FUJITSU

Fujitsu Group
Specified Chemical Substances List

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Fujitsu Limited

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[Definition of terms]

Containment	: A chemical substance exists in Deliverables even if the substance exists as impurities or as a result of addition, filling, mixing and production in the manufacturing 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. Adhesion, mixing and production of the substances in the manufacturing process and impurities are not included in intentional addition.
Material	: Homogeneous material which cannot be decomposed furthermore or composite material which can be regarded as homogeneous in order to fulfill its specific function(s), for which it is set or formed at particular position
Impurities	: Substances that are contained in natural materials and cannot be eliminated during processes in which they are manufactured into industrial sources
Preparation	: A mixture or solution composed of two or more substances (e.g. adhesives, plating solutions, coating materials)
Deliverables	: Deliverables (material, components, units, accessories, etc.) equipped to Fujitsu Group's products, or OEM/ODM products and packaging materials
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	: Articles constituting a product. For example, delivery article (unit, parts and so on) When the delivery article is a completed product, the article means the unit, parts and so on.

1. Banned Substances

Table 1: Banned Substances

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 material must not exceed 30ppm.	Refer to Note 2	- REACH (Restriction)
003	Cadmium /Cadmium Compounds	[1] Ban of intentional addition [2] Concentration in material must not exceed 100 ppm. <Packaging material> [1] and Sum of concentration of the 4 substances (refer to Note 3) in packaging materials must not exceed 100 ppm.	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	[1] Ban of intentional addition [2] Concentration in material must not exceed 1000 ppm. <In the case of leather articles or articles containing leather parts coming into contact with the skin> [1] and The concentrations in total dry weight of the leather of those leather part must be less than 3ppm. <Packaging material> [1] and Sum of concentration of the 4 substances (refer to Note 3) in packaging materials must not exceed 100 ppm.	This does not apply to textiles used under the conditions specified in No. 54.	- RoHS Directive - China RoHS
005	Lead/Lead Compounds	<Electrical and electronic equipment and Packaging> [1] Ban of intentional addition [2] Concentration in material must not exceed 1000 ppm. In this regard, however, concentration in material must not exceed 300 ppm in the case of cables/cords with thermoset or thermoplastic coatings. <Packaging material> [1] and Sum of concentration of the 4 substances (refer to Note 3) in packaging materials must not exceed 100 ppm.	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 - California Proposition 65

No	Substances	Standards of ban	Remark	Reference
	Lead/Lead Compounds	<Other than those above> [1] and [2], and 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.	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. This does not apply to textiles used under the conditions specified in No. 54.	- REACH (Restriction) - RoHS Directive - China RoHS - California Proposition 65
006	Mercury/Mercury Compounds	[1] Ban of intentional addition [2] Concentration in material must not exceed 1000 ppm. <Packaging material> [1] and Sum of concentration of the 4 substances (refer to Note 3) in packaging materials must not exceed 100 ppm.	Refer to Exempted Application in Table 1e	- REACH (Restriction) - RoHS Directive - China RoHS
007	Ozone Depleting Substances (CFCs, HCFCs, HBFCs, carbon tetrachloride, etc.)	[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 1b	- Montreal Protocol - EC No.2037/2000 - EC No.1005/2009
008	PFOS and PFOS-related substances	[1] Ban of intentional addition [2] Concentration or amount must not exceed undermentioned numerical numbers. - Concentration in material: 0.1wt% - Concentration in chemical product : 0.001wt% - Amount in the coated materials: 1μg/m2		- POPs Regulation
009	Polybrominated Biphenyls (PBBs)	[1] Ban of intentional addition [2]Concentration in material must not exceed 1000 ppm.		- RoHS Directive - China RoHS
010	Polybrominated Diphenylethers (PBDEs)	< Electrical and electronic equipment > [1] Ban of intentional addition [2] Concentration in material must not exceed 1000 ppm.		- RoHS Directive - China RoHS
		< Other than electrical and electronic equipment (including packaging material> [1] Concentration of the constituent article must not exceed 500 ppm.		- 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

No	Substances	Standards of ban	Remark	Reference
012	Polychlorinated Terphenyls (PCTs)	[1] Ban of intentional addition [2] Concentration in material must not exceed 50 ppm.		- REACH (Restriction)
013	Shortchain Chlorinated Paraffins (C10-13)	[1] Ban of intentional addition [2] Concentration in material 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 constituent article must not exceed 1000 ppm.		- REACH (Restriction)
015	Tributyl Tin Oxide (TBTO)	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- REACH (Restriction) - CSCL (Refer to Note 5)
016	Dimethylfumarate (DMF) CAS No 624-49-7	[1] Concentration in the constituent article must not exceed 0.1 ppm.		- REACH (Restriction)
017	Dibutyltin compounds (DBT)	[1] Concentration of Tin in the constituent article must not exceed 1000 ppm.		- REACH (Restriction)
018	Dioctyltin compounds (DOT)	[1] Concentration of Tin in the constituent article 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)
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 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)

No	Substances	Standards of ban	Remark	Reference
022	Tris（1-aziridinyl）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)
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)

No	Substances	Standards of ban	Remark	Reference
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) - Law of Turkey
035	Hexachloro-1,3-butadiene	[1] Ban of intentional addition [2] Ban of attachment, mix, or production of the substances in the manufacturing process.		- CSCL (Refer to Note 5)
036	Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethlethyl)-;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	α-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	β-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	γ-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.	This applies to the following articles. 1) The most outside surface of keyboards and mice as final products 2) The most outside surface of palm rests of laptops and chassis of mobile phones 3) Surface of liquid crystal touch panels	- REACH (Restriction)

No	Substances	Standards of ban	Remark	Reference
043	Polycyclic aromatic hydrocarbons (PAH)	[1] Ban of intentional addition [2] Concentration must not exceed 0.0001 % by weight of rubber or plastic component.	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: 1) The most outside surface of keyboards and mice 2) The most outside surface of palm rests of laptops and chassis of mobile phones 3) Surface of liquid crystal touch panels This does not apply to textiles used under the conditions specified in No. 54.	- REACH (Restriction)
044	Perfluorooctanoic acid (PFOA) CAS No 335-67-1 and its salts.	< Article, Mixture > In the mass of the article or in the mixture [1] It must be less than 25 ppb. [2] For PFOA related substances, one or a combination thereof be less than 1000 ppb 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] Concentration in 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)	< Electrical and electronic equipment > [1] Ban of intentional addition [2] Concentration in material must not exceed 1000 ppm. < Other than electrical and electronic equipment(including packaging material) > [1] Ban of intentional addition [2] Sum of concentration of the four substances in the plasticized material (refer to Note 6) in the article must not be equal to or greater 1000 ppm.		- RoHS Directive
048	Butyl benzyl phthalate (BBP)			
049	Dibutyl phthalate (DBP)			
050	Diisobutyl phthalate (DIBP)			
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 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)

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 dyes and azo pigments 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 specified 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) Any related substance (including its salts and polymers) having a linear or branched perfluoroheptyl group with the formula C7F15- directly attached to another carbon atom, as one of the structural elements. Any related substance (including its salts and polymers) having a linear or branched perfluorooctyl group with the formula C8F17- as one of the structural elements.
The following substances are excluded from this designation: － C8F17-X, where X = F, Cl, Br. － C8F17-C(=O)OH, C8F17-C(=O)O-X′ or C8F17-CF2-X′ (where X′ = any group, including salts).

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.

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	

Substances		CAS No.	Remark
CFCs Chlorofluorocarbons	CFC-215	1599-41-3 76-17-5 4259-43-2 1652-81-9 812-30-6	
	CFC-216	661-97-2	
	CFC-217	422-86-6	
Halons	Halon-1011(Bromochloromethane)	74-97-5	
	Halon-1202	75-61-6	Refer to Note 1
	Halon-1211	353-59-3	
	Halon-1301	75-63-8	
	Halon-2402	124-73-2 25497-30-7 27336-23-8	
Tetrachloromethane (Carbon tetrachloride)		56-23-5	
1,1,1-Trichloroethane (Methylchloroform)		71-55-6	
Bromomethane (Methyl bromide)		74-83-9	
Bromoethane (Ethyl bromide)		74-96-4	Refer to Note 1
1-Bromopropane (n-propyl bromide)		106-94-5	Refer to Note 1
Trifluoroiodomethane (Trifluoromethyl iodide)		2314-97-8	Refer to Note 1
Chloromethane (Methyl chloride)		74-87-3	Refer to Note 1
HBFCs Hydrobromofluorocarbons	Dibromofluoromethane (HBFC-21 B2)	1868-53-7	
	Bromodifluoromethane (HBFC-22 B1)	1511-62-2	
	Bromofluoromethane (HBFC-31 B1)	373-52-4	
	Tetrabromofluoroethane (HBFC-121 B4)	306-80-9 353-93-5	
	Tribromodifluoroethane (HBFC-122 B3)	353-97-9 677-34-9 7304-53-2	
	Dibromotrifluoroethane (HBFC-123 B2)	354-04-1	
	Bromotetrafluoroethane (HBFC-124 B1)	127-72-1	
	Tribromofluoroethane (HBFC-131 B3)	420-88-2 598-67-4	
	Dibromodifluoroethane (HBFC-132 B2)	75-82-1 359-19-3	
	Bromotrifluoroethane (HBFC-133 B1)	421-06-7	
	Dibromofluoroethane (HBFC-141 B2)	358-97-4	
	Bromodifluoroethane (HBFC-142 B1)	420-47-3 359-07-9	
	Bromofluoroethane (HBFC-151 B1)	762-49-2	
	Hexabromofluoropropane (HBFC-221 B6)	-	
	Pentabromodifluoropropane (HBFC-222 B5)	-	
	Tetrabromotrifluoropropane (HBFC-223 B4)	-	
	Tribromotetrafluoropropane (HBFC-224 B3)	666-48-8	
	Dibromopentafluoropropane (HBFC-225 B2)	431-78-7	
	Bromohexafluoropropane (HBFC-226 B1)	2252-78-0	
	Pentabromofluoropropane (HBFC-231 B5)	-	
	Tetrabromodifluoropropane (HBFC-232 B4)	148875-98-3	
	Tribromotrifluoropropane (HBFC-233 B3)	421-90-9	

Substances		CAS No.	Remark
HBFCs Hydrobromofluorocarbons	Dibromotetrafluoropropane (HBFC-234 B2)	460-86-6	
	Bromopentafluoropropane (HBFC-235 B1)	460-88-8 22692-16-6 26391-11-7 422-01-5 53692-43-6 53692-44-7 677-52-1 677-53-2 679-94-7	
	Tetrabromofluoropropane (HBFC-241 B4)	148875-95-0	
	Tribromodifluoropropane (HBFC-242 B3)	70192-80-2 666-25-1	
	Dibromotrifluoropropane (HBFC-243 B2)	431-21-0	
	Bromotetrafluoropropane (HBFC-244 B1)	679-84-5 19041-01-1 29151-25-5 460-67-3 70192-71-1 70192-84-6	
	Tribromofluoropropane (HBFC-251 B3)	75372-14-4	
	Dibromodifluoropropane (HBFC-252 B2)	460-25-3	
	Bromotrifluoropropane (HBFC-253 B1)	421-46-5 460-32-2	
	Dibromofluoropropane (HBFC-261 B2)	51584-26-0 1786-38-5 453-00-9 62135-10-8 62135-11-9	
	Bromodifluoropropane (HBFC-262 B1)	111483-20-6 2195-05-3 420-89-3 420-98-4 430-87-5 461-49-4	
	Bromofluoropropane (HBFC-271 B1)	1871-72-3 352-91-0	
HCFCs Hydrochlorofluorocarbons	HCFC-21	75-43-4	Refer to Note 1
	HCFC-22	75-45-6	Refer to Note 1
	HCFC-31	593-70-4	Refer to Note 1
	HCFC-121	134237-32-4 354-11-0 354-14-3	Refer to Note 1
	HCFC-122	41834-16-6 354-21-2 354-15-4 354-12-1	Refer to Note 1

Substances		CAS No.	Remark
HCFCs Hydrochlorofluorocarbons	HCFC-123	34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4	Refer to Note 1
	HCFC-124	63938-10-3 2837-89-0 354-25-6	Refer to Note 1
	HCFC-131	27154-33-2 134237-34-6 359-28-4 811-95-0 2366-36-1	Refer to Note 1
	HCFC-132	25915-78-0 1649-08-7 1842-05-3 471-43-2 431-06-1	Refer to Note 1
	HCFC-133	1330-45-6 431-07-2 75-88-7 421-04-5	Refer to Note 1
	HCFC-141	1717-00-6 25167-88-8 430-57-9 430-53-5	Refer to Note 1
	HCFC-142	25497-29-4 338-65-8 75-68-3 338-64-7 55949-44-5	Refer to Note 1
	HCFC-151	110587-14-9 762-50-5 1615-75-4	Refer to Note 1
	HCFC-221	134237-35-7 29470-94-8 422-26-4	Refer to Note 1
	HCFC-222	134237-36-8 422-49-1 422-30-0 116867-32-4	Refer to Note 1
	HCFC-223	134237-37-9 422-52-6 422-50-4	Refer to Note 1
	HCFC-224	134237-38-0 422-54-8 422-53-7 422-51-5	Refer to Note 1

Substances		CAS No.	Remark
HCFCs Hydrochlorofluorocarbons	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
	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

Substances		CAS No.	Remark
HCFCs Hydrochlorofluorocarbons	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: Examples of Polychlorinated Biphenyls (PCBs) and specific substitutes

Substances	CAS No.
Polychlorinated Biphenyls (all isomers and congeners)	1336-36-3
Monomethyl-tetrachloro-diphenyl methane (Ugilec 141)	76253-60-6
Monomethyl-dichloro-diphenyl methane(Ugilec 121, Ugilec 21)	81161-70-8
Monomethyl-dibromo-diphenyl methane (DBBT)	99688-47-8

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

No	Substances	Exempted applications（Refer to Note 1)	
003	Cadmium /Cadmium Compounds	8(b)-I	Cadmium and its compounds in electrical contacts used in: - circuit breakers, - thermal sensing controls, - thermal motor protectors (excluding hermetic thermal motor protectors), - AC switches rated at: - 6 A and more at 250 V AC and more, or - 12 A and more at 125 V AC and more, - DC switches rated at 20 A and more at 18 V DC and more, and - switches for use at voltage supply frequency ≥ 200 Hz. (banned from Jan 21, 2021)
		13(b)-(II)	Cadmium in striking optical filter glass types; excluding applications falling under point 39 of this Annex(banned from Jan 21, 2021)
		13(b)-(III)	Cadmium in glazes used for reflectance standards(banned from Jan 21, 2021)
005	Lead/Lead Compounds	5(b)	Lead in glass of fluorescent tubes not exceeding 0.2% by weight
		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 (banned from Jan 21, 2021)
		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 (banned from Jan 21, 2021)
		6(b)-II	Lead as an alloying element in aluminium for machining purposes with a lead content up to 0,4 % by weight (banned from Nov 18, 2020)
		6(c)	Copper alloy containing up to 4% lead by weight (banned from Jan 21, 2021)
		7(a)	Lead in high melting temperature type solders (i.e. lead based alloys containing 85% by weight or more lead) (banned from Jan 21, 2021)
		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 (banned from Jan 21, 2021)
		7(c)-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher (banned from 21 January 2021)
		13(a)	Lead in white glasses used for optical applications(banned from Jan 21, 2021)
		13(b)-(I)	Lead in ion coloured optical filter glass types(banned from Jan 21, 2021)
		13(b)-(III)	Lead in glazes used for reflectance standards(banned from Jan 21, 2021)
		15(a)	Lead in solders to complete a viable electrical connection between the semiconductor die and carrier within integrated circuit flip chip packages where at least one of the following criteria applies: - a semiconductor technology node of 90 nm or larger: - a single die of 300 mm2 or larger in any semiconductor technology node; - stacked die packages with die of 300 mm2 or larger, or silicon interposers of 300 mm2 or larger.
006	Mercury/Mercury Compounds	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp)	
		3(a)	Short length (≤ 500 mm)：3.5mg may be used per lamp
		3(b)	Medium length (> 500mm and ≤ 1500 mm)： 5mg may be used per lamp
		3(c)	Long length (> 1,500 mm) ： 13mg may be used per lamp
044	Perfluorooctanoic acid (PFOA) CAS No 335-67-1 and its salts.	- In photographic coatings applied to films, papers or printing plates - In photo-lithography processes for semiconductors or in etching processes for compound semiconductors	

Note regarding Table 1e:

1) The number is the exemption number described in RoHS directive

Table 1f: Polycyclic aromatic hydrocarbons (PAH)

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

Table 1g: Missing number

Table 1h: Hexabromocyclododecane (HBCDD)

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

Table 1i: Banned Standard of CMRs

No.	Substances	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

No.	Substances	Banned Standards (*1)
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	α, α,α,4-tetrachlorotoluene; p-chlorobenzotrichloride	
15	α, α,α-trichlorotoluene; benzotrichloride	
16	α-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-dienylidenemethylene)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 ≥ 0,1 % of Michler's ketone (EC no. 202-027-5)	
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

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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	Diarsenic pentaoxide	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 [Additional Conditions] Refer to Note 3	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, distn. 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)
016	Anthracene oil, anthracene paste	90640-81-6	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
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 (Na2O+K2O+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 (Na2O+K2O+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)
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)

No.	Substances	CAS No.	Conditions of reporting	Reference
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(II) dinitrate	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(II) diacetate	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	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)
042	Lead dipicrate	6477-64-1	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	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)

No.	Substances	CAS No.	Conditions of reporting	Reference
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 [Additional Conditions] Refer to Note 3	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 [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
052	Lead styphnate	15245-44-0	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
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 [Additional Conditions] Refer to Note 3	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)

No.	Substances	CAS No.	Conditions of reporting	Reference
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. 90-94-8) 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)
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 ≥ 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	α,α-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 ≥ 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	Pentacosafluorotridecanoic acid	72629-94-8	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
069	Tricosafluorododecanoic acid	307-55-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
070	Henicosafluoroundecanoic acid	2058-94-8	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
071	Heptacosafluorotetradecanoic acid	376-06-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
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 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	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
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 [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
081	Orange lead (Lead tetroxide)	1314-41-6	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
082	Lead bis(tetrafluoroborate)	13814-96-5	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
083	Trilead bis(carbonate)dihydroxide	1319-46-6	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
084	Lead titanium trioxide	12060-00-3	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
085	Lead Titanium Zirconium Oxide	12626-81-2	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
086	Silicic acid, lead salt	11120-22-2	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
087	Silicic acid（$H_2Si_2O_5$), 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 [Additional Conditions] Refer to Note 3	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)
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 [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
094	Lead oxide sulfate	12036-76-9	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
095	[Phthalato(2-)]dioxotrilead	69011-06-9	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
096	Dioxobis(stearato)trilead	12578-12-0	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
097	Fatty acids, C16-18, lead salts	91031-62-8	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
098	Lead cyanamidate	20837-86-9	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
099	Lead dinitrate	10099-74-8	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
100	Pentalead tetraoxide sulphate	12065-90-6	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
101	Pyrochlore, antimony lead yellow	8012-00-8	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
102	Sulfurous acid, lead salt, dibasic	62229-08-7	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
103	Tetraethyllead	78-00-2	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
104	Tetralead trioxide sulphate	12202-17-4	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
105	Trilead dioxide phosphonate	12141-20-7	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
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	Biphenyl-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 [Additional Conditions] Refer to Note 4	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
121	Cadmium Oxide	1306-19-0	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 4	REACH (Candidate for Authorization)
122	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 5	REACH (Candidate for Authorization)
123	Pentadecafluorooctanoic acid (PFOA)	335-67-1	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 5	REACH (Candidate for Authorization)
124	Dipentyl 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 [Additional Conditions] Refer to Note 4	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)
132	Lead di(acetate)	301-04-2	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 3	REACH (Candidate for Authorization)
133	Cadmium chloride	10108-64-2	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] Refer to Note 4	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)

No.	Substances	CAS No.	Conditions of reporting	Reference
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 (CdF2)	7790-79-6	Concentration in the constituent article exceeds 1000 ppm [Additional Conditions] 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 [Additional Conditions] 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)
139	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
140	Dioctyltin 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)
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-benzenedicarboxylicacid, 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-oic-acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
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[def]chrysene(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 1000 ppm	REACH (Candidate for Authorization)
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	Perfluorohexane-1-sulphonic acid and its salts	355-46-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
155	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) with ≥0.1% w/w 4-heptylphenol, branched and linear (4-HPbl)	-	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
156	Chrysene	218-01-9, 1719-03-5	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(CAS No. 218-01-9). This is only applied to excluding the prohibition usage of CMRs shown in Table 1.	REACH (Candidate for Authorization)
157	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)
158	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)
159	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)
160	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	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo [12.2.1.16,9.02,13.05,10] octadeca-7,15-diene (“Dechlorane Plus”TM) [covering any of its individual anti- and syn-isomers or any combination thereof]	-	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
162	Terphenyl, hydrogenated	61788-32-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
163	Octamethylcyclotetrasiloxane (D4)	556-67-2	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
164	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)
165	Ethylenediamine（EDA）	107-15-3	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
166	Dodecamethylcyclohexasiloxane (D6)	540-97-6	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
167	Disodium octaborate	12008-41-2	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
168	Dicyclohexyl phthalate (DCHP)	84-61-7	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
169	Decamethylcyclopentasiloxane (D5)	541-02-6	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
170	Benzo[ghi]perylene	191-24-2	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
171	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)
172	Pyrene	129-00-0	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
173	Phenanthrene	85-01-8	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
174	Fluoranthene	206-44-0	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
175	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)
176	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
177	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)
178	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	–	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)

No.	Substances	CAS No.	Conditions of reporting	Reference
179	4-tert-butylphenol	98-54-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
180	2-methoxyethyl acetate	110-49-6	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
181	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)
182	Perfluorobutane sulfonic acid (PFBS) and its salts	-	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
183	Diisohexyl phthalate	71850-09-4	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
184	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	Concentration in the constituent article exceeds 1000 ppm	REACH (Candidate for Authorization)
185	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	Concentration in the constituent article exceeds 1000 ppm	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 Fujitsu Group.

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

3) The substances fulfill the following additional conditions:
   - Applied only to them when they are used for "Exempted Application" of "lead compounds" defined in Table 1e.
   - Other than those above, they shall comply with the "Standards of ban" as "Lead compounds" defined in Table 1.
   - This is only applied to excluding the prohibition usage of CMRs shown in Table 1.

4) The substances fulfill the following additional conditions:
   - Applied only to them when they are used for "Exempted Application" of "Cadmium compounds" defined in Table 1e.
   - Other than those above, they shall comply with the "Standards of ban" as "Cadmium compounds" defined in Table 1.

   This is only applied to excluding the prohibition usage of CMRs shown in Table 1.

5) The substances fulfill the following additional conditions:
   - Applied to the fiber, carpet, or other coated articles of “PFOA, PFOA-salts, PFOA-esters”.
   - Other than those above, they shall comply with the "Standards of ban" as "PFOA, PFOA-salts, PFOA-esters" defined in Table 1.

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

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

4. Prohibited Substances in manufacturing process

Table 4: Prohibited Substances in manufacturing process

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

[Revision record]

May 13,2010	(Edition 1)	Created. (Separated from “Fujitsu Group Green Procurement Direction”) Added 1 substance to Reportable Substances.
Jul 9, 2010	(Edition 1.1)	Added 2 substances to Banned Substances, and renamed 1 substance. Added 5 substances to Ozone Depleting Substances. Added 8 substances to Reportable Substances. Redefined 2 Radioactive Substances.
Oct 25, 2010	(Edition 1.2)	Restructured Exempted Applications (Table 1d). Deleted 5 Reportable Substances.
Jan 24, 2011	(Edition 1.3)	Added 5 substances to Banned Substances. Added 6 substances to Reportable Substances. Deleted 2 substances to Control Substances. Created “Table 4: Prohibited Substances in manufacturing process”
Jul 6, 2011	(Edition 1.4)	Added 6 substances to Reportable Substances. Deleted 3 substances to Reportable Substances.
Oct 11, 2011	(Edition 1.5)	Revised in part (Clause 4)
Jan 20, 2012	(Edition 1.6)	Added 15 substances as “Reportable Substances”. Added substances as “Detailed Substances” of Ozone Depleting Substances and Fluorinated Greenhouse Gases. Amended “Exempted applications”.
Jul 20, 2012	(Edition 1.7)	Added 13 substances as “Reportable Substances”. Added substances as “Detailed Substances” of Ozone Depleting Substances. Modified the “Table 4: Prohibited Substances in manufacturing process”.
Jan 28, 2013	(Edition 1.8)	Added 1 substance to “Banned Substances.” Revised “Standards of ban” of 1 substance. Added 52 substances as “Reportable Substances”. Added 2 substances as “Control Substances”. Deleted 5 substances as “Control Substances”. Revised “Conditions of Deliverables to be controlled” of 2 substances. Modified the “Table 1e” (Deleted the exempted applications expired.) Deleted the “Table 3b” and “Table 3c.”
Jul 19, 2013	(Edition 1.9)	Added 6 substances as “Reportable Substances”
Feb 5, 2014	(Edition 2.0)	Added and modified some terms in “Definition of terms” Added 2 substances as “Banned Substances” and revised “Standards of ban” of 3 substances in Table 1 Modified Table 1e (added 1 exempted application and modified the expired dates) Added Table 1f and Table 1g Added 7 substances as “Reportable Substances” and revised “Conditions of reporting” of 2 substances in Table 2
May 1, 2014	(Edition 2.1)	Added 2 substances as “Banned Substances” and Table 1h. Deleted 1 substance of “Reportable Substances.”
July 18, 2014	(Edition 2.2)	Added 4 substances as “Reportable Substances”. Deleted Exempted applications on Dibutyltin compounds in Table 1 and Table 1e
Feb 5, 2015	(Edition 2.3)	Criteria change of 5 substances in Table 1. Name change of 1 substance in Table 1. Added 5 substances as “Reportable Substances” in Table 2. Criteria change of 1 substance in Table 2.

July 31, 2015	(Edition 2.4)	Added one “Definition of term”
		Criteria change of 1 substance and Added 5 substances in Table 1
		Modified Table 1e (added the expired dates and deleted PFOA)
		Added 2 substances as “Reportable Substances”
Jan 28, 2016	(Edition 2.5)	Added one substance as “Banned Substances” and revised “Standards of ban” of one substance in Table 1.
		Added 5 substances as “Reportable Substances” in Table 2.
		Deleted expired Exempted applications in Table 1e.
March 1, 2016	(Edition 2.5.1)	Correction of erroneous description in Table 1 (No. 23) (“1 chlorine atoms” to “1 chlorine atom”)
July 22, 2016	(Edition 2.6)	Added 1 substance as “Reportable Substances” in Table 2.
Feb 24, 2017	(Edition 2.7)	Criteria change of 1 substance and Added 2 substances in Table 1
		Added 4 substances as “Reportable Substances” in Table 2.
Sep 6, 2017	(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
Mar 14, 2018	(Edition 2.9)	Criteria change of 5 substances in Table 1
		Added 7 substances as “Reportable Substances” in Table 2
Aug 24, 2018	(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
Jan 9, 2013	(Edition 3.1)	Partial change of “Standard of ban”
		Partial change of “Conditions of reporting”
Apr 1, 2019	(Edition 3.2)	Criteria change and Added one substance in Table 1
		Added 6 substances as “Reportable Substances” in Table 2
Sep 24, 2019	(Edition 3.3)	Added 4 substances as “Reportable Substances” in Table 2
		Deleted exempted applications for lead, ”8(b) ”and ”15” in Table 1
Apr 1, 2020	(Edition 3.4)	Added 4 substances as “Reportable Substances” in Table 2
		Deleted exempted applications for PFOS and PFOS-related substances in Table 1

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