Konica Minolta
Green Procurement Guidelines

Edition 30.0

KONICA MINOLTA, INC.

Revision : March 31, 2024
Enforcement : June 1, 2024

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1. Introduction

Konica Minolta Environmental Policy

The Konica Minolta Group aims to promote sustainable development and profitable growth. We integrate environmental, economic and social perspectives into our business strategies so that our business activities are implemented in harmony with human lives and with the environment in all aspects.

Our concept is to make steady progress toward resolution of environmental challenges based on quantitative measurement and analysis of reliable date in regard to environmental performance and impact. This basic concept is demonstrated in the following affirmation:

"Management Based On Facts"

1. Working toward a sustainable society as a global citizen

In response to the call for a sustainable society, we will conduct business activities from the perspective of on-going enhancement of performance in environmental preservation, economic growth and social responsibilities (ethics). Every one of us will enhance its knowledge and awareness on the environment, economies and societies on a global scale and act with responsibility in pursuit of a sustainable society.

2. Compliance with laws and other requirements

We will comply with legal requirements in respective countries and regions, as well as our Group standards. In addition, we will respect, in an equitable manner, expectations of our stakeholders and consensus in the international community.

3. Consideration for the environment throughout the entire life cycle of products and services

We are committed to reducing the environmental load in all stages throughout the entire life cycle of products and services, recognizing that responsibility for a product rests with its manufacture.

4. Initiatives to counter global warming

We will continuously reduce greenhouse gas emissions that derive from our business activities from the perspective of the life cycle of our products and services throughout the entire Group, recognizing that global warming is one of the most important world issues.

5. Initiatives toward a recycling-oriented society

We are always reviewing what we can do as a corporate citizen in order to create recycling-oriented society while striving for minimizing consumption of natural resources and promoting "Zero Waste Emission" activities. In addition, we will accelerate initiatives for the recovery and recycling of end-of-life products and packaging materials.

6. Prevention of chemical pollution and minimization of potential risks to the environment

We will take every countermeasure for preventing chemical pollutions, recognizing that chemical substances can impose significant impact on human health and safety and the environment. At the same time, we will continuously suppress use of chemicals and reduce discharge volume in order to minimize environmental risks.

7. Promotion of information disclosure

We will execute accountability to all the stakeholders by actively disclosing environmental information and ensuring risk communication. We will as well make every effort to accomplish our commitment to the societies. Our Environmental Policy is to be disclosed to the public.

8. Establishment of environmental objectives and targets

We establish and administer environmental objectives, targets, and management programs to translate this Environmental Policy into reality. We will continuously review such objectives, targets and programs for further improvement of our environmental performance.

2. Purpose of green procurement

The purpose of green procurement is to accurately obtain information on Konica Minolta's "substances to manage" from suppliers, procure materials that include no hazardous substances for Konica Minolta products, and appropriately manage information on chemicals to be transmitted to the supply chain and to consumers.

3. Scope

Konica Minolta's green procurement applies to the following articles that the Konica Minolta Group procures from suppliers:
But production facilities and test and research uses are not included.

- Parts, materials, and equipment products
- Chemicals (*1)
- Packaging and logistics materials (*2)

(*1) The chemicals
- Chemicals (e.g. toner, ink, service sub-materials) and their constituent materials procured by the Konica Minolta Group.
- Raw materials and supplementary materials (grease, coating, adhesives, etc.) used in the Konica Minolta Group' production sites

(*2) Packaging that does not arrive at the end-user and is not imported or exported, or packaging that is not subject to control at our delivery point, is not included in the scope.

4. Definition of terms

Substances to manage: Chemical substances that have been determined to require management at Konica Minolta. All chemical substances and the following prohibited and reportable substances for equipment products.

Prohibited substances: Among the substances to manage, those substances (shown in Appendix 1) that are currently or scheduled to be prohibited in products by legislation as well as substances Konica Minolta restricts voluntarily.

Reportable substances: Among the substances to manage, those substances (shown in Appendix 1) that should be reduced depending on the situation and, where included in parts, for which information should be provided in accordance with laws.

Prohibited and restricted chemical substances: environmentally hazardous substances with long-term adverse effects and substances with serious health risks which the KM Group should exclude in its chemical products.

Homogeneous material: Based on the definition in EU RoHS (2011/65/EU), a material that cannot be mechanically separated into different materials. Examples include various types of plastic, ceramic, glass, metal, alloy, paper, board, resin, coating, paint, and plating.

Example: electrolytic capacitor

Source: Material Composition Survey and Response Manual (published: Japan VT62474)

Exemptions: Based on the definition in EU RoHS (2011/65/EU), uses that are temporarily permitted in an application where substitution is technically impracticable. The applications, limitations on the amount used, and periods of validity are established in detailed for each substance.

Intentional addition: The condition of having been added for some purpose, such as giving a product a certain property.

5. Request for supplier environmental management system

Suppliers should establish an environmental management system (EMS) at factories where suppliers produce or manufacture items for the Konica Minolta group. Specifically, this includes:

- Establishment and maintenance of environmental management organization and system in accordance with ISO14001, EMAS and other standards.
- Obtainment of ISO14001 certification, etc.
- Execution and record of required environmental management such as environment of factory and labor
- Reflection of Konica Minolta requests in management and production
- Securing of appropriate traceability from raw materials and parts to finished products
- Management of substances regulated under the Montreal Protocol
- Effort to reduce power consumption, water, production loss, CO_2
- Corporate effort towards zero-emission and recycling
- Development of a system to enable the management of chemical substances in products according to the principles and guidelines for the management of chemical substances in products as stated in JIS Z7201, including the establishment of a system to enable the management of chemical substances in products to be carried out reliably.

Established system and performed management should be properly documented and recorded.

6. Requirements for supplied products

1) Requirements for chemical substances in products (CiP)

- Deliveries of equipment products are not to include prohibited substances in excess of the control limit/threshold or in applications other than exemptions
- Information is to be provided to Konica Minolta regarding substances to manage (including prohibited and reportable substances in equipment products, and chemicals)

The administrative standards to be applied depend on the target use.
Reported substances with a scheduled prohibition date should be replaced by the scheduled prohibition date.
See Appendix 1 for details.
Some substances are subject to separate control criteria for each product group due to environmental labelling compliance or customer requirements.

2) Basis of determination of inclusion status

Determine inclusion status and content of survey target chemicals on a rational and chemical basis. Specifically:

- chemSHERPA data (CI, AI)
- Design value, prescription value
- Analytical value

Determine using one or a combination of the above.
If an analysis value is used as the basis of determination, consider maldistribution and other statistical variation between lots, within lots, and parts of an item.

3) Chemical substances in products (CiP) survey

Konica Minolta will email you a survey request for covered items. After receiving the survey request email, please answer the request. If the request is made via the Konica Minolta Green survey system, please access the system, review the request and answer.

https://greenweb4.konicaminolta.com/sigma2/

For equipment products, the survey response format for CiP is based on the chemSHERPA-AI File. Composition information is required. Information on compliance judgment is optional.

Follow the chemSHERPA usage rules when preparing the chemSHERPA-AI File.
See the following website for details.
https://chemsherpa.net/chemSHERPA/

For chemical products, please submit SDSs, certificates of conformity with chemical laws and regulations, and chemSHERPA-CI.
Due to amendments to legislation, etc., we will send you an email requesting you to investigate SDSs and certificates of conformity with chemicals legislation, etc. Please answer the request after checking the contents.
We will determine whether a chemical product corresponds to a prohibited restricted substance or not. As the risks of chemicals vary depending on the form of exposure, in order to manage the risks more in line with reality, they are classified into five categories based on the assumed usage situation, ranging from 'cases where the product is used under strict safety control (e.g. production sites)' to 'cases where an unspecified number of users are assumed and safety measures cannot be expected', and safety requirements are set according to the respective risks.

For product packaging material, submit a Declaration of Conformity on Chemical Substances in Packaging Material in addition to the chemSHERPA-AI File.

A different survey method and/or response format might be requested depending on the business division or item. Evidence such as measured results might need to be submitted.
Please check with a Konica Minolta representative for details.

category	subclass	specific example	Standards	Required documents (Investigation documents)
Equipment Products	Products	PCs, monitors, printers, office equipment, etc.	Annex1	chemSHERPA-AI
	Parts and components	Articles, substrates, batteries, steel materials, bar solder, string solder, glass plates, PET bases, piezo elements, paper, etc.	Annex1	
packaging	Product packaging	Containers, container caps, plastic bags, cushioning materials, roll cores, etc.	Annex1	・ChemSHERPA-AI ・Declaration of Conformity of Chemical Substances in Packaging Materials
	Logistics Packaging	Stretch film, cardboard for collective packaging, pallets, PP bands, cushioning materials, etc.	Annex1	
chemicals	Products	Toner, ink, etc.	Annex2	・chemSHERPA-CI ・SDS, ・Chemicals Certificate of Conformity
	Chemicals, service sub-materials and production sub-materials used in production	Raw materials, preforms, resin pellets, glass cullet, adhesives, plating solutions, solvents, greases for products, targets, water repellents, coating agents, paints, solder pastes, drying agents, preservatives, cleaning agents, mold release agents, cutting fluids, abrasives, resist fluids, etc.	Annex2	

7. Requests when changing a response

If a change in an already submitted response occurs due to the following reasons, please notify a Konica Minolta representative promptly.

①Changing parts

- ・At changing design
- ・At changing manufacturing conditions (such as materials, equipment, and so on)
- ・At changing commercial distribution (supplier, trading company, manufacturer of raw materials, and so on)

②Addition of substances listed in the Green Procurement Guidelines

- ・When controlled substances are added to the Konica Minolta Green Procurement Guidelines.

③Chemical composition and compositional changes

- ・At changing design
- ・At changing manufacturing conditions (such as materials, equipment, and so on)
- ・At changing commercial distribution (supplier, trading company, manufacturer of raw materials, and so on)

④Change in response to the Chemicals Regulatory Compliance Certificate

- ・At change of inventory registration status
- ・At change of hazard information.
- ・At In case the substance is contained in a substance that corresponds to a change/addition of a substance subject to the answered regulation

Revision History

Revision date	Edition	Revision details
March 31,2024	30.0	1.Revision of the prohibited/reportable substances list ・Add the substances registered with the IEC 62474(D27.0/D28.0) update Unification of control standard values with IEC62474 list entries. Deletion of planned regulatory dates for MOAH and MOSH in P37. P34 PIP (3:1) target use changed to all Eight substances (groups) added to the list of Reporting substances (R94-R101) Prohibited substances REACH SVHC targets added to Reporting substances ・EU POPs controlled substances added to prohibited substances. ・Part of the list of prohibited substances is made annexed as standards for specific products. ・Update from the official announcement on the RoHS exemption ・Revised list of reference substance names for substance groups. PFHxS Additional example substances 2. Business-specific environmental labelling standards, etc. are set as standards for each business unit. 3. Chemicals added to control standards. ・Addition of a table of prohibited and restricted chemical substances.
March 24,2023	29.0	・Revision of the prohibited/reportable substances list Add the substances registered with the IEC 62474(D26.00) update ・Added 9 types of substance to Reporting substances. (R77-R85) ・Changed the target of R76 PFAS from "packaging materials" to "all" ・P32 PAH criteria split into REACH regulation and GS mark. ・Created a column for reference regulations and added a list of regulations as Appendix 3. (Revised sections are shown in blue.)
September 26,2022	28.0	・Revision of the prohibited/reportable substances list Add the substances registered with the IEC 62474(D23.00/D24.00/D25.00) update ⇒ Added 4 types of prohibited substances, "PFHxS, PFCA (C9-14), mineral oil, bisphenol A" ⇒Corrected the remarks of PAH of prohibited substances to the notation according to the REACH regulation. ⇒Added 12 types of substance to Reporting substances. (R65-R76) ・Update from the official announcement of the RoHS Directive Exemption
May 14.2021	27.0	・Revision of the prohibited/reportable substances list Add the substances registered with the IEC 62474(D21.00&D22.00) update ⇒Add PIP (3: 1) to prohibited substances (P34) ⇒Add REACH 24th SVHC ・Update from the official announcement of the RoHS Directive Exemption
December 11,2020	26.1	- Update Sigma URL ・Revision of the prohibited/reportable substances list Add the substances registered with the IEC 62474(D20.00) update Add notation with parts as the denominator in the PFOA standard ・Update from the official announcement of the RoHS Directive Exemption
March 25,2020	26.0	- 7. Requests when changing a response - Modify requests - Revision of the prohibited/reportable substances list - Add the substances registered with the IEC 62474(D19.00) update ⇒Add REACH SVHC (2 substances) - Update from the official announcement of the RoHS Directive Exemption
Revision history prior to the 25th edition is omitted		

Appendix 1: Prohibited/reportable substances for Konica Minolta products (Ver. 30.0 list)

<Prohibited substances> Revision date 31-Mar-2024

	Substance	CAS No.	Application for Substances	Control limit and threshold (Contents in homogeneous material unless otherwise specified)	Remarks	Reference laws and regulations
P1	Cadmium/Cadmium compounds	Annex 2 ①	Parts	0.01%(100ppm)	Listed on Annex 1 are not prohibited.	1,2,3,4,5
			Batteries	0.001% of battery (10ppm)	Medical instruments exempt	22,24
			Packaging materials	Total weight of Cd, Pb, Hg, CrⅥ 0.01%(100ppm)		40,45
P2	Chromium (VI) Compounds	Annex 2 ②	Parts	0.1%(1000ppm)	Listed on Annex 1 are not prohibited	1,2,3,4
			Packaging materials	Total weight of Cd, Pb, Hg, CrⅥ 0.01%(100ppm)		40,45
P3	Lead/Lead Compounds	Annex 2 ③	Parts other than below	0.1%(1000ppm)	Listed on Annex 1 are not prohibited	1,2,3,4,5
			PVC sheathed wires that are external and frequently handled	0.03% (300ppm)		18
			PVC parts	0.1%(1000ppm)		5
			Consumer products designed or intended primarily for children 12 years of age or younger	0.01% (100ppm)		12
			Paint and similar surface coatings of toys and other articles intended for use by children	0.009% (90ppm)		
			Batteries	0.004% of battery (40ppm)		22,23
			Packaging materials	Total weight of Cd, Pb, Hg, CrⅥ (0.01%(100ppm)		40,45
P4	Mercury/Mercury Compounds	Annex 2 ④	Parts	Intentionally added Threshold as an impurity: 0.1%(1000ppm)	Listed on Annex 1 are not prohibited. The parts, which use Exceptional use, will be prohibited to deliver to Konica Minolta [CAT:1-7,10,11] AnnexⅢ 1(g) [CAT:8]AnnexⅢ 1(g),5(a),5(b)	1,2,3,4,5,14
			Batteries	0.0001% of battery (1ppm)		14,22,23,24,25,26
			Packaging materials	Total weight of Cd, Pb, Hg, CrⅥ 0.01%(100ppm)		40,45
P5	Polybrominated biphenyls (PBB)	Annex 2 ⑥	All	0.1%(1000ppm)		1,2,3
P6	Polybrominated diphenyl ethers (PBDE)	Annex 2 ⑦	All	Intentionally added threshold as an impurity: 0.1%(1000ppm)	Deca-BDE and Hexabromobiphenyl is also prohibited.	1,2,3,7,8,13,46
P7	Dibutyltin (DBT) compounds	Annex 2 ⑧	All	0.1% of tin in the part	Prohibited only for general public supply	5
P8	Dioctyltin (DOT) compounds	Annex 2 ⑨	(a) Textile and leather articles intended to come into contact with the skin (b) Childcare articles (c) Two-component room temperature vulcanisation moulding kits (RTV-2 moulding kits)	0.1% of tin in the part		5
P9	Bis(tributyltin) oxide (TBTO)	56-35-9	All	Intentionally added		7
P10	Tri-substituted organostannic compounds	Annex 2 ⑤	All	Intentionally added		5,7,9
P11	Polychlorinated Biphenyls (PCBs) and specific substitutes	Annex 2 ⑥	All	Intentionally added		7,8,13
P12	Polychlorinated Terphenyls (PCTs)	61788-33-8	All	0.005%(50ppm)		5
P13	Polychlorinated naphthalenes	Annex 2 ⑨	All	Intentionally added		7,13
P14	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	Annex 2 ⑩	All	Intentionally added Threshold as an impurity: 0.1%(1000ppm)		9,11,13
P15	Perfluorooctane sulfonates (PFOS)	Annex 2 ⑧	Parts	Intentionally added Threshold as an impurity: 0.0000025%(25ppb)		7,10,13
			Related substances in parts	0.0001%(1000ppb)		
			Textiles or other coated materials	Intentionally added Threshold as an impurity: 1μg/m^2		
P16	Azocolourants and Azodyes which form certain aromatic amines	Annex 2 ⑪	Textiles and leather products	Amine thresholds in finished products:0.003%(30ppm)		5
P17	Asbestos	Annex 2 ⑫	All	Intentionally added		5,8,11
P18	Ozone Depleting Substances (ODSs)	Annex 2 ⑬	All (Including prohibition in manufacturing)	Intentionally added		28,29,30,31
P19	Fluorinated Greenhouse Gases (PFC, SF6, HFC)	Annex 2 ⑭	All	Intentionally added		27
P20	Polyvinyl Chloride(PVC)	–	Resin packaging materials (Other than seal tapes for photographic arts films, X-ray films and color papers)	Intentionally added		41
P21	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	All	Intentionally added		6,7
P22	Radioactive substances	Annex 2 ⑮	All	Intentionally added		32,33,34,35
P23	Formaldehyde	50-00-0	Textiles	0.0075%(75ppm)		15,17
P24	Nickel/Nickel Compounds	Annex 2㉝	Parts that may come into direct contact with human skin for a long time	Intentionally added		5
P25	Dimethylfumarate (DMF)	624-49-7	All	0.00001%(0.1ppm)		5
P26	Benzyl butyl phthalate (BBP)	85-68-7	Parts: Other than below	0.1%(1000ppm)	<See Note.1>	1
			Parts: Toys or childcare articles	Total weight of BBP, DBP, DEHP, DIBP 0.1%(1000ppm)		5,12
			Other than above	Total weight of BBP, DBP, DEHP, DIBP 0.1%(1000ppm)		

	Substance	CAS No.	Application for Substances		Control limit and threshold (Contents in homogeneous material unless otherwise specified)	Remarks	Reference laws and regulations
P27	Dibutyl phthalate (DBP)	84-74-2	Parts	Other than below	0.1%(1000ppm)	<See Note.1>	1
				Toys or childcare articles	Total weight of BBP, DBP, DEHP, DIBP 0.1%(1000ppm)		5,12
			Other than above		Total weight of BBP, DBP, DEHP, DIBP 0.1%(1000ppm)		
P28	Bis (2-ethylhexyl)phthalate (DEHP)	117-81-7	Parts	Other than below	0.1%(1000ppm)	<See Note.1>	1
				Toys or childcare articles	Total weight of BBP, DBP, DEHP, DIBP 0.1%(1000ppm)		5,12
			Other than above		Total weight of BBP, DBP, DEHP, DIBP 0.1%(1000ppm)		
P29	Diisobutyl phthalate (DIBP)	84-69-5	Parts	Other than below	0.1%(1000ppm)	<See Note.1>	1
				Toys or childcare articles	Total weight of BBP, DBP, DEHP, DIBP 0.1%(1000ppm)		5,12
			Other than above		Total weight of BBP, DBP, DEHP, DIBP 0.1%(1000ppm)		
P30	Phthalates, Selected Group 2 (DIDP, DINP, DNOP)	Annex 2 ㉑	Children's toy or child care article that can be placed in a child's mouth		0.1%(1000ppm)		5,12
P31	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α–HBCDD, β-HBCDD, γ-HBCDD)	Annex 2 ㉕	All		Intentionally added Threshold as an impurity: 0.01%(100ppm)		7,13
P32	Polycyclic aromatic hydrocarbons (PAHs)	Annex 2 ㉔	Rubber parts or plastic parts that come into direct, prolonged or repetitive skin or oral cavity contact except those for toys or childcare articles		Each of PAHs be weight of the plastic or rubber parts <= 1mg / Kg	except toys and childcare articles	5
					Each of PAHs be weight of the plastic or rubber parts <= 0.5mg / Kg	toys and childcare articles	
P33	Perfluorooctanoic acid (PFOA) and individual salts and esters of PFOA	Annex 2 ㉛	Parts		Intentionally added Threshold as an impurity:0.0000025% (25ppb)		7,13,16
			PFOA-related compounds, in article or mixture		Intentionally added 1μg/m2		
P34	Phenol, Isopropylated Phosphate (3:1) (PIP (3:1))	68937-41-7	All		Intentionally added	Medical equipment applications are not prohibited	8
P35	Perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS related compounds	Annex 2 ㉞	All		PFHxS 0.0000025% (25ppb)		11
					Total of PFHxS related substances 0.0001% (1ppm)		
P36	Perfluorocarboxylic acids (PFCA:C9-C14),their salts and C9-C14 PFCA-related compounds	Annex 2 ㊷	All		C9-C14 PFCA 0.0000025% (25ppb)		5
					Total of C9-C14 PFCA-related substances 0.000026% (260ppb)		
P37	Aromatic hydrocarbons of mineral oil (MOAH) comprising from 1 to 7 aromatic rings	-	Packaging materials & Included printed matter		Aromatic hydrocarbons of mineral oil comprising from 1 to 7 aromatic rings (in ink) 1000ppm or Aromatic hydrocarbons of mineral oil comprising from 3 to 7 aromatic rings (in ink) 1ppm	※Not listed in chemSHERPA 2.09.00	42
	Saturated hydrocarbons with mineral oil (MOSH) comprising from 16 to 35 carbon atoms	-	Packaging materials & Included printed matter		(in ink) 1000ppm	※Not listed in chemSHERPA 2.09.00	
P38	4,4'-isopropylidenediphenol (BPA)	80-05-7	Packaging materials		Intentionally added	Except for packaging materials, refer to monitoring substance R42	43
P39	Halogenated flame retardants	Annex 2 ㉒ Annex 2 ㉓	Enclosure and stand of electronic displays with a screen area greater than 100 square		Intentionally added	Except for certain applications, refer to monitoring substance R1,R2	20
P40	Hexachlorobenzene	118-74-1	All		0.001%(10ppm)		13,46
P41	Aldrin	309-00-2	All		Intentionally added		13,46
P42	Dieldrin	60-57-1	All		Intentionally added		13,46
P43	Endrin	72-20-8	All		Intentionally added		13,46
P44	DDT	50-29-3	All		Intentionally added		13,46
P45	Chlordane	57-74-9	All		Intentionally added		13,46
P46	Heptachlor	76-44-8	All		Intentionally added		13,46
P47	Toxaphene	8001-35-2	All		Intentionally added		13,46
P48	Mirex	2385-85-5	All		Intentionally added		13,46
P49	Hexachlorobutadiene	87-68-3	All		Intentionally added		13,46
P50	Pentachlorobenzene	608-93-5	All		Intentionally added		13,46
P51	Alpha hexachlorocyclohexane	319-84-6	All		Intentionally added		13,46
P52	Beta hexachlorocyclohexane	319-85-7	All		Intentionally added		13,46
P53	Lindane	58-89-9	All		Intentionally added		13,46
P54	Chlordecone	143-50-0	All		Intentionally added		13,46
P55	Tetrabromodiphenyl ether andpentabromodiphenyl ether	—	All		0.001%(10ppm)		13,46
P56	Hexabromodiphenyl ether andheptabromodiphenyl ether	—	All		0.001%(10ppm)		13,46
P57	Technical endosulfan and its related isomers	Annex 2㊼	All		Intentionally added		13,46
P58	Pentachlorophenol and its salts andesters	Annex 2㊾	All		Intentionally added threshold as an impurity: 0.0005%(5ppm)		7,13,46
P59	Dicofol	Annex 2㊽	All		Intentionally added		13,46
P60	Dechlorane Plus"TM [covering any of its individual anti- and syn-isomers or any combination thereof]	Annex 2 ㊺	All		Intentionally added		46
P61	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	All		Intentionally added		46

Note1: As phthalates are migratory, please manage phthalates to ensure that migratory contamination does not occur.

<Additional prohibited substances for information equipment products.>

	Substance	CAS No.	Application for Substances	Control limit and threshold (Contents in homogeneous material unless otherwise specified)	Remarks	Reference laws and regulations
P101	Cadmium/Cadmium compounds	Annex 2 ①	Imaging equipment	0.01%(100ppm)	Exempting cadmium usage in imaging equipment is also prohibited	101
P102	Mercury/Mercury Compounds	Annex 2 ④	Imaging equipment	Intentionally added		101

<Additional prohibited substances for industrial products.>

	Substance	CAS No.	Application for Substances	Control limit and threshold (Contents in homogeneous material unless otherwise specified)	Remarks	Reference laws and regulations
P106	Beryllium Oxide	1304-56-9	All OC business products (except those for special applications for which there is no alternative)	Intentionally added		102
P107	Cobalt Dichloride	7646-79-9	Humidity indicator for drying agents (e.g. silica gel) used in OC business products.	Intentionally added		6

<Reporting substance>

	Substance	CAS No.	Application for Substances	Control limit and threshold (Contents in article unless otherwise specified)	Remarks	Reference laws and regulations
R1	Brominated flame retardants (other than PBBs,PBDEs and HBCDDs)(including polymers)	Annex 2 ㉒	Printed wiring board laminate	0.09%(900 ppm) total bromine content in laminate		37,38
			Plastic materials except above	0.1%(1000ppm)		20,39
R2	Chlorine flame retardants(exempted Short Chain Chlorinated Paraffins) (including polymers)	Annex 2 ㉓	Printed wiring board laminates	0.09%(900 ppm) total chlorine content in laminate		37,38
			Plastic materials except above	0.1%(1000ppm)		20,39
R3	Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	All	0.1%(1000ppm)		6
R4	Diarsenic pentaoxide	1303-28-2	All	0.1%(1000ppm)		6
R5	Diarsenic trioxide	1327-53-3	All	0.1%(1000ppm)		6
R6	tris(2-chloroethyl)phosphate (TCEP)	115-96-8	All	0.1%(1000ppm)		6
R7	Beryllium Oxide	1304-56-9	All	0.1%(1000ppm)		36
R8	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	All	0.1%(1000ppm)		6
R9	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	All	0.1%(1000ppm)		6
R10	Specific Ceramic Fibres	Annex 2 ㉖	All	0.1%(1000ppm)		6
R11	Specific borate compounds	Annex 2 ㉗	All	0.1%(1000ppm)		6
R12	Cobalt Dichloride	7646-79-9	All	0.1%(1000ppm)		6
R13	Perchlorates	Annex 2 ⑱	All	0.0000006% (0.006ppm)		19
R14	Bis(2-methoxyethyl) ether	111-96-6	All	0.1%(1000ppm)		6
R15	4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	140-66-9	All	0.1%(1000ppm)		6
R16	1,2-bis(2-methoxyethoxy)ethane	112-49-2	All	0.1%(1000ppm)		6
R17	1,2-dimethoxyethane	110-71-4	All	0.1%(1000ppm)		6
R18	4-aminoazobenzene	60-09-3	All	0.1%(1000ppm)		6
R19	1,2-diethoxyethane	629-14-1	All	0.1%(1000ppm)		6
R20	N,N-dimethylformamide	68-12-2	All	0.1%(1000ppm)		6
R21	1,2-benzenedicarboxylic acid, dipentylester, branched and linear;	84777-06-0	All	0.1%(1000ppm)		6
R22	Diisopentylphthalate (DIPP)	605-50-5	All	0.1%(1000ppm)		6
R23	N-pentyl-isopentylphtalate	776297-69-9	All	0.1%(1000ppm)		6
R24	Di-n-Hexyl Phthalate (DNHP)	84-75-3	All	Intentionally added 0.1%(1000ppm)		6,18
R25	Hexahydromethylphthalic anhydride	Annex 2 ㉙	All	0.1%(1000ppm)		6
R26	Dipentylphthalate	131-18-0	All	0.1%(1000ppm)		6
R27	Nonylphenol ethoxylates	Annex 2 ㉚	All	0.1%(1000ppm)		6
R28	Trixylyl phosphate	25155-23-1	All	0.1%(1000ppm)		6
R29	C.I. Direct black 38	1937-37-7	All	0.1%(1000ppm)		6
R30	C.I. Direct red 28	573-58-0	All	0.1%(1000ppm)		6
R31	2-Imidazolidinethione	96-45-7	All	0.1%(1000ppm)		6
R32	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	All	0.1%(1000ppm)	Except in the case of prohibited substances.	6
R33	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	All	0.1%(1000ppm)		6
R34	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)	-	All	0.1%(1000ppm)		6

	Substance	CAS No.	Application for Substances	Control limit and threshold (Contents in article unless otherwise specified)	Remarks	Reference laws and regulations
R35	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear「DiHP」	68515-50-4	All	0.1%(1000ppm)		6
R36	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	All	0.1%(1000ppm)		6
R37	1,3-propanesultone	1120-71-4	All	0.1%(1000ppm)		6
R38	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	All	0.1%(1000ppm)		6
R39	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	All	0.1%(1000ppm)		6
R40	Benzo[def]chrysene (Benzo[a]pyrene))	50-32-8	All	0.1%(1000ppm)		6
R41	4,4'-isopropylidenediphenol (BPA)	80-05-7	All except packaging materials	Intentionally added 0.1%(1000ppm)		6,18
R42	Chrysene	218-01-9	All	0.1%(1000ppm)		6
R43	Benz[a]anthracene	56-55-3	All	0.1%(1000ppm)		6
R44	Dechlorane Plus™TM [covering any of its individual anti- and syn-isomers or any combination thereof]	Annex 2 ㉟	All	0.1%(1000ppm)	Except in the case of prohibited substances.	6
R45	Benzo[ghi] perylene	191-24-2	All	0.1%(1000ppm)		6
R46	Octamethylcyclotetrasiloxane(D4)	556-67-2	All	0.1%(1000ppm)		6
R47	Decamethylcyclopentasiloxane(D5)	541-02-6	All	0.1%(1000ppm)		6
R48	Dodecamethylcyclohexasiloxane(D6)	540-97-6	All	0.1%(1000ppm)		6
R49	Disoduim octaborate	12008-41-2	All	0.1%(1000ppm)		6
R50	Terhenyl hydrogenated	61788-32-7	All	0.1%(1000ppm)		6
R51	Dicyclohexyl phthalate (DCHP)	84-61-7	All	0.1%(1000ppm)		6
R52	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	All	0.1%(1000ppm)		6
R53	Benzo[k]fluoranthene	207-08-9	All	0.1%(1000ppm)		6
R54	Fluoranthene	206-44-0, 93951-69-0	All	0.1%(1000ppm)		6
R55	Phenanthrene	85-01-8	All	0.1%(1000ppm)		6
R56	Pyrene	129-00-0, 1718-52-1	All	0.1%(1000ppm)		6
R57	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ＞= 0.1% of 4-nonylphenol, branched and linear (4-NP)	Annex 2 ㊱	All	0.1%(1000ppm)		6
R58	Diisohexyl phthalate	71850-09-4	All	0.1%(1000ppm)		6
R59	Perfluorobutane sulfonic acid (PFBS) and its salts	Annex 2 ㊲	All	0.1%(1000ppm)		6
R60	Bis(2-(2-methoxyethoxy)ethyl)ether	143-24-8	All	0.1%(1000ppm)		6
R61	Dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety	Annex 2 ㊳	All	0.1%(1000ppm)		6
R62	Cobalt/Cobalt compounds	-	Batteries used in computer servers and online data storage products	Report the content		21
R63	Neodymium/Neodymium compounds	-	HDDs (Hard Disk Drives) used in computer servers and online data storage products	Report the content		21
R64	4,4'-(1-methylpropylidene) bisphenol; Bisphenol B	77-40-7	All	0.1%(1000ppm)		6
R65	Medium-chain chlorinated paraffins (MCCP)	Annex 2 ㊴	All	0.1%(1000ppm)		6
R66	Orthoboric acid, sodium salt	Annex 2 ㊵	All	0.1%(1000ppm)		6
R67	4-Nonylphenol, branched and linear	Annex 2 ㊶	All	0.1%(1000ppm)		6
R68	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	119-47-1	All	0.1%(1000ppm)		6
R69	Perfluorohexane acid (PFHxA)its salts and PFHxA related compounds	-	All	Report the content	※Not listed in chemSHERPA 2.09.00	(regulation under consideration 13)
R70	Perfluorocarboxylic acids (PFCA:C15-C21),their salts and C15-C21 PFCA-related compounds	-	All	Report the content	※Not listed in chemSHERPA 2.09.00	(regulation under consideration 10,13)
R71	Decabromo-diphenyl-ethane {1,1'-(ethane-1,2-diyl)bis[pentabromobenzene]} (DBDPE)	84852-53-9	All	Report the content	Independently posted from R1 Brominated flame retardants	(regulation under consideration 10)

	Substance	CAS No.	Application for Substances	Control limit and threshold (Contents in article unless otherwise specified)	Remarks	Reference laws and regulations
R72	Tetrabromo-bisphenol A (TBBPA)	Annex 2 ㊸	All	Report the content	Independently posted from R1 Brominated flame retardants	(regulation under consideration 1)
R73	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	Annex 2 ㊹	All	Report the content		44
R74	1,1'-[ethane-1,2-diylbisoxy]bis[2,4,6-tribromobenzene]	37853-59-1	All	0.1%(1000ppm)		6
R75	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol	79-94-7	All	0.1%(1000ppm)		6
R76	4,4'-sulphonyldiphenol	80-09-1	All	0.1%(1000ppm)		6
R77	Barium diboron tetraoxide	13701-59-2	All	0.1%(1000ppm)		6
R78	Bis(2-ethylhexyl) tetrabromophthalate	Annex 2 ㊺	All	0.1%(1000ppm)		6
R79	Isobutyl 4-hydroxybenzoate	4247-02-3	All	0.1%(1000ppm)		6
R80	Melamine	108-78-1	All	0.1%(1000ppm)		6
R81	Perfluoroheptanoic acid and its salts	Annex 2 ㊻	All	0.1%(1000ppm)		6
R82	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	EC number: 473-390-7	All	0.1%(1000ppm)		6
R83	Cadmium/Cadmium compounds	Annex 2①	All	0.1%(1000ppm)	Except in the case of prohibited substances.	6
R84	Mercury/Mercury Compounds	Annex 2②	All	0.1%(1000ppm)	Except in the case of prohibited substances.	6
R85	Bis(pentabromophenyl) ether (decabromodiphenyl ether) (DecaBDE)	1163-19-5	All	0.1%(1000ppm)	Except in the case of prohibited substances.	6
R86	Bis(tributyltin) oxide (TBTO)	56-35-9	All	0.1%(1000ppm)	Except in the case of prohibited substances.	6
R87	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	Annex 2⑩	All	0.1%(1000ppm)	Except in the case of prohibited substances.	6
R88	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	All	0.1%(1000ppm)	Except in the case of prohibited substances.	6
R89	Benzyl butyl phthalate (BBP)	85-68-7	All	0.1%(1000ppm)	Except in the case of prohibited substances.	6
R90	Dibutyl phthalate (DBP)	84-74-2	All	0.1%(1000ppm)	Except in the case of prohibited substances.	6
R91	Bis (2-ethylhexyl)phthalate (DEHP)	117-81-7	All	0.1%(1000ppm)	Except in the case of prohibited substances.	6
R92	Diisobutyl phthalate (DIBP)	84-69-5	All	0.1%(1000ppm)	Except in the case of prohibited substances.	6
R93	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α–HBCDD, β-HBCDD, γ-HBCDD)	Annex 2 ㉕	All	0.1%(1000ppm)	Except in the case of prohibited substances.	6
R94	bis(4-chlorophenyl) sulphone(BPFE)	80-07-9	All	0.1%(1000ppm)		6
R95	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide(DPTPO)	75980-60-8	All	0.1%(1000ppm)		6
R96	2,4,6-tri-tert-butylphenol	732-26-3	All	0.1%(1000ppm)		6
R97	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl) phenol (UV-329)	3147-75-9	All	0.1%(1000ppm)		6
R98	2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one	119344-86-4	All	0.1%(1000ppm)		6
R99	Bumetrizole (UV-326)	3896-11-5	All	0.1%(1000ppm)		6
R100	Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol	Annex 2 ㊿	All	0.1%(1000ppm)		6
P101	Dibutyl phthalate (DBP)	84-74-2	All	0.1%(1000ppm)	Except in the case of prohibited substances.	6
R102	Organohalogen flame retardant	Annex 2 ㉒ Annex 2 ㉓	Plastic outside enclosures for indoor electrical products	Intentionally added 0.1%(1000ppm)		47

Appendix 1 Annex 1：Exceptional use of prohibited substances in products

RoHS Directive（2011/65/EU）Applications exempted （ANNEX Ⅲ）

Revision date 31-Mar-2024

Classification		Exemptions	Expiration				
			Category 1-7,10	Category 8,9 medical devices and monitoring and control instruments	Category 8,9 in vitro diagnostic medical devices	Category 8,9 industrial monitoring and control instruments	Category 11
1	1(f)- Ⅰ	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner): For lamps designed to emit mainly light in the ultraviolet spectrum: 5 mg	2027.2.24				
	1(f)- Ⅱ	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner): For special purposes: 5 mg	2025.2.24				
	1(g)	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):For general lighting purposes < 30 W with a lifetime equal or above 20,000 h: 3.5 mg	2023.8.24 Expired				
2(a)	2(a)(2)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp): Tri-band phosphor with normal lifetime and a tube diameter >=9 mm and =< 17 mm (e.g. T5): 3 mg	2023.8.24 Expired				
	2(a)(3)	Mercury in double-capped linear fluorescent lamps for generation lighting purposes not exceeding (per lamp):Tri-band phosphor with normal lifetime and a tube diameter > 17 mm and =< 28 mm (e.g. T8): 3.5mg	2023.8.24 Expired				
2(b)	2(b)(3)	Mercury in other fluorescent lamps not exceeding (per lamp):Non-linear tri-band phosphor lamps with tube diameter > 17 mm (e.g. T9): 15 mg	2023.8.24 Expired				
		Mercury in other fluorescent lamps not exceeding (per lamp):Non-linear tri-band phosphor lamps with tube diameter > 17 mm (e.g. T9): 10 mg	2025.2.24				
	2(b)(4)- Ⅰ	Mercury in other fluorescent lamps not exceeding (per lamp): Lamps for other general lighting and special purposes (e.g. induction lamps): 15 mg	Requested for Renewal (Former Date 2025.2.24)				
	2(b)(4)- Ⅱ	Mercury in other fluorescent lamps not exceeding (per lamp): Lamps emitting mainly light in the ultraviolet spectrum: 15 mg	2027.2.24				
	2(b)(4)-Ⅲ	Mercury in other fluorescent lamps not exceeding (per lamp): Emergency lamps: 15 mg	2027.2.24				
3	3(a)	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes used in EEE placed on the market before 24 February 2022 not exceeding (per lamp): Short length (<= 500 mm): 3,5 mg	2025.2.24				
	3(b)	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes used in EEE placed on the market before 24 February 2022 not exceeding (per lamp): Medium length (> 500 mm and <= 1,500 mm): 5 mg					
	3(c)	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes used in EEE placed on the market before 24 February 2022 not exceeding (per lamp):Long length (> 1,500 mm): 13 mg					
4(a)	4(a)- Ⅰ	Mercury in low pressure non-phosphor coated discharge lamps, where the application requires the main range of the lamp-spectral output to be in the ultraviolet spectrum: up to 15 mg mercury may be used per lamp	2027.2.24				
4(b)	4(b)	Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index Ra > 80: P <= 105 W: 16 mg may be used per burner	2027.2.24				
4(c)	4(c)-I	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner): P <= 155 W:20mg	2027.2.24				
	4(c)-II	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner): 155 W < P <= 405 W: 25 mg					
	4(c)-III	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner): P> 405 W: 25 mg					
4(e)		Mercury in metal halide lamps (MH)	2027.2.24				
4(f)	4(f)- Ⅰ	Mercury in other discharge lamps for special purposes not specifically mentioned	Requested for Renewal (Former Date 2025.2.24)				
	4(f)- Ⅱ	Mercury in high pressure mercury vapour lamps used in projectors where an output >= 2000 lumen ANSI is required	2027.2.24				
	4(f)-Ⅲ	Mercury in high pressure sodium vapour lamps used for horticulture lighting	2027.2.24				
	4(f)-Ⅳ	Mercury in lamps emitting light in the ultraviolet spectrum	2027.2.24				
5(a)		Lead in glass of cathode ray tubes			2023.7.21 Expired	2024.7.21	2024.7.21
5(b)		Lead in fluorescent tube glass not to exceeding 0.2 % by weight	Requested for Renewal (Former Date 2016.7.21)		2023.7.21 Expired	2024.7.21	2024.7.21
6(a)		Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0.35 % lead by weight		Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	Requested for Renewal (Former Date 2024.7.21)	Requested for Renewal (Former Date 2024.7.21)
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	Requested for Renewal (Former Date 2021.7.21)				
6(b)		Lead as an alloying element in aluminium containing up to 0,4 % lead by weight		Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	Requested for Renewal (Former Date 2024.7.21)	Requested for Renewal (Former Date 2024.7.21)
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	Requested for Renewal (Former Date 2021.7.21)				
6(b)- Ⅱ		Lead as an alloying element in aluminium for machining purposes with a lead content up to 0,4 % by weight	Requested for Renewal (Former Date 2021.5.18)				
6(c)		Copper alloy containing up to 4 % lead by weight	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	Requested for Renewal (Former Date 2024.7.21)	Requested for Renewal (Former Date 2024.7.21)

Classification	Exemptions	Expiration				
		Category 1-7,10	Category 8,9			Category 11
			medical devices and monitoring and control instruments	in vitro diagnostic medical devices	industrial monitoring and control instruments	
7(a)	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)	Requested for Renewal (Former Date 2021.7.21) (excluding applications covered by point 24 of this Annex)	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	Requested for Renewal (Former Date 2024.7.21)	Requested for Renewal (Former Date 2024.7.21)
7(b)	Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, and network management for telecommunications			2023.7.21	2024.7.21	2024.7.21
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	Requested for Renewal (Former Date 2021.7.21) (except applications covered under point 34)	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	Requested for Renewal (Former Date 2024.7.21)	Requested for Renewal (Former Date 2024.7.21)
7(c)-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	Requested for Renewal (Former Date 2024.7.21)	Requested for Renewal (Former Date 2024.7.21)
7(c) IV	Lead in PZT based dielectric ceramic materials for capacitors which are part of integrated circuits or discrete semiconductors			2023.7.21 Expired	2024.7.21	2024.7.21
8(b)	Cadmium and its compounds in electrical contacts		Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	Requested for Renewal (Former Date 2024.7.21)	Requested for Renewal (Former Date 2024.7.21)
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	Requested for Renewal (Former Date 2021.7.21)				
9	Hexavalent chromium as an anticorrosion agent of the carbon steel cooling system in absorption refrigerators up to 0.75 % by weight in the cooling solution			2023.7.21 Expired	2024.7.21	2024.7.21
9(a)-Ⅱ	Up to 0.75 % hexavalent chromium by weight, used as an anticorrosion agent in the cooling solution of carbon steel cooling systems of absorption refrigerators: — designed to operate fully or partly with electrical heater, having an average utilised power input >=75 W at constant running conditions, — designed to fully operate with non-electrical heater	Requested for Renewal (Former Date 2021.7.21)				
9(a)-Ⅲ	Up to 0,7 % hexavalent chromium by weight, used as an anticorrosion agent in the working fluid of the carbon steel sealed circuit of gas absorption heat pumps for space and water heating	2026.12.31 (category 1 only)				
9(b)	Lead in bearing shells and bushes for refrigerant containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications			2023.7.21 Expired	2024.7.21	2024.7.21
13(a)	Lead in white glasses used for optical applications	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	Requested for Renewal (Former Date 2024.7.21)	Requested for Renewal (Former Date 2024.7.21)
13(b)	Cadmium and lead in filter glasses and glasses used for reflectance standards		Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	Requested for Renewal (Former Date 2024.7.21)	Requested for Renewal (Former Date 2024.7.21)
13(b)-(Ⅰ)	Lead in ion coloured optical filter glass types	Requested for Renewal (Former Date 2021.7.21)				
13(b)-(Ⅱ)	Cadmium in striking optical filter glass types; excluding applications falling under point 39 of this annex	Requested for Renewal (Former Date 2021.7.21)				
13(b)-(Ⅲ)	Cadmium and lead in glazes used for reflectance standards	Requested for Renewal (Former Date 2021.7.21)				
15	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages		Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	Requested for Renewal (Former Date 2024.7.21)	Requested for Renewal (Former Date 2024.7.21)
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^2 or larger in any semiconductor technology node; - stacked die packages with die of 300 mm^2 or larger, or silicon interposers of 300 mm^2 or larger.	Requested for Renewal (Former Date 2021.7.21)				
17	Lead halide as radiant agent in high intensity discharge (HID) lamps used for professional reprography applications			2023.7.21 Expired	2024.7.21	2024.7.21
18(b)	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as sun tanning lamps containing phosphors such as BSP ($BaSi_2O_5$:Pb)	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2021.7.21)	2023.7.21 Expired	2024.7.21	2024.7.21
18(b)-I	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps containing phosphors such as BSP (BaSi2O5:Pb) when used in medical phototherapy equipment	Requested for Renewal (Former Date 2021.7.21) Applies to categories 5, excluding applications covered by entry 34 of Annex IV.				

Classification	Exemptions	Expiration				
		Category 1-7,10	Category 8,9			Category 11
			medical devices and monitoring and control instruments	in vitro diagnostic medical devices	industrial monitoring and control instruments	
21	Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses			2023.7.21 Expired	2024.7.21	2024.7.21
24	Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	Requested for Renewal (Former Date 2024.7.21)	Requested for Renewal (Former Date 2024.7.21)
25	Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring			2023.7.21 Expired	2024.7.21	2024.7.21
29	Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC	Requested for Renewal (Former Date 2021.7.21)		2023.7.21 Expired	2024.7.21	Requested for Renewal (Former Date 2024.7.21)
30	Cadmium alloys as electrical/mechanical solder joints to electrical conductors located directly on the voice coil in transducers used in high-powered loudspeakers with sound pressure levels of 100 dB (A) and more			2023.7.21 Expired	2024.7.21	2024.7.21
31	Lead in soldering materials in mercury free flat fluorescent lamps (which e.g. are used for liquid crystal displays, design or industrial lighting)			2023.7.21 Expired	2024.7.21	2024.7.21
32	Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2021.7.21)	2023.7.21 Expired	Requested for Renewal (Former Date 2024.7.21)	2024.7.21
33	Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers			2023.7.21 Expired	2024.7.21	2024.7.21
34	Lead in cermet-based trimmer potentiometer elements	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	Requested for Renewal (Former Date 2024.7.21)	2024.7.21
37	Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body			2023.7.21 Expired	2024.7.21	2024.7.21
38	Cadmium and cadmium oxide in thick film pastes used on aluminium bonded beryllium oxide			2023.7.21 Expired	2024.7.21	2024.7.21
39(a)	Cadmium selenide in downshifting cadmium-based semiconductor nanocrystal quantum dots for use in display lighting applications (< 0,2 µg Cd per mm^2 of display screen area)	Requested for Renewal (Former Date 2019.10.31)	Requested for Renewal (Former Date 2019.10.31)	Requested for Renewal (Former Date 2019.10.31)	Requested for Renewal (Former Date 2019.10.31)	Requested for Renewal (Former Date 2019.10.31)
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))			2023.7.21 Expired	2024.7.21	
42	Lead in bearings and bushes of diesel or gaseous fuel powered internal combustion engines applied in non-road professional use equipment: with engine total displacement >=15 litres; or with engine total displacement < 15 litres and the engine is designed to operate in applications where the time between signal to start and full load is required to be less than 10 seconds; or regular maintenance is typically performed in a harsh and dirty outdoor environment, such as mining, construction, and agriculture applications.					Requested for Renewal (Former Date 2024.7.21) Applies to category 11, excluding applications covered by entry 6(c) of this Annex.
43	Bis(2-ethylhexyl) phthalate in rubber components in engine systems, designed for use in equipment that is not intended solely for consumer use and provided that no plasticised material comes into contact with human mucous membranes or into prolonged contact with human skin and the concentration value of bis(2-ethylhexyl) phthalate does not exceed: (a) 30 % by weight of the rubber for (i) gasket coatings; (ii) solid-rubber gaskets; or (iii) rubber components included in assemblies of at least three components using electrical, mechanical or hydraulic energy to do work, and attached to the engine. (b) 10 % by weight of the rubber for rubber-containing components not referred to in point (a). For the purposes of this entry, "prolonged contact with human skin" means continuous contact of more than 10 minutes duration or intermittent contact over a period of 30 minutes, per day.					2024.7.21
44	Lead in solder of sensors, actuators, and engine control units of combustion engines within the scope of Regulation (EU) 2016/1628 of the European Parliament and of the Council (*), installed in equipment used at fixed positions while in operation which is designed for professionals, but also used by non-professional users					Requested for Renewal (Former Date 2024.7.21)
45	Lead diazide, lead styphnate, lead dipicramate, orange lead (lead tetroxide), lead dioxide in electric and electronic initiators of explosives for civil (professional) use and barium chromate in long time pyrotechnic delay charges of electric initiators of explosives for civil (professional) use.					2026.4.20

RoHS Directive(2011/65/EU) Applications exempted from the restriction specific to medical devices and monitoring and control instruments (ANNEX IV)

Classification	Exemptions	Expiration		
		Category 8,9		
		medical devices and monitoring and control instruments	in vitro diagnostic medical devices	industrial monitoring and control instruments
Equipment utilising or detecting ionising radiation				
1	Lead, cadmium and mercury in detectors for ionising radiation	Requested for Renewal (Former Date 2021.7.21)	2023.7.21 Expired	Requested for Renewal (Former Date 2024.7.21)
2	Lead bearings in X-ray tubes	Requested for Renewal (Former Date 2021.7.21)	2023.7.21 Expired	2024.7.21
3	Lead in electromagnetic radiation amplification devices: micro-channel plate and capillary plate	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	Requested for Renewal (Former Date 2024.7.21)
4	Lead in glass frit of X-ray tubes and image intensifiers and lead in glass frit binder for assembly of gas lasers and for vacuum tubes that convert electromagnetic radiation into electrons		2023.7.21 Expired	Requested for Renewal (Former Date 2024.7.21)
5	Lead in shielding for ionising radiation	Requested for Renewal (Former Date 2021.7.21)	2023.7.21 Expired	Requested for Renewal (Former Date 2024.7.21)
6	Lead in X-ray test objects		2023.7.21 Expired	2024.7.21
7	Lead stearate X-ray diffraction crystals		2023.7.21 Expired	2024.7.21
8	Radioactive cadmium isotope source for portable X-ray fluorescence spectrometers		2023.7.21 Expired	2024.7.21
Sensors, detectors and electrodes				
1a	Lead and cadmium in ion selective electrodes including glass of pH electrodes	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	Requested for Renewal (Former Date 2024.7.21)
1b	Lead anodes in electrochemical oxygen sensors	Requested for Renewal (Former Date 2021.7.21)	2023.7.21 Expired	Requested for Renewal (Former Date 2024.7.21)
1c	Lead, cadmium and mercury in infra-red light detectors	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	Requested for Renewal (Former Date 2024.7.21)
1d	Mercury in reference electrodes: low chloride mercury chloride, mercury sulphate and mercury oxide		2023.7.21 Expired	2024.7.21
Others				
9	Cadmium in helium-cadmium lasers		2023.7.21 Expired	Requested for Renewal (Former Date 2024.7.21)
10	Lead and cadmium in atomic absorption spectroscopy lamps		2023.7.21 Expired	Requested for Renewal (Former Date 2024.7.21)
11	Lead in alloys as a superconductor and thermal conductor in MRI	Requested for Renewal (Former Date 2021.7.21)	2023.7.21 Expired	2024.7.21
12	Lead and cadmium in metallic bonds creating superconducting magnetic circuits in MRI, SQUID, NMR (Nuclear Magnetic Resonance) or FTMS (Fourier Transform Mass Spectrometer) detectors	Requested for Renewal (Former Date 2021.6.30)		Requested for Renewal (Former Date 2021.6.30)
13	Lead in counterweights	Requested for Renewal (Former Date 2021.7.21)	2023.7.21 Expired	2024.7.21
14	Lead in single crystal piezoelectric materials for ultrasonic transducers	Requested for Renewal (Former Date 2021.7.21)	2023.7.21 Expired	2024.7.21
15	Lead in solders for bonding to ultrasonic transducers	Requested for Renewal (Former Date 2021.7.21)	2023.7.21 Expired	2024.7.21
16	Mercury in very high accuracy capacitance and loss measurement bridges and in high frequency RF switches and relays in monitoring and control instruments not exceeding 20 mg of mercury per switch or relay		2023.7.21 Expired	2024.7.21
17	Lead in solders in portable emergency defibrillators	Requested for Renewal (Former Date 2021.7.21)	2023.7.21 Expired	2024.7.21
18	Lead in solders of high performance infrared imaging modules to detect in the range 8-14 μm	Requested for Renewal (Former Date 2021.7.21)	2023.7.21 Expired	2024.7.21
19	Lead in Liquid crystal on silicon (LCoS) displays		2023.7.21 Expired	2024.7.21
20	Cadmium in X-ray measurement filters	Requested for Renewal (Former Date 2021.7.21)	2023.7.21 Expired	2024.7.21

Classification	Exemptions	Expiration		
		Category 8,9		
		medical devices and monitoring and control instruments	in vitro diagnostic medical devices	industrial monitoring and control instruments
26	Lead in the following applications that are used durably at a temperature below – 20 °C under normal operating and storage conditions: (a) solders on printed circuit boards; (b) termination coatings of electrical and electronic components and coatings of printed circuit boards; (c) solders for connecting wires and cables; (d) solders connecting transducers and sensors. Lead in solders of electrical connections to temperature measurement sensors in devices which are designed tobe used periodically at temperatures below – 150 °C.	Requested for Renewal (Former Date 2021.6.30)		Requested for Renewal (Former Date 2021.6.30)
27(a) 27(b)	Lead in solders, termination coatings of electrical and electronic components and printed circuit boards, connections of electrical wires, shields and enclosed connectors,which are used in (a)magnetic fields within the sphere of 1 m radius around the isocenter of the magnet in medical magnetic resonance imaging equipment, including patient monitors designed to be used within this sphere, or (b) magnetic fields within 1 m distance from the external surfaces of cyclotron magnets, magnets for beam transport and beam direction control applied for particle therapy.	Requested for Renewal (Former Date 2020.6.30)	Requested for Renewal (Former Date 2020.6.30)	
27(c) 27(d)	(c)MRI non-integrated coils, for which the Declaration of Conformity of this model is issued for the first time before 23 September 2022, or (d)MRI devices including integrated coils, which are used in magnetic fields within the sphere of 1 m radius around the isocentre of the magnet in medical magnetic resonance imaging equipment, for which the Declaration of Conformity is issued for the first time before 30 June 2024.	2027.6.30		
29	Lead in alloys, as a superconductor or thermal conductor, used in cryo-cooler cold heads and/or in cryo-cooled cold probes and/or in cryo-cooled equipotential bonding systems, in medical devices (category 8) and/or in industrial monitoring and control instruments.	Requested for Renewal (Former Date 2021.6.30)		
31a	Lead, cadmium, hexavalent chromium, and polybrominated diphenyl ethers (PBDE) in spare parts recovered from and used for the repair or refurbishment of medical devices, including in vitro diagnostic medical devices, or electron microscopes and their accessories, provided that the reuse takes place in auditable closed-loop business-to-business return systems and that each reuse of parts is notified to the customer	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	2024.7.21
35	Mercury in cold cathode fluorescent lamps for back-lighting liquid crystal displays, not exceeding 5 mg per lamp, used in industrial monitoring and control instruments placed on the market before 22 July 2017			2024.7.21
37	Lead in platinized platinum electrodes used for conductivity measurements where at least one of the following conditions applies: (a) wide-range measurements with a conductivity range covering more than 1 order of magnitude (e.g. range between 0,1 mS/m and 5 mS/m) in laboratory applications for unknown concentrations; (b) measurements of solutions where an accuracy of +/– 1 % of the sample range and where high corrosion resistance of the electrode are required for any of the following: (i) solutions with an acidity < pH 1; (ii) solutions with an alkalinity > pH 13; (iii) corrosive solutions containing halogen gas; (c) measurements of conductivities above 100 mS/m that must be performed with portable	2025.12.31		
39	Lead in micro-channel plates (MCPs) used in equipment where at least one of the following properties is present: (a) a compact size of the detector for electrons or ions, where the space for the detector is limited to a maximum of 3 mm/MCP (detector thickness + space for installation of the MCP), a maximum of 6 mm in total, and an alternative design yielding more space for the detector is scientifically and technically impracticable; (b) a two-dimensional spatial resolution for detecting electrons or ions, where at least one of the following applies: (i) a response time shorter than 25 ns; (ii) a sample detection area larger than 149 mm^2; (iii) a multiplication factor larger than 1.3×10^3. (c) a response time shorter than 5 ns for detecting electrons or ions; (d) a sample detection area larger than 314 mm^2 for detecting electrons or ions; (e) a multiplication factor larger than 4.0×10^7. The exemption expires on the following dates:	Requested for Renewal (Former Date 2021.7.21)	Requested for Renewal (Former Date 2023.7.21)	Requested for Renewal (Former Date 2024.7.21)
42	Mercury in electric rotating connectors used in intravascular ultrasound imaging systems capable of high operating frequency (＞50MHz) modes of operation.	2026.6.30		
43	Cadmium anodes in Hersch cells for oxygen sensors used in industrial monitoring and control instruments, where sensitivity below 10ppm is required			2023.7.15 Expired
44	Others; Cadmium in radiation tolerant video camera tubes designed for cameras with a centre resolution greater than 450 TV lines which are used in environments with ionising radiation exposure exceeding 100 Gy/hour and a total dose in excess of 100kGy.	2027.3.31		2027.3.31
45	Bis(2-ethylhexyl) phthalate (DEHP) in ion-selective electrodes applied in point of care analysis of ionic substances present in human body fluids and/or in dialysate fluids	2028.7.21		
46	Bis(2-ethylhexyl) phthalate (DEHP) in plastic components in MRI detector coils.		Requested for Renewal (Former Date 2024.1.1)	
47	Bis(2-ethylhexyl) phthalate (DEHP), butyl benzyl phthalate (BBP), dibutyl phthalate (DBP) and diisobutyl phthalate (DIBP) in spare parts recovered from and used for the repair or refurbishment of medical devices, including in vitro diagnostic medical devices, and their accessories, provided that the reuse takes place in auditable closed-loop business-to-business return systems and that each reuse of parts is notified to the customer.		2028.7.21	
48	Lead in bismuth strontium calcium copper oxide (BSCCO) superconductor cables and wires and lead in electrical connections to these wires	2027.6.30	2027.6.30	2027.6.30
49	Mercury in melt pressure transducers for capillary rheometers at temperatures over 300 °C and pressures over 1000 bar	2025.12.31 (Category9 only)	2025.12.31 (Category9 only)	2025.12.31 (Category9 only)

Appendix 1 Annex 2: List of specific substances for reference in substance group

Revision date 31-Mar-2024

Substance group	Specific substance	CAS No
①Cadmium/Cadmium compounds	Cadmium	7440-43-9
	Cadmium oxide	1306-19-0
	Cadmium sulfide	1306-23-6
	Cadmium hydroxide	21041-95-2
②Chromium (VI) Compounds	Pentazinc chromate octahydroxide	49663-84-5
	Potassium hydroxyoctaoxodizincatedichromate	11103-86-9
	Barium chromate	10294-40-3
	Calcium chromate	13765-19-0
	Strontium chromate	7789-06-2
	Zinc chromate	13530-65-9
③Lead/Lead Compounds	Lead	7439-92-1
	Lead (II) sulfate	7446-14-2
	Lead (II) carbonate	598-63-0
	Trilead bis(carbonate) dihydroxide	1319-46-6
	Lead (II) acetate, trihydrate	6080-56-4
	Lead (II) phosphate	7446-27-7
	Lead selenide	12069-00-0
	Lead (IV) oxide	1309-60-0
	Lead (II,IV) oxide	1314-41-6
	Lead (II) sulfide	1314-87-0
	Lead (II) titanate	12060-00-3
	Lead sulfate, sulphuric acid, lead salt	15739-80-7
	Lead sulphate, tribasic	12202-17-4
	Lead stearate	1072-35-1
	Lead (II) chromate	7758-97-6
	Lead chromate molybdate sulphate red	12656-85-8
	Lead sulfochromate yellow	1344-37-2
	Sulfurous acid, lead salt, dibasic	62229-08-7
	Trilead dioxide phosphonate	12141-20-7
	Pyrochlore, antimony lead yellow	8012-00-8
	Pentalead tetraoxide sulphate	12065-90-6
	Lead cyanamidate	20837-86-9
	Silicic acid (H2Si2O5), barium salt (1:1), lead-doped	68784-75-8
	Lead titanium zirconium oxide	12626-81-2
	Lead oxide sulfate	12036-76-9
	[Phthalato(2-)]dioxotrilead	69011-06-9
	Dioxobis(stearato)trilead	12578-12-0
	Fatty acids, C16-18, lead salts	91031-62-8
	Lead dinitrate	10099-74-8
④Mercury/Mercury Compounds	Mercury	7439-97-6
	Mercury, chloro(cyclohexylmethyl)-	33631-63-9
	Mercury (II) chloride	7487-94-7
	Mercuric sulfate	7783-35-9
	Mercuric nitrate	10045-94-0
	Mercuric (II) oxide	21908-53-2
	Mercuric sulfide	1344-48-5
⑤Tri-substiituted organostannic compounds	Triphenyltin-N, N-dimethyldithiocarbamate	1803-12-9
	Triphenyltinfluoride	379-52-2
	Triphenyltinacetate	900-95-8
	Triphenyltinchloride	639-58-7
	Triphenyltinhydroxide	76-87-9
	Triphenyltin fattyacid((9-11)salt)	18380-71-7 18380-72-8 47672-31-1 94850-90-5
	Triphenyltinchloroacetate	7094-94-2
	Tributyltinmethacrylate	2155-70-6
	Bis(tributyltin)fumalate	6454-35-9
	Tributyltinfluoride	1983-10-4
	Bis(tributyltin)2,3-dibromosuccinate	31732-71-5
	Tributyltinacetate	56-36-0
	Tributyltinlaurate	3090-36-6
	Bis(tributyltin)phthalate	4782-29-0
	Copolymer of alkyl(c=8) acrylate,methyl methacrylate and tributyltin methacrylate	67772-01-4
	Tributyltinsulfamate	6517-25-5
	Bis(tributyltin)maleate	14275-57-1
	Tributyltinchloride	1461-22-9 7342-38-3
	Tributyltin cyclopentane carbonate=mixture	85409-17-2
	Tributyltin-1, 2,3,4,4a, 4b, 5,6,10,10a-decahydro-7-isoplopyl-1, 4a-dimethyl-1-phenanthrencarboxylatemix	26239-64-5
⑥Polybrominated biphenyls (PBB)	Polybrominated Biphenyls	59536-65-1
	Dibromobiphenyl	92-86-4
	2-Bromobiphenyl	2052-07-5
	3-Bromobiphenyl	2113-57-7
	4-Bromobiphenyl	92-66-0
	Tribromobiphenyl	59080-34-1
	Tetrabromobiphenyl	40088-45-7
	Pentabrphenyl	56307-79-0
	Hexabromobiphenyl	59080-40-9
	hexabromo-1,1-biphenyl	36355-01-8
	Firemaster FF-1	67774-32-7
	Heptabromobiphenyl	35194-78-6
	Octabromobiphenyl	61288-13-9
	Nonabiphenyl	27753-52-2
	Decabromobiphenyl	13654-09-6
⑦Polybrominated diphenyl ethers (PBDE)	Bromodiphenyl ether	101-55-3
	Dibromodiphenyl ethers	2050-47-7
	Tribromodiphenyl ether	49690-94-0
	Tetrabromodiphenyl ethers	40088-47-9

Substance group	Specific substance	CAS No
⑦Polybrominated diphenyl ethers (PBDE)	Hexabromodiphenyl ether	36483-60-0
	Heptabromodiphenylether	68928-80-3
	Nonabromodiphenylether	63936-56-1
	Decabromodiphenyl ether	1163-19-5
	Pentabromodiphenyl ether	32534-81-9
	Octabromodiphenyl ether	32536-52-0
⑧Polychlorinated biphenyls (PCBs) and specific substitutes	Polychlorinated Biphenyls (all isomers and congeners)	1336-36-3
	Monomethyl-tetrachloro-diphenyl methane	76253-60-6
	Monomethyl-dichloro-diphenyl methane	81161-70-8
	Monomethyl-dibromo-diphenyl methane (DBBT)	99688-47-8
⑨Polychlorinated naphthalenes	Naphthalene, chloro derivatives	70776-03-3
	1-Chloronaphthalene	90-13-1
	2-Chloronaphthalene	91-58-7
	1,5-Dichloronaphthalene	1825-30-5
	1,4-Dichloronaphthalene	1825-31-6
	1,2-Dichloronaphthalene	2050-69-3
	1,6-Dichloronaphthalene	2050-72-8
	1,7-Dichloronaphthalene	2050-73-9
	1,8-Dichloronaphthalene	2050-74-0
	2,3-Dichloronaphthalene	2050-75-1
	2,6-Dichloronaphthalene	2065-70-5
	1,3-Dichloronaphthalene	2198-75-6
	2,7-Dichloronaphthalene	2198-77-8
	Chloronaphthalene	25586-43-0
	Dichloronaphthalene	28699-88-9
	Pentachloronaphthalene	1321-64-8
	Trichloronaphthalene	1321-65-9
	Hexachloronaphthalene	1335-87-1
	Tetrachloronaphthalene	1335-88-2
	Perchloronaphthalene	2234-13-1
	1,4,6-Trichloronaphthalene	2437-54-9
	1,4,5-Trichloronaphthalene	2437-55-0
	1,4,5,8-Tetrachloronaphthalene	3432-57-3
	1,2,4,8-Tetrachloronaphthalene	6529-87-9
	1,2,4,5-Tetrachloronaphthalene	6733-54-6
	1,2,3,6,7,8-Hexachloronaphthalene	17062-87-2
	1,2,3,4-Tetrachloronaphthalene	20020-02-4
	1,3,5,8-Tetrachloronaphthalene	31604-28-1
	Heptachloronaphthalene	32241-08-0
	2,3,6,7-Tetrachloronaphthalene	34588-40-4
	1,2,4-Trichloronaphthalene	50402-51-2
	1,2,3-Trichloronaphthalene	50402-52-3
	1,3,5-Trichloronaphthalene	51570-43-5
	1,2,6-Trichloronaphthalene	51570-44-6
	1,2,4,6-Tetrachloronaphthalene	51570-45-7
	1,2,3,5-Tetrachloronaphthalene	53555-63-8
	1,3,5,7-Tetrachloronaphthalene	53555-64-9
	1,2,3,5,7-Pentachloronaphthalene	53555-65-0
	1,2,5-Trichloronaphthalene	55720-33-7
	1,2,7-Trichloronaphthalene	55720-34-8
	1,2,8-Trichloronaphthalene	55720-35-9
	1,3,6-Trichloronaphthalene	55720-36-0
	1,3,7-Trichloronaphthalene	55720-37-1
	1,3,8-Trichloronaphthalene	55720-38-2
	1,6,7-Trichloronaphthalene	55720-39-3
	2,3,6-Trichloronaphthalene	55720-40-6
	1,2,3,7-Tetrachloronaphthalene	55720-41-7
	1,3,6,7-Tetrachloronaphthalene	55720-42-8
	1,4,6,7-Tetrachloronaphthalene	55720-43-9
	1,2,3,4,5,6,7-Heptachloronaphthalene	58863-14-2
	1,2,3,4,5,6,8-Heptachloronaphthalene	58863-15-3
	1,2,3,4,5,6-Hexachloronaphthalene	58877-88-6
	1,2,4,7-Tetrachloronaphthalene	67922-21-8
	1,2,5,6-Tetrachloronaphthalene	67922-22-9
	1,2,5,7-Tetrachloronaphthalene	67922-23-0
	1,2,6,8-Tetrachloronaphthalene	67922-24-1
	1,2,3,4,5-Pentachloronaphthalene	67922-25-2
	1,2,3,4,6-Pentachloronaphthalene	67922-26-3
	1,2,3,4,5,7-Hexachloronaphthalene	67922-27-4
	1,2,4,5,6,8-Hexachloronaphthalene	90948-28-0
	1,2,4,5,7,8-Hexachloronaphthalene	103426-92-2
	1,2,3,4,5,8-Hexachloronaphthalene	103426-93-3
	1,2,3,5,7,8-Hexachloronaphthalene	103426-94-4
	1,2,3,5,6,8-Hexachloronaphthalene	103426-95-5
	1,2,3,4,6,7-Hexachloronaphthalene	103426-96-6
	1,2,3,5,6,7-Hexachloronaphthalene	103426-97-7
	1,2,3,6-Tetrachloronaphthalene	149864-78-8
	1,2,6,7-Tetrachloronaphthalene	149864-79-9
	1,2,5,8-Tetrachloronaphthalene	149864-80-2
	1,2,3,8-Tetrachloronaphthalene	149864-81-3
	1,2,7,8-Tetrachloronaphthalene	149864-82-4
	1,2,3,7,8-Pentachloronaphthalene	150205-21-3
	1,3,6,8-Tetrachloronaphthalene	150224-15-0
	1,2,3,6,7-Pentachloronaphthalene	150224-16-1
	1,2,4,6,7-Pentachloronaphthalene	150224-17-2
	1,2,3,5,6-Pentachloronaphthalene	150224-18-3
	1,2,4,5,7-Pentachloronaphthalene	150224-19-4
	1,2,4,5,6-Pentachloronaphthalene	150224-20-7
	1,2,4,7,8-Pentachloronaphthalene	150224-21-8
	1,2,4,6,8-Pentachloronaphthalene	150224-22-9
	1,2,3,6,8-Pentachloronaphthalene	150224-23-0
	1,2,3,5,8-Pentachloronaphthalene	150224-24-1
	1,2,4,5,8-Pentachloronaphthalene	150224-25-2

Substance group		Specific substance	CAS No
⑩Asbestos		Asbestos	1332-21-4
		Actinolite	77536-66-4
		Amosite (Grunerite)	12172-73-5
		Anthophyllite	77536-67-5
		Chrysotile	12001-29-5
		Crocidolite	12001-28-4
		Tremolite	77536-68-6
⑪Azocolourants and Azodyes which form certain aromatic amines	formed certain aromatic amines	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
⑫Ozone Depleting Substances（ODSs）		Trichlorofluoromethane	75-69-4
		Dichlorodifluoromethane	75-71-8
		Chlorotrifluoromethane	75-72-9
		Pentachlorofluoroethane	354-56-3
		Tetrachlorodifluoroethane	76-12-0
		1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0
		1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9
		Trichlorotrifluoroethane	76-13-1
		1,1,2-Trichloro-1,2,2 trifluoroethane	76-13-1
		1,1,1-Trichloro-2,2,2 trifluoroethane	354-58-5
		Dichlorotetrafluoroethane	76-14-2
		Monochloropentafluoroethane	76-15-3
		Heptachlorofluoropropane	422-78-6
			135401-87-5
		1,1,1,2,2,3,3-Heptachloro-3-fluoropropane	422-78-6
		1,1,1,2,3,3,3-Heptachloro-2-fluoropropane	422-81-1
		Hexachlorodifluoropropane	3182-26-1
		Pentachlorotrifluoropropane	2354-06-5
			134237-31-3
		Tetrachlorotetrafluoropropane	29255-31-0
		1,2,2,3-Tetrachloro-1,1,3,3-tetrafluoropropane	2268-46-4
		1,1,1,3-Tetrachloro-2,2,3,3-tetrafluoropropane	-
		Trichloropentafluoropropane	1599-41-3
		1,2,2-Trichloropentafluoropropane	1599-41-3
		1,2,3-Trichloropentafluoropropane	76-17-5
		1,1,2-Trichloropentafluoropropane	-
		1,1,3-Trichloropentafluoropropane	-
		1,1,1-Trichloropentafluoropropane	4259-43-2
		Dichlorohexafluoropropane	661-97-2
		Chloroheptafluoropropane	422-86-6
		Bromochloromethane	74-97-5
		Dibromodifluoromethane	75-61-6
		Bromochlorodifluoromethane	353-59-3
		Bromotrifluoromethane	75-63-8
		Dibromotetrafluoroethane	124-73-2
		Tetrachloromethane	56-23-5
		1,1,1-Trichloroethane	71-55-6
		Bromomethane	74-83-9
		Bromoethane	74-96-4
		Trifluoroiodomethane	2314-97-8
		Chloromethane	74-87-3
		Dibromofluoromethane	1868-53-7
		Bromodifluoromethane	1511-62-2
		Bromofluoromethane	373-52-4
		Tetrabromofluoroethane	306-80-9
		Tribromodifluoroethane	-
		Dibromotrifluoroethane	354-04-1
		Bromotetrafluoroethane	124-72-1
		Tribromofluoroethane	-
		Dibromodifluoroethane	75-82-1
		Bromotrifluoroethane	421-06-7
		Dibromofluoroethane	358-97-4
		Bromodifluoroethane	420-47-3
		Bromofluoroethane	762-49-2
		Hexabromofluoropropane	-
		Pentabromodifluoropropane	-
		Tetrabromotrifluoropropane	-
		Tribromotetrafluoropropane	-
		Dibromopentafluoropropane	431-78-7
		Bromohexafluoropropane	2252-78-0
		Pentabromofluoropropane	-
		Tetrabromodifluoropropane	-
		Tribromotrifluoropropane	-
		Dibromotetrafluoropropane	-

Substance group	Specific substance	CAS No
⑫Ozone Depleting Substances（ODSs）	Bromopentafluoropropane	460-88-8
	Tetrabromofluoropropane	-
	Tribromodifluoropropane	70192-80-2
	Dibromotrifluoropropane	431-21-0
	Bromotetrafluoropropane	679-84-5
	Tribromofluoropropane	75372-14-4
	Dibromodifluoropropane	460-25-3
	Bromotrifluoropropane	421-46-5
	Dibromofluoropropane	51584-26-0
	Bromodifluoropropane	-
	Bromofluoropropane	1871-72-3
	Dichlorofluoromethane	75-43-4
	Chlorodifluoromethane	75-45-6
	Chlorofluoromethane	593-70-4
	Tetrachlorofluoroethane	134237-32-4
	1,1,2,2-Tetrachloro-1-fluoroethane	354-14-3
	1,1,1,2-Tetrachloro-2-fluoroethane	354-11-0
	Trichlorodifluoroethane	41834-16-6
	1,2,2-Trichloro-1,1-difluoroethane	354-21-2
	1,1,2-Trichloro-1,2-difluoroethane	354-15-4
	1,1,1-Trichloro-2,2-difluoroethane	354-12-1
	Dichlorotrifluoroethane	34077-87-7
	1,1-Dichloro-2,2,2-trifluoroethane	306-83-2
	1,2-Dichloro-1,1,2-trifluoroethane	354-23-4
		90454-18-5
	1,1-Dichloro-1,2,2-trifluoroethane	812-04-4
	Chlorotetrafluoroethane	63938-10-3
	2-chloro-1,1,1,2-tetrafluoroethane	2837-89-0
	1-chloro-1,1,2,2-tetrafluoroethane	354-25-6
	Trichlorofluoroethane	27154-33-2;
		(134237-34-6)
	1,1,2-Trichloro-2-fluoroethane	359-28-4
	1,1,2-Trichloro-1-fluoroethane	811-95-0
	1,1,1-Trichloro-2-fluoroethane	2366-36-1
	Dichlorodifluoroethane	25915-78-0
	1,2-Dichloro-1,2-difluoroethane	431-06-1
	1,1-Dichloro-2,2-difluoroethane	471-43-2
	1,2-Dichloro-1,1-difluoroethane	1649-08-7
	1,1-Dichloro-1,2-difluoroethane	1842-05-3
	Chlorotrifluoroethane	1330-45-6
		431-07-2
	1-Chloro-1,2,2-trifluoroethane	1330-45-6
	2-Chloro-1,1,1-trifluoroethane	75-88-7
	1-Chloro-1,1,2-trifluoroethane	421-04-5
	Dichlorofluoroethane	1717-00-6;
		(25167-88-8)
	1,2-Dichloro-1-fluoroethane	430-57-9
	1,1-Dichloro-2-fluoroethane	430-53-5
	1,1-Dichloro-1-fluoroethane	1717-00-6
	Chlorodifluoroethane	25497-29-4
	2-Chloro-1,1-Difluoroethane	338-65-8
	1-Chloro-1,1-difluoroethane	75-68-3
	1-Chloro-1,2-difluoroethane	338-64-7
	Chlorofluoroethane	110587-14-9
	1-Chloro-2-fluoroethane	762-50-5
	1-Chloro-1-fluoroethane	1615-75-4
	Hexachlorofluoropropane	134237-35-7
		29470-94-8
	1,1,1,2,2,3-Hexachloro-3-fluoropropane	422-26-4
	Pentachlorodifluoropropane	134237-36-8
	1,1,1,3,3-pentachloro-2,2-difluoropropane	422-49-1
	1,2,2,3,3-pentachloro-1,1-difluoropropane	422-30-0
	Tetrachlorotrifluoropropane	134237-37-9
	1,1,3,3-Tetrachloro-1,2,2-trifluoropropane	422-52-6
	1,1,1,3-Tetrachloro-2,2,3-trifluoropropane	422-50-4
	Trichlorotetrafluoropropane	134237-38-0
	1,3,3-Trichloro-1,1,2,2-tetrafluoropropane	422-54-8
	1,1,3-Trichloro-1,2,2,3-tetrafluoropropane	422-53-7
	1,1,1-Trichloro-2,2,3,3-tetrafluoropropane	422-51-5
	Dichloropentafluoropropane	127564-92-5
	2,2-Dichloro-1,1,1,3,3-pentafluoropropane	128903-21-9
	2,3-Dichloro-1,1,1,2,3-pentafluoropropane	422-48-0
	1,2-Dichloro-1,1,2,3,3-pentafluoropropane	422-44-6
	3,3-Dichloro-1,1,1,2,2-pentafluoropropane	422-56-0
	1,3-Dichloro-1,1,2,2,3-pentafluoropropane	507-55-1
	1,1-Dichloro-1,2,2,3,3-pentafluoropropane	13474-88-9
	1,2-Dichloro-1,1,3,3,3-pentafluoropropane	431-86-7
	1,3-Dichloro-1,1,2,3,3-pentafluoropropane	136013-79-1
	1,1-Dichloro-1,2,3,3,3-pentafluoropropane	111512-56-2
	Chlorohexafluoropropane	134308-72-8
	2-Chloro-1,1,1,3,3,3-hexafluoro-propane	431-87-8
	Pentachlorofluoropropane	134190-48-0
	1,1,1,2,3-pentachloro-2-fluoro-propane	421-94-3
	Tetrachlorodifluoropropane	134237-39-1
	1,1,1,3-Tetrachloro-3,3-difluoropropane	460-89-9
	Trichlorotrifluoropropane	134237-40-4
	1,1,1-Trichloro-3,3,3-trifluoropropane	7125-83-9
	Dichlorotetrafluoropropane	127564-83-4
	1,2-Dichloro-1,2,3,3-tetrafluoropropane	425-94-5
	Chloropentafluoropropane	134237-41-5
	1-Chloro-1,1,3,3,3-pentafluoropropane	460-92-4
	Tetrachlorofluoropropane	134190-49-1
	1,1,2,3-Tetrachloro-1-fluoropropane	666-27-3

Substance group	Specific substance	CAS No
⑫Ozone Depleting Substances（ODSs）	Trichlorodifluoropropane	134237-42-6
	1,3,3,Trichloro-1,1-difluoropropane	460-63-9
	Dichlorotrifluoropropane	134237-43-7
	1,1-Dichloro-1,2,2-trifluoropropane	7125-99-7
	2,3-Dichloro-1,1,1-trifluoropropane	338-75-0
	3,3-Dichloro-1,1,1-trifluoropropane	460-69-5
	Chlorotetrafluoropropane	134190-50-4
	3-Chloro-1,1,2,2-tetrafluoropropane	679-85-6
	1-Chloro-1,1,2,2-tetrafluoropropane	421-75-0
	Trichlorofluoropropane	134190-51-5
	1,1,3-Trichloro-1-fluoropropane	818-99-5
	1,1,2-Trichloro-1-fluoropropane	421-41-0
	Dichlorodifluoropropane	134190-52-6
	1,3-Dicloro-1,1-difluoropropane	819-00-1
	Chlorotrifluoropropane	134237-44-8
	3-Chloro-1,1,1-trifluoropropane	460-35-5
	Dichlorofluoropropane	134237-45-9
	1,1-Dichloro-1-fluoropropane	7799-56-6
	1,2-Dichloro-2-fluoropropane	420-97-3
	Chlorodifluoropropane	134190-53-7
	1-Chloro-2,2-difluoropropane	420-99-5
	2-Chloro-1,3-difluoropropane	102738-79-4
	1-Chloro-1,1-difluoropropane	421-02-3
	Chlorofluoropropane	134190-54-8
	2-Chloro-2-fluoropropane	420-44-0
	1-Chloro-1-fluoropropane	430-55-7
⑬Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	Alkanes, C10-13, chloro	85535-84-8
	Alkanes, C10-12, chloro	108171-26-2
	Alkanes, C12-13, chloro	71011-12-6
	Alkanes, chloro	61788-76-9
⑭Perfluorooctane sulfonates (PFOS)	2-Propenoic acid, 2-methyl-, dodecyl ester, polymers with 2-[methyl[(perfluoro-C4-8-alkyl)-sulfonyl]amino]ethyl acrylate and vinylidene chloride	306975-62-2
	Glycine, N-ethyl-N-[(heptadecafluorooctyl)sulfonyl]-, potassium salt	2991-51-7
⑮Dibutyltin (DBT) compounds	Dibutyltin oxide	818-08-6
	Dibutyltin diacetate	1067-33-0
	Dibutyltin dilaurate	77-58-7
	Dibutyltin maleate	78-04-6
⑯Radioactive substances	Uranium-238	7440-61-1
	Radon	10043-92-2
	Americium-241	14596-10-2
	Thorium-232	7440-29-1
	Cesium-137	10045-97-3
	Strontium-90	10098-97-2
⑰Fluorinated Greenhouse Gases (PFC, SF6, HFC)	Tetrafluoromethane	75-73-0
	Hexafluoroethane	76-16-4
	Octafluoropropane	76-19-7
	Decafluorobutane	355-25-9
	Dodecafluoropentane	678-26-2
	Tetradecafluorohexane	355-42-0
	Octafluorocyclobutane	115-25-3
	Sulfur Hexafluoride	2551-62-4
	Trifluoromethane	75-46-7
	Difluoromethane	75-10-5
	Methyl fluoride	593-53-3
	2H,3H-Decafluoropentane	138495-42-8
	Pentafluoroethane	354-33-6
	1,1,2,2-Tetrafluoroethane	359-35-3
	1,1,1,2-Tetrafluoroethane	811-97-2
	1,1-Difluoroethane	75-37-6
	1,1,2-Trifluoroethane	430-66-0
	1,1,1-Trifluoroethane	420-46-2
	2H-Heptafluoropropane	431-89-0
	1,1,1,2,2,3-Hexafluoro-propane	677-56-5
	1,1,1,2,3,3-Hexafluoropropane	431-63-0
	1,1,1,3,3,3-Hexafluoropropane	690-39-1
	1,1,2,2,3-Pentafluoropropane	679-86-7
	1,1,1,3,3-Pentafluoropropane	460-73-1
	1,1,1,3,3-Pentafluorobutane	406-58-6
⑱Perchlorates	Lithium Perchlorate	7791-03-9
	Ammonium perchlorate	7790-98-9
	Barium perchlorate	13465-95-7
	Lead perchlorate	13637-76-8
	Magnesium Perchlorate	10034-81-8
	Perchloric acid, cobalt (2+) salt	13455-31-7
	Perchloric acid, mercury(2+) salt	7616-83-3
	Perchloric acid, nickel(2+) salt, hexahydrate	13520-61-1
	Nickel perchlorate	13637-71-3
	Potassium Perchlorate	7778-74-7
	Sodium Perchlorate	7601-89-0
	Thallium(3+) perchlorate	15596-83-5
⑲Dioctyltin (DOT) compounds	Dioctyl Tin Oxide	870-08-6
	Dioctyltin dilaurate	3648-18-8
⑳Phthalates, Selected Group 2 (DIDP, DINP, DNOP)	Diisodecycl phthalate (DIDP)	26761-40-0
		68515-49-1
	Diisononyl phthalate (DINP)	28553-12-0
		68515-48-0
	Di-n-octyl phthalate (DNOP)	117-84-0
㉒Brominated flame retardants(other than PBBs,PBDEs and HBCDDs) (including polymers)	Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(14) [Aliphatic/alicyclic brominated compounds]	-
	Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(15) [Aliphatic/alicyclic brominated compounds in combination with antimony compounds]	-
	Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(16) [Aromatic brominated compounds excluding brominated diphenyl ether and biphenyls)]	-

Substance group	Specific substance	CAS No
㉒Brominated flame retardants(other than PBBs,PBDEs and HBCDDs) (including polymers)	Brominated flame retardant which comes under notation of ISO 1043-4 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 ISO 1043-4 code number FR(22) [Aliphatic/alicyclic chlorinated and brominated compounds]	-
	Brominated flame retardant which comes under notation of ISO 1043-4 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
	TBBA, unspecified	30496-13-0
	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 bis-(2-hydroxy-ethyl-ether)	4162-45-2
	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-ethoxy)-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
	Tribromo-bisphenyl-maleinimide	59789-51-4
	Tetrabromo-cyclo-octane	31454-48-5
	1,2-Dibromo-4-(1,2 dibromo-ethyl)-cyclo-hexane	3322-93-8
	Tetrabromophthalic acid Na salt	25357-79-3
	Tetrabromo phthalic anhydride	632-79-1
	Octabromo-1,1,3-trimethyl-1-phenylindane (FR-1808)	155613-93-7
㉓Chlorine flame retardants(exempted Short Chain Chlorinated Paraffins) (including polymers)	Tetrakis(2-chloroethyl)dichloroisopentyldiphosphate	38051-10-4
	Tris(1-chloro-2-propyl)phosphate	13674-84-5
	Tris(2,3-dichloro-1-propyl)phosphate	66108-37-0
	Tris(1,3-dichloro-2-propyl)phosphate	13674-87-8
㉔Polycyclic Aromatic Hydrocarbon(PAH)	Chrysene (CHR)	218-01-9
	Benzo[a]anthracen (BaA)	56-55-3
	Benzo[b]fluoranthene (BbF)	205-99-2
	Benzo[k]fluoranthene (BkF)	207-08-9
	Benzo[a]pyrene (BaP)	50-32-8
	Dibenzo[a,h]anthrancene (DBA)	53-70-3
	Benzo[j]fluoranthene (BjF)	205-82-3
	Benzo[e]pyrene (BeP)	192-97-2
㉕Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α–HBCDD, β-HBCDD, γ-HBCDD)	Hexabromocyclododecane (HBCDD)	25637-99-4
	1,2,5,6,9,10-hexabromocyclodecane	3194-55-6
	Diastereoisomers: alpha-hexabromocyclododecane	134237-51-7
	Diastereoisomers: beta-hexabromocyclododecane	134237-50-6
	Diastereoisomers: gamma-hexabromocyclododecane	134237-52-8
㉖Specific Ceramic Fibres	Aluminosilicate Refractory Ceramic Fibres (RCF): Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, 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 ($Na_2O+K_2O+CaO+MgO+BaO$) content less or equal to 18% by weight	
㉖Specific Ceramic Fibres	Zirconia Aluminosilicate, Refractory Ceramic Fibres (Zr-RCF): Zirconia Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, 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 ($Na_2O+K_2O+CaO+MgO+BaO$) content less or equal to 18% by weight	

Substance group	Specific substance		CAS No
㉗Specific borate compounds	Boric acid		10043-35-3 11113-50-1
	Borate (Disodium tetraborate)	Disodium tetraborate, anhydrous	1330-43-4
		Disodium tetraborate, pentahydrate	12179-04-3
		Disodium tetraborate, decahydrate	1303-96-4
	Tetraboron disodium heptaoxide, hydrate		12267-73-1
	diboron trioxide; boric oxide		1303-86-2
㉙Hexahydromethylphthalic anhydride	Hexahydromethylphthalic anhydride		25550-51-0
	Hexahydro-4-methylphthalic anhydride		19438-60-9
	Hexahydro-1-methylphthalic anhydride		48122-14-1
	Hexahydro-3-methylphthalic anhydride		57110-29-9
㉚Nonylphenol ethoxylates	Ethanol, 2-(4-nonylphenoxy)-		104-35-8
	Isononylphenol ethoxylate		37205-87-1
	Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched		127087-87-0
	4-tert-Nonylphenol diethoxylate		156609-10-8
	Poly(oxy-1,2-ethanediyl), α-(4-nonylphenyl)-ω-hydroxy-		26027-38-3
	Ethanol, 2-[2-[2-[2-(4-nonylphenoxy)ethoxy]ethoxy]ethoxy]-		7311-27-5
	Ethanol, 2-[2-(4-nonylphenoxy)ethoxy]-		20427-84-3
	3,6,9,12,15-Pentaoxaheptadecan-1-ol,17-(4-nonylphenoxy)-		34166-38-6
	3,6,9,12,15,18-Hexaoxaeicosan-1-ol, 20-(4-nonylphenoxy)-		27942-27-4
	3,6,9,12,15,18,21,24-Octaoxahexacosan-1-ol,26-(4-nonylphenoxy)-		14409-72-4
㉛Perfluorooctanoic acid (PFOA) and individual salts and esters of PFOA	Pentadecafluorooctanoic acid (PFOA)		335-67-1
	Ammonium pentadecafluorooctanoate (APFO)		3825-26-1
	Sodium pentadecafluorooctanoate		335-95-5
	Potassium pentadecafluorooctanoate		2395-00-8
	Silver pentadecafluorooctanoate		335-93-3
	Pentadecafluoroctanoyl fluoride		335-66-0
	Methyl pentadecafluorooctanoate		376-27-2
	Ethyl pentadecafluorooctanoate		3108-24-5
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptadecafluordecan-1-ol		678-39-7
	8:2 Fluorotelomer methacrylate		1996-88-9
㉝Nickel/Nickel Compounds	Nickel		7440-02-0
	Nickel (II) oxide		1313-99-1
	Nickel (II) chloride		7718-54-9
	Nickel (II) chloride, hexahydrate		7791-20-0
	Nickel(II) sulfate		7786-81-4
	Nickel(II) sulfate, hexahydrate		10101-97-0
	Nickel(II) sulfate, heptahydrate		10101-98-1
	Antimony nickel titanium oxide yellow		8007-18-9
	Nickel niobium titanium yellow rutile		68611-43-8
	Cobalt titanate green spinel		68186-85-6
㉞Perfluorohexane-1-sulphonic acid and its salts	Perfluorohexane-1-sulphonic acid		355-46-4
	ammonium perfluorohexane-1-sulphonate		68259-08-5
	potassium perfluorohexane-1-sulphonate		3871-99-6
	tridecafluorohexanesulphonic acid, compound with 2,2'-iminodiethanol (1:1)		70225-16-0
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, cesium salt (1:1)		92011-17-1
	Dibenzo[k,n][1,4,7,10,13]tetraoxathiacyclopentadecinium, 19-[4-(1,1-dimethylethyl)phenyl]-6,7,9,10,12,13-hexahydro-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		928049-42-7
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, zinc salt		70136-72-0
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. with N,N-diethylethanamine (1:1)		72033-41-1
	Phosphonium, triphenyl(phenylmethyl)-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		1000597-52-3
	N,N,N-tributylbutan-1-aminium tridecafluorohexane-1-sulfonate		108427-54-9
	N,N,N-triethylethanaminium tridecafluorohexane-1-sulfonate		108427-55-0
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. with pyrrolidine (1:1)		1187817-57-7
	Methanaminium, N,N,N-trimethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1)		189274-31-5
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. with 2-methyl-2-propanamine (1:1)		202189-84-2
	Iodonium, bis[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		213740-81-9
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, gallium salt		341035-71-0
	Sulfonium, bis(4-methylphenyl)phenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		341548-85-4
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, scandium(3+) salt (3:1)		350836-93-0
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, neodymium(3+) salt (3:1)		41184-65-0
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, yttrium(3+) salt (3:1)		41242-12-0
	Sulfonium, (thiodi-4,1-phenylene)bis[diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:2)		421555-73-9
	Iodonium, bis[4-(1,1-dimethylpropyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic		421555-74-0
	Sulfonium, tris[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		425670-70-8
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, lithium salt (1:1)		55120-77-9
	Ethanaminium, N-[4-[[4-(diethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		1310480-24-0
	Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		1310480-27-3
	Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(phenylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		1310480-28-4
	Beta-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid ion(1-) (1:1)		1329995-45-0
	Gamma-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid ion(1-) (1:1)		1329995-69-8
	Sulfonium, triphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		144116-10-9
	Quinolinium, 1-(carboxymethyl)-4-[2-[4-[4-(2,2-diphenylethenyl)phenyl]-1,2,3,3a,4,8b-hexahydrocyclopent[b]indol-7-yl]ethenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		1462414-59-0
	Iodonium, diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		153443-35-7
	Sulfonium, [4-[(2-methyl-1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1), polymer with 2-ethyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate, 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate		911027-69-5
	Sulfonium, [4-[(2-methyl-1-oxo-2-propen-1-yl)oxy]phenyl]diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)		911027-68-4

Substance group	Specific substance	CAS No
㉞Perfluorohexane-1-sulphonic acid and its salts	Sulfonium, (4-methylphenyl)diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	910606-39-2
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, sodium salt	82382-12-5
	Iodonium, bis[(1,1-dimethylethyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1)	866621-50-3
㉟Dechlorane Plus™ [covering any of its individual anti- and syn-isomers or any combination thereof]	1,4-7,10-Dimethanodibenzo[a,e]cyclooctene, 1,2,3,4,7,8,9,10,13,13,14,14-dodecachloro-1,4,4a,5,6,6a,7,10,10a,11,12,12a-dodecahydro-	13560-89-9
	1,4-7,10-Dimethanodibenzo[a,e]cyclooctene, 1,2,3,4,7,8,9,10,13,13,14,14-dodecachloro-1,4,4a,5,6,6a,7,10,10a,11,12,12a-dodecahydro-, (1R,4S,4aS,6aS,7S,10R,10aR,12aR)-rel-	135821-74-8
	1,4-7,10-Dimethanodibenzo[a,e]cyclooctene, 1,2,3,4,7,8,9,10,13,13,14,14-dodecachloro-1,4,4a,5,6,6a,7,10,10a,11,12,12a-dodecahydro-, (1R,4S,4aS,6aR,7R,10S,10aS,12aR)-rel-	135821-03-3
㊱Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with >= 0.1% of 4-nonylphenol, branched and linear (4-NP)	Phenol, 4-nonyl, phosphite	3050-88-2
	Phenol, p-isononyl-, phosphite	31631-13-7
	Phenol, p-sec-nonyl-, phosphite	106599-06-8
㊲Perfluorobutane sulfonic acid (PFBS) and its salts	N,N,N,-triethylethanaminium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulfonate	25628-08-4
	1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonic acid	375-73-5
㊳Dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety	Stannane, dioctylbis[(1-oxododecyl)oxy]-	3648-18-8
	Stannane, dioctyl-, bis(coco acyloxy) derivs.	91648-39-4
	dioctyltin dilaurate; stannane, dioctyl-, bis(coco acyloxy) derivs.	—
㊴Medium-chain chlorinated paraffins (MCCP)	Alkanes, C14-17, chloro	85535-85-9
	di-, tri- and tetrachlorotetradecane	—
	Tetradecane, chloro derivs.	198840-65-2
	Alkanes, C14-16, chloro	1372804-76-6
㊵Orthoboric acid, sodium salt	Boric acid (H3BO3), sodium salt, hydrate	25747-83-5
	Boric acid (H3BO3), disodium salt	22454-04-2
	Trisodium orthoborate	14312-40-4
	Boric acid, sodium salt	1333-73-9
	Orthoboric acid, sodium salt	13840-56-7
	Boric acid (H3BO3), sodium salt (1:1)	14890-53-0
㊶4-Nonylphenol, branched and linear	Phenol, 4-nonyl-, branched	84852-15-3
	p-(1,1-dimethylheptyl)phenol	30784-30-6
	4-(1-Ethyl-1,4-dimethylpentyl)phenol	142731-63-3
	4-(1-Ethyl-1,3-dimethylpentyl)phenol	186825-36-5
	4-(1-ethyl-1-methylhexyl)phenol	52427-13-1
	p-isononylphenol	26543-97-5
	p-(1-methyloctyl)phenol	17404-66-9
	p-nonylphenol	104-40-5
	Phenol, nonyl-, branched	90481-04-2
	4-(3-ethylheptan-2-yl)phenol	186825-39-8
	4-(1,1,5-Trimethylhexyl)phenol	521947-27-3
	Nonylphenol	25154-52-3
	Isononylphenol	11066-49-2
㊷Perfluorocarboxylic acids (PFCA:C9-C14),their salts and C9-C14 PFCA-related compounds	Henicosafluoroundecanoic acid	2058-94-8
	Sodium salts of Perfluorononan-1-oic acid	21049-39-8
	Tricosafluorododecanoic acid	307-55-1
	ammonium nonadecafluorodecanoate	3108-42-7
	Nonadecafluorodecanoic acid	335-76-2
	Perfluorononan-1-oic acid	375-95-1
	Heptacosafluorotetradecanoic acid	376-06-7
	Sodium nonadecafluorodecanoate	3830-45-3
	Ammonium salts of Perfluorononan-1-oic acid	4149-60-4
	Pentacosafluorotridecanoic acid	72629-94-8
	Dodecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12,12-docosafluoro-11-(trifluoromethyl)-	16486-96-7
	Undecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-eicosafluoro-	1765-48-6
	Hexacosafluoro-13-(trifluoromethyl)tetradecanoic acid	18024-09-4
	Potassium 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-icosafluoroundecanoate	307-71-1
	Ammonium octadecafluoro-9-(trifluoromethyl)decanoate	3658-63-7
	Ammonium tricosafluorododecanoate	3793-74-6
	Dodecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12,12-docosafluoro-11-(trifluoromethyl)-, compd. With ethanamine (1:1)	68015-87-2
	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl ester, polymer with3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate,hexadecyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, octadecyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-propenoate	115592-83-1
	2-Propenoic acid, 2-methyl-, C10-16-alkyl esters, polymers with 2-hydroxyethyl methacrylate, Me methacrylate and alpha-omega-perfluoro-C8-14-alkylacrylate	125328-29-2
	2-Propenoic acid, 2-methyl-, C10-16-alkyl esters, polymers with 2-hydroxyethyl methacrylate, Me methacrylate and gamma-omega-perfluoro-C8-14-alkylacrylate	129783-45-5
	2-Propenoic acid, dodecyl ester, polymers with Bu (1-oxo-2-propenyl)carbamate and gamma-omega-perfluoro-C18-14-alkyl acrylate	144031-01-6
	Dodecanoyl fluoride, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12,12-docosafluoro-11-	15811-52-6
	2-Propenoic acid,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-2-hydroxy-14-(trifluoromethyl)pentadecyl ester	16083-87-7
	2-(Perfluorodecyl) ethyl acrylate, 2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl ester	17741-60-5
	1-Dodecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-, 1,1'-(hydrogen phosphate); Bis[3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-henicosafluorododecyl] hydrogen phosphate	1895-26-7
	Dodecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-heneicosafluoro-12-iodo-; C10-2 telomer B iodide	2043-54-1
	2-(Perfluorodecyl) ethyl methacrylate, 2- Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl ester	2144-54-9
	Tetradecane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12- pentacosafluoro-14-iodo-; 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-pentacosafluoro-14-iodotetradecane	30046-31-2
	Undecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-tricosafluoro-11-iodo-	307-50-6
	Dodecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-pentacosafluoro-12-iodo-	307-60-8
	Tetradecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14-nonacosafluoro-14-iodo-; Nonacosafluoro-1-iodotetradecane	307-63-1
	Dodecane, 1,1,1,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-tetracosafluoro-12-iodo-2-(trifluoromethyl)-; 1,1,1,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-tetracosafluoro-12-iodo-2-(trifluoromethyl)dodecane	3248-61-1
	Tetradecane, 1,1,1,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14-octacosafluoro-14-iodo-2-(trifluoromethyl)-; Octacosafluoro-14-iodo-2-(trifluoromethyl)tetradecane	3248-63-3

Substance group	Specific substance	CAS No
㊷Perfluorocarboxylic acids (PFCA:C9-C14),their salts and C9-C14 PFCA-related compounds	Pentadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15-hentriacontafluoro-15-iodo	335-79-5
	Tridecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13-heptacosafluoro-13-iodo-	376-04-5
	1-Tetradecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluoro-; 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecanol	39239-77-5
	Decane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-heneicosafluoro-10-iodo-; Henicosafluoro-10-iododecane	423-62-1
	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluorohexadecyl ester; 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluorohexadecyl methacrylate	4980-53-4
	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,14,14,14-tetracosafluoro-13-(trifluoromethyl)tetradecyl ester; 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,14,14,14-tetracosafluoro-13-(trifluoromethyl)tetradecyl acrylate	52956-82-8
	Nonane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-nonadecafluoro-9-iodo-; Nonadecafluoro-9-iodononane	558-97-4
	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecyl ester; 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecyl methacrylate	6014-75-1
	1-Hexadecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluoro-; 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluorohexadecanol	60699-51-6
	1,2-Tridecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,13,13,13-eicosafluoro-12-(trifluoromethyl)-, 1-(dihydrogen phosphate); 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,13,13,13-icosafluoro-2-hydroxy-12-(trifluoromethyl)tridecyl dihydrogen phosphate	63295-27-2
	1,2-Pentadecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-14-(trifluoromethyl)-, 1-(dihydrogen phosphate); 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-2-hydroxy-14-(trifluoromethyl)pentadecyl dihydrogen phosphate	63295-28-3
	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecyl 2-methyl-2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-methyl-2-propenoate	65104-45-2
	Hexadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14-nonacosafluoro-16-iodo-; 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14-nonacosafluoro-16-	65510-55-6
	Undecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-nonadecafluoro-11-iodo-; 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-nonadecafluoro-11-iodoundecane	65510-56-7
	Decane, 1,1,1,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-eicosafluoro-10-iodo-2-(trifluoromethyl)-; Eicosafluoro-10-iodo-2-(trifluoromethyl)decane	677-93-0
	2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,14,14,14-hexacosafluoro-13-(trifluoromethyl)myristoyl fluoride	68025-62-7
	2H-Pyran, 2,2,3,3,4,4,5,5,6-nonafluorotetrahydro-6-(1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-nonadecafluorononyl)-	68155-54-4
	Alkyl iodides, C4-20, gamma-omega-perfluoro	68188-12-5
	Fatty acids, C7-13, perfluoro	68333-92-6
	Alkyl iodides, C10-12, gamma-omega-perfluoro	68390-33-0
	Phosphonic acid, perfluoro-C6-12-alkyl derivs.	68412-68-0
	Phosphinic acid, bis(perfluoro-C6-12-alkyl) derivs.	68412-69-1
	Piperazinium, 1-(carboxymethyl)-1-(2-hydroxyethyl)-4-(2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-nonadecafluoro-1-oxodecyl)-, hydroxide, inner salt; 1-(Carboxylatomethyl)-1-(2-hydroxyethyl)-4-(2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-nonadecafluoro-1-oxodecyl)piperazinium	71356-38-2
	Fatty acids, C7-13, perfluoro, ammonium salts; Carboxylic acids, C7-13, perfluoro, ammonium salts	72968-38-8
	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12,12-eicosafluoro-11-(trifluoromethyl)dodecyl ester; 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12,12-icosafluoro-11-(trifluoromethyl)dodecyl methacrylate	74256-14-7
	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,14,14,14-tetracosafluoro-13-(trifluoromethyl)tetradecyl ester; 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,14,14,14-tetracosafluoro-13-(trifluoromethyl)tetradecyl methacrylate	74256-15-8
	2-Propenoic acid, gamma-omega-perfluoro-C8-14-alkyl esters	85631-54-5
	2-Propenoic acid, perfluoro-C8-16-alkyl esters	85681-64-7
	1-Dodecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-; C10-2 fluorotelomer alcohol; 1-Dodecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-	865-86-1
	Alkyl iodides, C6-18, perfluoro	90622-71-2
	Amides, C7-19, alpha-omega-perfluoro-N,N-bis(hydroxyethyl)	90622-99-4
	Fatty acids, C7-19, perfluoro	91032-01-8
	Phosphinic acid, bis(perfluoro-C6-12-alkyl) derivs., aluminum salts	93062-53-4
	2-Pentadecanol, 1,1'-[oxybis[(1-methyl-2,1-ethanediyl)oxy]]bis[4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoro-; 1,1'-[oxybis[(1-methylethylene)oxy]]bis[4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoropentadecan-2-ol	93776-00-2
	1-Propanaminium, N-(2-carboxyethyl)-N,N-dimethyl-3-[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoro-2-hydroxypentadecyl)amino]-, inner salt; (2-carboxylatoethyl)(dimethyl)[3-[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoro-2-	93776-12-6
	1-Propanaminium, N-(2-carboxyethyl)-3-[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-heneicosafluoro-2-hydroxytridecyl)amino]-N,N-dimethyl-, inner salt; (2-carboxylatoethyl)[3-[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-henicosafluoro-2-hydroxytridecyl)amino]propyl]dimethylammonium	93776-13-7
	1-Propanaminium, N-(2-carboxyethyl)-N,N-dimethyl-3-[[4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-2-hydroxy-14-(trifluoromethyl)pentadecyl]amino]-, innersalt; (2-carboxylatoethyl)(dimethyl)[[[4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-2-hydroxy-14-(trifluoromethyl)pentadecyl]amino]propyl]mmonium	93776-15-9
	bis(2-hydroxyethyl)methyl(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoro-2-hydroxypentadecyl)ammonium iodide	93776-16-0
	1-Tridecanaminium, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-heneicosafluoro-2-hydroxy-N,N-bis(2-hydroxyethyl)-N-methyl-, iodide (1:1); [4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-henicosafluoro-2-hydroxytridecan-1-yl][bis(2-hydroxyethyl)]methylammonium iodide	93776-17-1
	1,2-Tridecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-heneicosafluoro-, 1-(dihydrogen phosphate); 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-henicosafluoro-2-hydroxytridecyl dihydrogen phosphate	94158-70-0
	bis(2-hydroxyethyl)methyl[4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-2-hydroxy-14-(trifluoromethyl)pentadecyl] ammonium iodide	94159-76-9
	2-Pentadecanol, 1-[[3-(dimethylamino)propyl]amino]-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoro-; 1-[[3-(dimethylamino)propyl]amino]-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoropentadecan-2-ol	94159-79-2

Substance group	Specific substance	CAS No
㊷Perfluorocarboxylic acids (PFCA:C9-C14),their salts and C9-C14 PFCA-related compounds	2-Tridecanol, 1-[[3-(dimethylamino)propyl]amino]-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-heneicosafluoro-; 1-[[3-(dimethylamino)propyl]amino]-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-henicosafluorotridecan-2-ol	94159-80-5
	2-Pentadecanol, 1-[[3-(dimethylamino)propyl]amino]-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-14-(trifluoromethyl)-; 1-[[3-(dimethylamino)propyl]amino]-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-14-(trifluoromethyl)pentadecan-2-ol	94159-82-7
	2-Tridecanol, 1-[[3-(dimethylamino)propyl]amino]-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,13,13,13-eicosafluoro-12-(trifluoromethyl)-; 1-[[3-(dimethylamino)propyl]amino]-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,13,13,13-icosafluoro-12-(trifluoromethyl)tridecan-1-ol	94159-83-8
	4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoro-2-hydroxypentadecyl dihydrogen phosphate	94200-42-7
	4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,17-nonacosafluoro-2-hydroxyheptadecyl dihydrogen phosphate	94200-43-8
	1,2-Tridecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-heneicosafluoro-, 1-(dihydrogen phosphate), diammonium salt; Diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-henicosafluoro-2-hydroxytridecyl phosphate	94200-46-1
	1,2-Pentadecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoro-, 1-(dihydrogen phosphate), diammonium salt; Diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoro-2-hydroxypentadecyl phosphate	94200-47-2
	1,2-Heptadecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,17-nonacosafluoro-, 1-(dihydrogen phosphate), diammonium salt; Diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,17-nonacosafluoro-2-hydroxyheptadecyl phosphate	94200-48-3
	1,2-Tridecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-eicosafluoro-12-(trifluoromethyl)-, 1-(dihydrogen phosphate), diammonium salt; Diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-icosafluoro-2-hydroxy-12-(trifluoromethyl)tridecyl phosphate	94200-50-7
	1,2-Pentadecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-14-(trifluoromethyl)-, 1-(dihydrogen phosphate), diammonium salt; Diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-2-hydroxy-14-(trifluoromethyl)pentadecyl phosphate	94200-51-8
㊸Tetrabromo-bisphenol A (TBBPA)	Tetrabromobisphenol A (TBBPA) ;2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol	79-94-7
	2,2'-[(1-methylethylidene)bis[(2,6-dibromo-4,1-phenylene)oxymethylene]]bisoxirane	3072-84-2
	1,1'-(isopropylidene)bis[3,5-dibromo-4-(2,3-dibromopropoxy)benzene]	21850-44-2
	TBBA-bis-(allyl-ether) ;1,1'-isopropylidenebis[4-(allyloxy)-3,5-dibromobenzene]	25327-89-3
	TBBA-dimethyl-ether ;4,4'-(isopropylidene)bis[2,6-dibromoanisole] m	37853-61-5
	1,1'-(isopropylidene)bis[3,5-dibromo-4-(2,3-dibromo-2-methylpropoxy)benzene]	97416-84-7
	（INTERSTAB FR 184）	-
	A mixture of: 2-ethyl-[2,6-dibromo-4-[1-[3,5-dibromo-4-(2-hydroxyethoxy)phenyl]-1-methylethyl]phenoxy]propenoate; 2,2'-diethyl-[4,4'-bis(2,6-dibromophenoxy)-1-methylethylidene] dipropenoate; 2,2'-[(1-methylethylidene)bis[[2,6-dibromo-4,1-phenylene)oxy]ethanol]] (TR33R)	-
	2,2-bis(3,5-dibromo-4-(3-acryloyloxy-2-hydroxypropoxy)phenyl)propane (SC 11 PREPOLYMER)	-
	（BB 331）	-
	TBBA-epichlorhydrin oligomer ;2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	40039-93-8
	2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane and 2,4,6-tribromophenol	158725-44-1
	Phenol, 4,4'-(1-methylethylidene)bis[2,6-dibromo-, polymer with 2-(chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol], Ph ethers	1045809-53-7
	2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol, oligomeric reaction products with Propylene oxide and n-butyl glycidyl ether	1179964-22-7
	Reaction mass of 1,1'-(isopropylidene)bis[3,5-dibromo-4-(2,3-dibromo-2-methylpropoxy)benzene] and 1,3-dibromo-2-(2,3-dibromo-2-methylpropoxy)-5-{2-[3,5-dibromo-4-(2,3,3-tribromo-2-methylpropoxy)phenyl]propan-2-yl}benzene	-
㊹Perfluoroalkyl and polyfluoroalkyl substances（PFAS）	https://comptox.epa.gov/dashboard/chemical-lists/pfasmaster	
㊺Bis(2-ethylhexyl) tetrabromophthalate	Bis(2-ethylhexyl) tetrabromophthalate	26040-51-7
㊻Perfluoroheptanoic acid and its salts	Perfluoroheptanoic acid	375-85-9
	Sodium perfluoroheptanoate	20109-59-5
	Ammonium perfluoroheptanoate	6130-43-4
	Potassium perfluoroheptanoate	21049-36-5
㊼Technical endosulfan and its relatedisomers	Endosulfan	115-29-7
	Endosulfan	959-98-8
	Endosulfan	33213-65-9
㊽Dicofol	Dicofol	115-32-2
	2,2,2-Trichloro-1-(2-chlorophenyl)-1-(4-chlorophenyl)ethanol	10606-46-9
㊾Pentachlorophenol and its salts andesters	Carbonic acid, 1,1-dimethylethyl pentachlorophenyl ester	18942-25-1
	Acetic acid, 2,2,2-trichloro-, 2,3,4,5,6-pentachlorophenyl ester	2879-60-9
	Acetic acid, 2,2-dichloro-, 2,3,4,5,6-pentachlorophenyl ester	19745-69-8
	Pentachlorophenol salts	-
	Pentachlorophenol	87-86-5
	Sodium pentachlorophenolate	131-52-2
	Zinc bis(pentachlorophenolate)	2917-32-0
	N2-benzyl pentachlorophenyl N2-carboxy-L-(2-aminoglutaramate)	13673-51-3
	Perchlorophenyl N-(benzyloxycarbonyl)-L-isoleucinate	13673-53-5
	Perchlorophenyl S-benzyl-N-(benzyloxycarbonyl)-L-cysteinate	13673-54-6
㊾Pentachlorophenol and its salts andesters	Pentachlorophenyl N-[[(4-methoxyphenyl)methoxylcarbonyl]-L-serinate	23234-97-1
	Pentachlorophenol esters	
	Perchlorophenyl 5-oxo-L-prolinate	28990-85-4
	Pentachlorophenyl laurate	3772-94-9
	Potassium pentachlorophenolate	7778-73-6
㊿Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol	Phenol, methylstyrenated	68512-30-1

Appendix 1 Annex 3：Reference laws and regulations

Number	Country, region/standard, etc.	Name of law, etc.
1	EU	RoHS Directive 2011/65/EU and its amendments
2	China	Law Measures for Restriction of the Use of Hazardous Substances in Electrical Appliances and Electronic Products
3	Japan	Law for the Promotion of Effective Utilization of Resources
4	USA California	Electronic Waste Recycling Act (California RoHS) SB 20, amended by SB 50 and AB 575
5	EU	REACH Regulation (EC) No.1907/2006 ANNEX XVII
6	EU	REACH Regulation (EC) No.1907/2006 Candidate List for Authorisation
7	Japan	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.
8	USA	Toxic Substances Control Act (TSCA)
9	Norway	Regulations relating to restrictions on the manufacture, import, export, sale and use of chemicals and other products hazardous to health and the environment (Consumer Product Regulations) FOR-2004-06-01-922
10	Canada	Prohibition of Certain Toxic Substances Regulations SOR/2012-285 and its amendment
11	Switzerland	Act of Reduction of Risks in Treatment of Specified Hazardous Substances, Preparations, and Articles in Switzerland (ChemRRV) Swiss Ordinance 814.81
12	USA	Consumer Product Safety Improvement Act of 2008 PUBLIC LAW 110-314
13	EU	Persistent Organic Pollutants (POPs) Regulation (EU) 2019/1021
14	Canada	Products containing Mercury Regulations SOR/2014-254
15	Austria	BGB I 1990/194: Formaldehyde Restriction §2, 12/2/1990
16	Korea (the Republic of)	Persistent Organic Pollutants Control Act
17	Lithuania	Hygiene Norm HN 96:2000 (Hygiene Norms and Regulations)
18	USA California	Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)
19	USA California	Perchlorate Contamination Prevention Act of 2003 AB 826
20	EU	Commission Regulation (EU) 2019/2021 laying down ecodesign requirements for electronic displays
21	EU	Ecodesign requirements (EU) 2021/341 and (EU) 2019/424 pursuant to Directive 2009/125/EC
22	EU	Battery Directive 2006/66/EC
23	China	Limitation of mercury, cadmium and lead contents for alkaline and non-alkaline zinc manganese dioxide batteries GB 24427-2009
24	Korea (the Republic of)	Quality Management and Manufactured Product Safety Management Law (Battery Regulation)
25	Taiwan (Province ofChina)	Restrictions on the Manufacture, Import, and Sale of Dry Cell Batteries
26	USA New York	Environmental Conservation Law, Battery management and disposal § 27-0719
27	EU	REGULATION (EU) No 517/2014 on fluorinated greenhouse gases
28	EU	Regulation on substances that deplete the ozone layer (EC) No. 1005/2009
29	Japan	Law concerning the Protection of the Ozone Layer through the Control of Specified Substances and Other Measures
30	USA	Clean Air Act
31	International Treaty	Montreal Protocol on Substances that Deplete the Ozone Layer
32	EU	Directive 2013/59/Euratom
33	Japan	Law Concerning Prevention from Radiation Hazards due to Radio-Isotopes, etc.
34	Japan	Law for the Regulation of Nuclear Source Material, Nuclear Fuel Material, and Reactors
35	USA	Nuclear Regulatory Commission Regulations Title 10 CFR Part 20
36	(Guidance)	EICTA, CECED and EERA Joint Position：Guidance on implementing article 11 of Directive 2002/96(EC) concerning information for treatment facilities
37	Standard	IEC 61249-2-21
38	Standard	IPC-4101
39	Standard	JEDEC JS709
40	EU	Package Directive 94/62/EC
41	Korea (the Republic of)	ACT ON THE PROMOTION OF SAVING AND RECYCLING OF RESOURCES
42	France	Order of April 13, 2022 specifying the substances contained in mineral oils whose use is prohibited on packaging and for printing intended for the public
43	Spain	Law 7/2022, of April 8, on waste and contaminated soil for a circular economy.
44	USA Maine	Chapter 447 (LD 1503, 2021) PFAS regulation
45	USA	Model Toxics in Packaging Legislation
46	International Treaty	Stockholm Convention
47	USA Washington	Safer Products for Washington
101	USA	EPEAT(Electronic Product Environmental Assessment Tool)
102	EU	EU-WEEE Directive(2012/19/EU)

Annex 2. Konica Minolta Chemicals - List of Prohibited and Restricted Substances

Category Ⅰ : Difficult to manage risk as users cannot be identified
Category Ⅱ : Risk management is made possible by thorough working procedures.
Category Ⅲ : Risk management is made possible by ensuring protective equipment is worn.
Category Ⅳ : Risk management is made possible by equipment measures.

Since risks differ depending on the form of exposure, Konica Minolta classifies substances into five categories that envision usage, ranging from use under strict safety controls (e.g., at production sites) to use by the general public, which cannot be assumed to take safety measures.

※The table below is for reference only. Chemicals - Prohibited and restricted substances are determined by konicaminolta.

	List of prohibited and restricted chemicals in chemical products.								List of prohibited and restricted chemicals for used in the production site.	
category	Ⅰ		Ⅱ		Ⅲ		Ⅳ		Used in production site	
	← consumer use						professional use →		professional use	
	prohibited substances	restricted substances	prohibited substances	restricted substances	prohibited substances	restricted substances	prohibited substances	restricted substances	prohibited substances	restricted substances
Japanese Lows and regulations										
Chemical Substance Control Law [CSCL]	Class I Specified Chemical Substances, Class Ⅱ Specified Chemical Substances, Monitoring Chemical Substances	Type II Monitoring Chemical Substances (before amendment), Equivalent to Type Ⅱ Monitoring Chemical Substances	Class I Specified Chemical Substances, Class Ⅱ Specified Chemical Substances, Monitoring Chemical Substances	Type II Monitoring Chemical Substances (before amendment), Equivalent to Type Ⅱ Monitoring Chemical Substances	Class I Specified Chemical Substances, Class Ⅱ Specified Chemical Substances	Monitoring Chemical Substances, Type II Monitoring Chemical Substances (before amendment), Equivalent to Type Ⅱ Monitoring Chemical Substances	Class I Specified Chemical Substances	Class Ⅱ Specified Chemical Substances, Monitoring Chemical Substances, Type II Monitoring Chemical Substances (before amendment), Equivalent to Type Ⅱ Monitoring Chemical	Class I Specified Chemical Substances	Class Ⅱ Specified Chemical Substances, Monitoring Chemical Substances, Type II Monitoring Chemical Substances (before amendment), Equivalent to Type Ⅱ Monitoring Chemical
Industrial Safety and Health Act [ISHA]	Chemical Substances Prohibited to Manufacturing, etc., Strong Mutagenic Chemical Substances	---	Chemical Substances Prohibited to Manufacturing, etc.	Strong Mutagenic Chemical Substances	Chemical Substances Prohibited to Manufacturing, etc.	Strong Mutagenic Chemical Substances	Chemical Substances Prohibited to Manufacturing, etc.	Strong Mutagenic Chemical Substances	Chemical Substances Prohibited to Manufacturing, etc.	Strong Mutagenic Chemical Substances
Poisonous and Deleterious Substances Control Act	Specified Poisonous Substances, Poisonous Substances	---	Specified Poisonous Substances, Poisonous Substances	---	Specified Poisonous Substances	Poisonous Substances	Specified Poisonous Substances	Poisonous Substances	Specified Poisonous Substances	Poisonous Substances
Act on Prohibition of Chemical Weapons and Control of Specific Chemicals	Specific Chemicals, First Class Designated Chemicals, Second Class Designated Chemicals	---	Specific Chemicals, First Class Designated Chemicals, Second Class Designated Chemicals	---	Specific Chemicals, First Class Designated Chemicals	Second Class Designated Chemicals	Specific Chemicals, First Class Designated Chemicals	Second Class Designated Chemicals	Specific Chemicals, First Class Designated Chemicals	Second Class Designated Chemicals
Laws and regulations other than Japan										
Stockholm Convention on Persistent Organic Pollutants (POPs)	listed	---	listed	---	listed	---	listed	---	listed	---
Montreal Protocol on Substances that Deplete the Ozone Layer.	listed	---	listed	---	listed	---	listed	---	ANNEX A,B, C-gr Ⅰ, Ⅲ	ANNEX C-gr Ⅰ, E
United Nations Framework Convention on Climate Change	HFC,PFC SF_6	---	HFC,PFC SF_6	---	HFC,PFC SF_6	---	HFC,PFC SF_6	---	---	HFC,PFC SF_6
TSCA §6	listed	---	listed	---	listed	---	listed	---	listed	---
RoHS (2011/65/EU)	listed	---	listed	---	listed	---	listed	---	listed	---
REACH ANNEX XVII (*1) ChemVerbotsV	---	listed	---	listed	---	listed (regulated use)	---	listed (regulated use)	---	listed (regulated use)
REACH SVHC	---	listed	---	listed	---	listed	---	listed	---	listed
CLP ((EC) No. 1272/2008) ANNEX VI (*1)	---	listed	---	listed	---	Acute Tox. 1	---	Acute Tox. 1	---	Acute Tox. 1
Hazard classification - Carcinogenicity, Mutagenicity and Reproductive toxicity										
IARC (Carc)	1,2A,2B	---	1,2A,2B	---	1,2A	2B	1	2A,2B	1	2A,2B
CLP ((EC) No. 1272/2008) ANNEX VI	1A,1B,2	---	1A,1B,2	---	1A,1B	2(Except Repr 2)	1A	1B,2(Except Repr 2)	1A	1B,2(Except Repr 2)
EPA (Carc)	A,B1,B2	---	A,B1,B2	---	A,B1	B2	A	B1,B2	A	B1,B2
NTP (Carc)	A,B	---	A,B	---	A	B	A	B	A	B
ACGIH (Carc)	A1,A2,A3	---	A1,A2,A3	---	A1,A2	A3	A1	A2,A3	A1	A2,A3
Japanese Society of Occupational Health[JSOH] (Carc)	Class1, Class2(A)(B)	---	Class1, Class2(A)(B)	---	Class1, Class2(A)	Class2(B)	Class1	Class2(A)(B)	Class1	Class2(A)(B)
MAK (Carc,Mut,Repr)	1,2,3 (Except Repr3)	---	1,2,3 (Except Repr3)	---	1,2	3(Except Repr3)	1,2	3(Except Repr3)	1,2	3(Except Repr3)
TRGS 905 (Carc,Mut,Repr)	1,2,3	---	1,2,3	---	1,2	3(Except Repr3)	1,2	3(Except Repr3)	1,2	3(Except Repr3)
OSHA Z-Tables (Carc)	listed	---	listed	---	---	listed	---	listed	---	listed
Proposition 65 (Carc,Repr)	---	listed	---	listed	---	---	---	---	---	---

*1 Excluding physicochemical hazard classifications.

Appendix 3: Categories of EEE covered by RoHS

Categories	EEE
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.
9	Monitoring and control instruments including industrial monitoring and control instruments.
10	Automatic dispensers.
11	Other EEE not covered by any of categories above.