-one	119344-86-4	Concentration in the constituent article exceeds 1000ppm.	REACH (Candidate for Authorization)
220	Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol	-	Concentration in the constituent article exceeds 1000ppm.	REACH (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
- S. • 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.

### 3. Control Substances

**Table 3: Control Substances**

No	Substances	CAS No.	Conditions of Deliverables to be controlled	Remark
001	Brominated Flame Retardants (Other than PBBs, PBDEs or HBCDD)	-	Intentionally added	Detailed substances: Refer to Table 3a
002	Polyvinyl Chloride (PVC)	-	Manage the material weights in cases where this substance is intentionally added	
003	Carcinogenic, mutagenic or toxic substances for reproduction (CMRs)	-	Intentionally added	Detailed substances: Refer to Note 3  This is only applied to excluding the prohibition usage of CMRs shown in Table 1.
004	Persistent, bioaccumulative and toxic substances (PBTs), Very persistent and very bioaccumulative substances (vPvBs)	-	Intentionally added	Detailed substances: Refer to Note 4

**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 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	<p>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.</p> <p>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)</p> <p>[Note] If you use HCFCs, please work to reduce the emission and/or the use.</p>

## 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	Scope of coverage	Standard (Note 2)	Denominator	Reference
Mercury	All batteries	Ban of intentional addition or less than 1ppm	Battery weight	[EU] RoHS Directive 2011/65/EU and its amendments; [China] Law Measures for Restriction of the Use of Hazardous Substances in Electrical Appliances and Electronic Products; [Japan] Law for the Promotion of Effective Utilization of Resources; [EU] REACH Regulation (EC) No.1907/2006 ANNEX XVII; [Canada] Products containing Mercury Regulations SOR/2014-254
Cadmium	Manganese battery (exclude button cell) Alkaline manganese battery (exclude button cell) NiMH rechargeable battery (exclude button cell)	Less than 10ppm	Battery weight	[EU] Battery Directive 2006/66/EC; [Korea (the Republic of)] Quality Management and Manufactured Product Safety Management Law (Battery Regulation)
	Other than above batteries	Less than 20ppm		[EU] EU Battery Directive 2006/66/EC; [Korea (the Republic of)] Consumer Protection Law
Lead	Alkaline manganese battery (include button cell)	Less than 40ppm	Battery weight	[EU] Battery Directive 2006/66/EC; [China] Limitation of mercury, cadmium and lead contents for alkaline and non-alkaline zinc manganese dioxide batteries GB 24427-2009; [China] GB24427-2021
	Zinc air button battery Under than 5 cm in 1 dimension battery (Note 3)	Less than 500ppm		[China] GB24427-2021; [EU] REACH Regulation (EC) No.1907/2006 ANNEX XVII
	Portable battery (Note 1) Zinc air button battery (Note 1)	Less than 100ppm		[EU] Battery Regulation (EU) 2023/1542
	Other than above batteries (exclude lead-acid battery)	Less than 1,000ppm		[EU] RoHS Directive 2011/65/EU and its amendments
Hexavalent Chromium	All batteries	Less than 1,000ppm	Battery weight	[EU] RoHS Directive 2011/65/EU and its amendments
PBB				
PBDE				

DEHP		Less than 1,000ppm for total 4 substance		[EU] REACH Regulation (EC) No.1907/2006 ANNEX XVII
BBP				
DBP				
DIBP				

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.

## 5.2 About exemption on EU RoHS

EU RoHS 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

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	

## [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-diylbis(oxy)]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 Mercury,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	<p>[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」.</p> <p>Table 1 general: Supplemental wording. Classification by battery body/packaging materials, etc. See section 5 for battery body.</p> <p>Table 1: Revised standard No.006「Mercury/Mercury Compounds」</p> <p>Table 1: Revised standard No.013「Shortchain Chlorinated Paraffins」</p> <p>Table 1: Revised standard No.015「Table 1: Revised standard No.006 「Mercury/Mercury Compounds」」</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Table 1: Added No.062「Halogenated flame retardants」, No.063「Decloramp Plus」, No.064「UV-328」, No.065「Methoxychlor」.</p> <p>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.</p> <p>Table 1e: Note 1 and Note 3 have been moved to the top of the table and the note numbers deleted.</p> <p>Table 1e: Deleted expiration dates that have already been exceeded.</p> <p>Table 1e: Deleted "(Note 1)".</p> <p>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).</p> <p>Table 1e: Added "Reference" column. The date of commencement of the legal regulation is also listed.</p> <p>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.</p> <p>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.</p> <p>Table 2: Deleted No.139「UV-328」 and No.160「Decloramp Plus」.</p> <p>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-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6,6-octafluoro-4-morpholine」.</p> <p>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」.</p> <p>Table 2: Note 3: Added of 「Biocidal Active Substances」 confirmation method.</p> <p>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.</p> <p>Section 5: Revised title "Prohibition about Purchased battery and Battery Material" was revised to "Prohibition about Battery".</p> <p>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.</p>



		<p>Old Table 5: Clarified "Purchased Lead acid battery is not applicable" to Table 6 "exclude Lead-acid battery".</p> <p>Old Table 5: Deleted Cadmium "Nickel-Cadmium Battery (prohibit to purchase)".</p> <p>Table 6: Added of lead standard on EU Battery Regulation.</p> <p>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.</p> <p>Table 6: Note 2: Added to reference the case where the criteria cannot be met.</p> <p>Section 5: Added "5.2 About exemption on EU RoHS" as the concept of EU RoHS exemption and expiration date.</p>
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