Banned Substances

● What are banned substances?
Chemical substances whose manufacture, use, etc. are prohibited by environmental laws and regulations. Depending on the application, use may be permitted.

◎ Substances listed are treated as "no intentional inclusion" but may be exempted by meeting specified conditions.
◎ If there are threshold values according to various laws and regulations, the minimum value among the threshold values specified for each condition is used.
◎ The percentage of ingredients contained is confirmed by chemSHERPA.
◎ For substances that have not yet been chemSHERPA compliant or have not yet been applied under the promulgated laws and regulations, please cooperate with us by submitting a written pledge.
◎ Even for chemSHERPA-compliant substances, we may ask you to submit a written pledge for certain reasons.

1. Japanese domestic laws and regulations
(1) Industrial Safety and Health Law Manufacturing prohibited substances (Article 55 of the Law, Article 16 of the Enforcement Order)
(2) Chemical Investigation Law (Class I)

2. Europe/Americas
(1) RoHS restricted substances (Annex II)
(2) Substances restricted under REACH (Annex XVII)
(3) EU POPs Annex A (Elimination)
(4) Five PBT Chemicals under TSCA

1. Japanese domestic laws and regulations

(1) Industrial Safety and Health Law Manufacturing prohibited substances (Article 55 of the Law, Article 16 of the Enforcement Order)

No.		Substance name	CA No.	Threshold (ppm)
1a	1	Yellow phosphorusmatch	–	
1a	2	Benzidine and its salts	92-87-5(Typical)	
1a	3	4-aminodiphenyl and its salts	92-67-1(Typical)	
1a	4	Asbestos ※1	Banned-1	1000
1a	5	4-nitrodiphenol and its salts	92-93-3(Typical)	
1a	6	bis (chloromethyl) ether	542-88-1	
1a	7	beta-naphthylamine and its salts	91-59-8(Typical)	
1a	8	Gum containing benzene, in which the volume of contained benzene exceeds 5 % of the solvent (including diluents) of the gum	–	

※1：Among natural minerals, a non-asbestos certificate or other documentation must be submitted for bluesite, vermiculite, talc, mica, and wollastonite.

1. Japanese domestic laws and regulations

(2) Chemical Investigation Law (Class I)

No.	Substance name	Effective date
1	Polychlorinated biphenyls	June 10, 1974
2	Polychlorinated naphthalenes (limited to those containing two or more chlorine atoms)	August 20, 1979(※1)
3	Hexachlorobenzene	
4	1, 2, 3, 4, 10, 10-hexachloro-1, 4, 4a, 5, 8, 8a-hexahydro-exo-1, 4-endo-5, 8-dimethanonaphthalene (also known as aldrin; referred to as "aldrin" in row (iii) of the table in Article 7)	October 12, 1981
5	1, 2, 3, 4, 10, 10-hexachloro-6, 7-epoxy-1, 4, 4a, 5, 6, 7, 8, 8a-octahydro-exo-1, 4-endo-5, 8-dimethanonaphthalene (also known as dieldrin; referred to as "dieldrin" in row (iv) of the table in Article 7)	
6	1, 2, 3, 4, 10, 10-hexachloro-6, 7-epoxy-1, 4, 4a, 5, 6, 7, 8, 8a-octahydro-endo-1, 4-endo-5, 8-dimethanonaphthalene (also known as endrin)	
7	1, 1, 1-trichloro-2, 2-bis (4-chlorophenyl) ethane (also known as DDT; referred to as "DDT" in row (iii) of the table in Article 7)	
8	1, 2, 4, 5, 6, 7, 8, 8-octachloro-2, 3, 3a, 4, 7, 7a-hexahydro-4, 7-methano-1H-indene, 1, 4, 5, 6, 7, 8, 8-heptachloro-3a, 4, 7, 7a-tetrahydro-4, 7-methano-1H-indene and their analogous compounds (also known as chlordane or heptachlor; referred to as "chlordanes" in row (v) of the table in Article 7)	September 17, 1986
9	Bis (tributyltin) oxide	January 6, 1990
10	N, N'-ditolyl-p-phenylenediamine, N-tolyl-N'-xylyl-p-phenylenediamine, or N, N'-dixylyl-p-phenylenediamine	January 6,2001
11	2, 4, 6-tri-tert-butylphenol	
12	Polychloro-2, 2-dimethyl-3-methylidenebicyclo [2. 2. 1] heptane (also known as toxaphene)	September 4, 2002
13	Dodecachloropentacyclo [5. 3. 0. 0. 0. 0] decane (also known as mirex; referred to as "mirex" in row (ix) of the table in Article 7)	
14	2, 2, 2-trichloro-1-(2-chlorophenyl)-1-(4-chlorophenyl) ethanol, or 2, 2, 2-trichloro-1, 1-bis (4-chlorophenyl) ethanol (also known as kelthane or dicofol)	April 1, 2005 (※2)
15	Hexachlorobuta-1, 3-diene	
16	2-(2H-1, 2, 3-benzotriazol-2-yl)-4, 6-di-tert-butylphenol	November 10, 2007
17	Perfluoro (octane-1-sulfonic acid) (also known as PFOS; hereinafter referred to as "PFOS") or its salts	
18	Perfluoro (octane-1-sulfonyl) =fluoride (also known as PFOSF)	
19	Pentachlorobenzene	
20	r-1, c-2, t-3, c-4, t-5, t-6-hexachlorocyclohexane (also known as alpha- hexachlorocyclohexane)	
21	r-1, t-2, c-3, t-4, c-5, t-6-hexachlorocyclohexane (also known as beta- hexachlorocyclohexane)	April 1,2010
22	r-1, c-2, t-3, c-4, c-5, t-6-hexachlorocyclohexane (also known as gamma- hexachlorocyclohexane)	
23	Decachloropentacyclo [5. 3. 0. 0(2, 6). 0(3, 9). 0(4, 8)] decan-5-one (also known as chlordecone)	
24	Hexabromobiphenyl	
25	Tetrabromo (phenoxybenzene) (also known as tetrabromodiphenyl ether; referred to as "tetrabromodiphenyl ether" in row (xii) of the table in Article 7)	
26	Pentabromo (phenoxybenzene) (also known as pentabromodiphenyl ether; referred to as "pentabromodiphenyl ether" in row (xiii) of the table in Article 7)	
27	Hexabromo (phenoxybenzene) (also known as hexabromodiphenyl ether)	
28	Heptabromo (phenoxybenzene) (also known as heptabromodiphenyl ether)	
29	6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3-oxide (also known as endosulfan or benzoepin)	May 1, 2014
30	Hexabromocyclododecane	
31	Pentachlorophenol or its salts or esters	April 1, 2016
32	Polychlorinated normal paraffin (limited those in which the carbon number is 10 through 13 and the content of chlorine is more than 48% of the total weight)	April 1, 2018
33	1,1'-oxybis (2,3,4,5,6-pentabromobenzene) (also known as decabromodiphenyl ether)	
34	Perfluorooctanoic acid (PFOA) and its salts	October-22-2021
35	Perfluorohexanesulfonic acid (PFHxS) or perfluoroalkanesulfonic acid (limited to those with a branched structure and 6 carbons) or their salts	February 1, 2024 (※3)

※1: The designation date for polychlorinated naphthalenes with a chlorine number of 2 is April 1, 2016.

※2: The designation date of 2,2,2-trichloro-1-(2-chlorophenyl)-1-(4-chlorophenyl) ethanol is October 22, 2021.

※3: Order for Enforcement of the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. The date of enforcement of the 1st Amendment is stated.

2. Europe/Americas
(1) RoHS restricted substances (Annex II)
RoHS Directive
https://environment.ec.europa.eu/topics/waste-and-recycling/rohs-directive_en

Restricted substances (Annex II)
https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32015L0863

No.	Substance name	Threshold values	Effective date (Category 9)
1	Cadmium (Cd)	0.01wt%	July 22, 2019 (※1)
2	Lead (Pb)	0.1wt%	
3	Mercury (Hg)	0.1wt%	
4	Hexavalent chromium (Cr6+)	0.1wt%	
5	Polybrominated biphenyls (PBB)	0.1wt%	
6	Polybrominated diphenyl ethers (PBDE)	0.1wt%	
7	Bis (2-ethylhexyl) phthalate (DEHP)	0.1wt%	
8	Butyl benzyl phthalate (BBP)	0.1wt%	
9	Dibutyl phthalate (DBP)	0.1wt%	
10	Dibutyl phthalate (DIBP)	0.1wt%	

※1 : Applicable date for this case of RoHS 2 Directive; promulgated in June 2015 as 4 additional restricted substances (10 in total).

2. Europe/Americas
(2) Substances restricted under REACH (Annex XVII)
https://echa.europa.eu/substances-restricted-under-reach

No.	CAS No.	Substance name	Conditions of restriction	Conditions of derogation
1	–	Polychlorinated terphenyls (PCTs)	Shall not be placed on the market, or used: – as substances, – in mixtures, including waste oils, or in equipment, in concentrations greater than 50 mg/kg (0,005 % by weight)	–
2	75-01-4	Chloroethene (vinyl chloride)	Shall not be used as propellant in aerosols for any use. Aerosols dispensers containing the substance as propellant shall not be placed on the market.	–
3	–	Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1.	1. Shall not be used in: – ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, – tricks and jokes, – games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: – can be used as fuel in decorative oil lamps for supply to the general public, and, – present an aspiration hazard and are labelled with H304,	4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).
4	126-72-7	Tris (2,3 dibromopropyl) phosphate	1. Shall not be used in textile articles, such as garments, undergarments and linen, intended to come into contact with the skin. 2. Articles not complying with paragraph 1 shall not be placed on the market	–
5	71-43-2	Benzene	1. Shall not be used in toys or parts of toys where the concentration of benzene in the free state is greater than 5 mg/kg (0,0005 %) of the weight of the toy or part of toy. 2. Toys and parts of toys not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market, or used, – as a substance, – as a constituent of other substances, or in mixtures, in concentrations equal to, or greater than 0,1 % by weight.	4. However, paragraph 3 shall not apply to: (a) motor fuels which are covered by Directive 98/70/EC; (b) substances and mixtures for use in industrial processes not allowing for the emission of benzene in quantities in excess of those laid down in existing legislation. (c) natural gas placed on the market for use by consumers, provided that the concentration of benzene remains below 0,1 % volume/volume'.
6	12001-28-4 12172-73-5 77536-67-5 77536-66-4 77536-68-6 12001-29-5 132207-32-0	Asbestos fibres (a) Crocidolite (b) Amosite (c) Anthophyllite (d) Actinolite (e) Tremolite (f) Chrysotile	1. The manufacture, placing on the market and use of these fibres and of articles and mixtures containing these fibres added intentionally is prohibited.	2. The use of articles containing asbestos fibres referred to in paragraph 1 which were already installed and/or in service before 1 January 2005 shall continue to be permitted until they are disposed of or reach the end of their service life.
7	545-55-1	Tris(aziridinyl)phosphinoxide	1. Shall not be used in textile articles, such as garments, undergarments and linen, intended to come into contact with the skin. 2. Articles not complying with paragraph 1 shall not be placed on the market.	–
8	59536-65-1	Polybromobiphenyls; Polybrominatedbiphenyls (PBB)	1. Shall not be used in textile articles, such as garments, undergarments and linen, intended to come into contact with the skin. 2. Articles not complying with paragraph 1 shall not be placed on the market.	–
9	68990-67-0 – – 92-87-5 552-89-6 –	(a) Soap bark powder (Quillaja saponaria) and its derivatives containing saponines (b) Powder of the roots of Helleborus viridis and Helleborus niger (c) Powder of the roots of Veratrum album and Veratrum nigrum (d) Benzidine and/or its derivatives (e) o-Nitrobenzaldehyde (f) Wood powder	1. Shall not be used, in jokes and hoaxes or in mixtures or articles intended to be used as such, for instance as a constituent of sneezing powder and stink bombs. 2. Jokes and hoaxes, or mixtures or articles intended to be used as such, not complying with paragraph 1 shall not be placed on the market.	3. However, paragraphs 1 and 2 shall not apply to stink bombs containing not more than 1,5 ml of liquid.
10	12135-76-1 12124-99-1 9080-17-5	(a) Ammonium sulphide (b) Ammonium hydrogen sulphide (c) Ammonium polysulphide	1. Shall not be used, in jokes and hoaxes or in mixtures or articles intended to be used as such, for instance as a constituent of sneezing powder and stink bombs. 2. Jokes and hoaxes, or mixtures or articles intended to be used as such, not complying with paragraph 1 shall not be placed on the market.	3. However, paragraphs 1 and 2 shall not apply to stink bombs containing not more than 1,5 ml of liquid.
11	– 96-32-2 105-36-2 35223-80-4 18991-98-5	Volatile esters of bromoacetic acids: (a) Methyl bromoacetate (b) Ethyl bromoacetate (c) Propyl bromoacetate (d) Butyl bromoacetate	1. Shall not be used, in jokes and hoaxes or in mixtures or articles intended to be used as such, for instance as a constituent of sneezing powder and stink bombs. 2. Jokes and hoaxes, or mixtures or articles intended to be used as such, not complying with paragraph 1 shall not be placed on the market.	3. However, paragraphs 1 and 2 shall not apply to stink bombs containing not more than 1,5 ml of liquid.

12	91-59-8	2-naphthylamine and its salts	Shall not be placed on the market, or used, as substances or in mixtures in concentrations greater than 0,1 % by weight.	–
13	92-87-5	Benzidine and its salts	Shall not be placed on the market, or used, as substances or in mixtures in concentrations greater than 0,1 % by weight.	–
14	92-93-3	4-Nitrobiphenyl	Shall not be placed on the market, or used, as substances or in mixtures in concentrations greater than 0,1 % by weight.	–
15	92-67-1	4-Aminobiphenyl xenylamine and its salts	Shall not be placed on the market, or used, as substances or in mixtures in concentrations greater than 0,1 % by weight.	–
16	598-63-0 1319-46-6	Lead carbonates: (a) Neutral anhydrous carbonate (PbCO3) (b) Trilead-bis(carbonate)-dihydroxide 2PbCO3-Pb(OH)2	Shall not be placed on the market, or used, as substances or in mixtures, where the substance or mixture is intended for use as paint.	However, Member States may, in accordance with the provisions of International Labour Organization (ILO) Convention 13, permit the use on their territory of the substance or mixture for the restoration and maintenance of works of art and historic buildings and their interiors, as well as the placing on the market for such use. Where a Member State makes use of this derogation, it shall inform the Commission thereof.
17	7446-14-2 15739-80-7	Lead sulphates: (a) PbSO4 (b) PbxSO4	Shall not be placed on the market, or used, as substances or in mixtures, where the substance or mixture is intended for use as paint.	However, Member States may, in accordance with the provisions of International Labour Organization (ILO) Convention 13, permit the use on their territory of the substance or mixture for the restoration and maintenance of works of art and historic buildings and their interiors, as well as the placing on the market for such use. Where a Member State makes use of this derogation, it shall inform the Commission thereof.
18	–	Mercury compounds	Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is intended for use: (a) to prevent the fouling by micro-organisms, plants or animals of: — the hulls of boats, — cages, floats, nets and any other appliances or equipment used for fish or shellfish farming, — any totally or partly submerged appliances or equipment; (b) in the preservation of wood; (c) in the impregnation of heavy-duty industrial textiles and yarn intended for their manufacture; (d) in the treatment of industrial waters, irrespective of their use	
18a	7439-97-6	Mercury	1. Shall not be placed on the market: (a) in fever thermometers; (b) in other measuring devices intended for sale to the general public (such as manometers, barometers, sphygmomanometers, thermometers other than fever thermometers). 5. The following mercury-containing measuring devices intended for industrial and professional uses shall not be placed on the market after 10 April 2014: (a) barometers; (b) hygrometers; (c) manometers; (d) sphygmomanometers; (e) strain gauges to be used with plethysmographs; (f) tensiometers; (g) thermometers and other non-electrical thermometric applications. 7. The following mercury-using measuring devices intended for professional and industrial uses shall not be placed on the market after 10 April 2014: (a) mercury pycnometers; (b) mercury metering devices for determination of the softening point.	2. The restriction in paragraph 1 shall not apply to measuring devices that were in use in the Community before 3 April 2009. However Member States may restrict or prohibit the placing on the market of such measuring devices. 3. The restriction in paragraph 1(b) shall not apply to: (a) measuring devices more than 50 years old on 3 October 2007; (b) barometers (except barometers within point (a)) until 3 October 2009. 6. The restriction in paragraph 5 shall not apply to: (a) sphygmomanometers to be used: (i) in epidemiological studies which are ongoing on 10 October 2012; (ii) as reference standards in clinical validation studies of mercury-free sphygmomanometers; (b) thermometers exclusively intended to perform tests according to standards that require the use of mercury thermometers until 10 October 2017; (c) mercury triple point cells which are used for the calibration of platinum resistance thermometers. 8. The restrictions in paragraphs 5 and 7 shall not apply to: (a) measuring devices more than 50 years old on 3 October 2007; (b) measuring devices which are to be displayed in public exhibitions for cultural and historical purposes.

19	–	Arsenic compounds	1. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is intended for use to prevent the fouling by micro-organisms, plants or animals of: — the hulls of boats, — cages, floats, nets and any other appliances or equipment used for fish or shellfish farming, — any totally or partly submerged appliances or equipment. 2. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is intended for use in the treatment of industrial waters, irrespective of their use. 3. Shall not be used in the preservation of wood. Furthermore, wood so treated shall not be placed on the market.	4. By way of derogation from paragraph 3: (a) Relating to the substances and mixtures for the preservation of wood: these may only be used in industrial installations using vacuum or pressure to impregnate wood if they are solutions of inorganic compounds of the copper, chromium, arsenic (CCA) type C and if they are authorised in accordance with Article 5(1) of Directive 98/8/EC. Wood so treated shall not be placed on the market before fixation of the preservative is completed. (b) Wood treated with CCA solution in accordance with point (a) may be placed on the market for professional and industrial use provided that the structural integrity of the wood is required for human or livestock safety and skin contact by the general public during its service life is unlikely: — as structural timber in public and agricultural buildings, office buildings, and industrial premises, — in bridges and bridgework, as constructional timber in freshwater areas and brackish waters, for example jetties and bridges, as noise barriers, in avalanche control, in highway safety fencing and barriers, as debarked round conifer livestock fence posts, in earth retaining structures, as electric power transmission and telecommunications poles, as underground railway sleepers. (c) Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that all treated wood placed on the market is individually labelled 'For professional and industrial installation and use only, contains arsenic'. In addition, all wood placed on the market in packs shall also bear a label stating 'Wear gloves when handling this wood. Wear a dust mask and eye protection when cutting or otherwise crafting this wood. Waste from this wood shall be treated as hazardous by an authorised undertaking'. (d) Treated wood referred to under point (a) shall not be used: — in residential or domestic constructions, whatever the purpose, — in any application where there is a risk of repeated skin contact, — in marine waters, — for agricultural purposes other than for livestock fence posts and structural uses in accordance with point (b), — in any application where the treated wood may come into contact with intermediate or finished products intended for human and/or animal consumption. 5. Wood treated with arsenic compounds that was in use in the Community before 30 September 2007, or that was placed on the market in accordance with paragraph 4 may remain in place and continue to be used until it reaches the end of its service life. 6. Wood treated with CCA type C that was in use in the Community before 30 September 2007, or that was placed on the market in accordance with paragraph 4: — may be used or reused subject to the conditions pertaining to its use listed under points 4(b), (c) and (d), — may be placed on the market subject to the conditions pertaining to its use listed under points 4(b), (c) and (d). 7. Member States may allow wood treated with other types of CCA solutions that was in use in the Community before 30 September 2007: — to be used or reused subject to the conditions pertaining to its use listed under points 4 (b), (c) and (d), — to be placed on the market subject to the conditions pertaining to its use listed under points 4(b), (c) and (d).

20	–	Organostannic compounds	1. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is acting as biocide in free association paint. 2. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture acts as biocide to prevent the fouling by micro-organisms, plants or animals of: (a) all craft irrespective of their length intended for use in marine, coastal, estuarine and inland waterways and lakes; (b) cages, floats, nets and any other appliances or equipment used for fish or shellfish farming; (c) any totally or partly submerged appliance or equipment. 3. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is intended for use in the treatment of industrial waters. 4. Tri-substituted organostannic compounds: (a) Tri-substituted organostannic compounds such as tributyltin (TBT) compounds and triphenyltin (TPT) compounds shall not be used after 1 July 2010 in articles where the concentration in the article, or part thereof, is greater than the equivalent of 0,1 % by weight of tin. 5. Dibutyltin (DBT) compounds: (a) Dibutyltin (DBT) compounds shall not be used after 1 January 2012 in mixtures and articles for supply to the general public where the concentration in the mixture or the article, or part thereof, is greater than the equivalent of 0,1 % by weight of tin. 6. Dioctyltin (DOT) compounds: (a) Dioctyltin (DOT) compounds shall not be used after 1 January 2012 in the following articles for supply to, or use by, the general public, where the concentration in the article, or part thereof, is greater than the equivalent of 0,1 % by weight of tin: — textile articles intended to come into contact with the skin, gloves, footwear or part of footwear intended to come into contact with the skin, wall and floor coverings, childcare articles, female hygiene products, nappies, two-component room temperature vulcanisation moulding kits (RTV-2 moulding kits).	4. Tri-substituted organostannic compounds: (b) Articles not complying with point (a) shall not be placed on the market after 1 July 2010, except for articles that were already in use in the Community before that date. 5. Dibutyltin (DBT) compounds: (b) Articles and mixtures not complying with point (a) shall not be placed on the market after 1 January 2012, except for articles that were already in use in the Community before that date. (c) By way of derogation, points (a) and (b) shall not apply until 1 January 2015 to the following articles and mixtures for supply to the general public: — one-component and two-component room temperature vulcanisation sealants (RTV-1 and RTV-2 sealants) and adhesives, — paints and coatings containing DBT compounds as catalysts when applied on articles, — soft polyvinyl chloride (PVC) profiles whether by themselves or coextruded with hard PVC, — fabrics coated with PVC containing DBT compounds as stabilisers when intended for outdoor applications, — outdoor rainwater pipes, gutters and fittings, as well as covering material for roofing and façades, (d) By way of derogation, points (a) and (b) shall not apply to materials and articles regulated under Regulation (EC) No 1935/2004. 6. Dioctyltin (DOT) compounds: (b) Articles not complying with point (a) shall not be placed on the market after 1 January 2012, except for articles that were already in use in the Community before that date.
21	75113-37-0	Di-μ-oxo-di-n-butylstanniohydroxyborane/ Dibutyltin hydrogen borate C8H19BO3Sn (DBB)	Shall not be placed on the market, or used, as a substance, or in mixtures in a concentration equal to, or greater than 0,1 % by weight.	However, the first paragraph shall not apply to this substance (DBB) or mixtures containing it if these are intended solely for conversion into articles, among which this substance will no longer feature in a concentration equal to or greater than 0,1 %.

23	7440-43-9	Cadmium and its compounds	1. Shall not be used in mixtures and articles produced from the following synthetic organic polymers (hereafter referred to as plastic material): — polymers or copolymers of vinyl chloride (PVC) — polyurethane (PUR) — low-density polyethylene (LDPE), with the exception of low-density polyethylene used for the production of coloured masterbatch — cellulose acetate (CA) — cellulose acetate butyrate (CAB) — epoxy resins — melamine-formaldehyde (MF) resins — urea-formaldehyde (UF) resins — unsaturated polyesters (UP) — polyethylene terephthalate (PET) — polybutylene terephthalate (PBT) — transparent/general-purpose polystyrene — acrylonitrile methylmethacrylate (AMMA) — cross-linked polyethylene (VPE) — high-impact polystyrene — polypropylene (PP) Mixtures and articles produced from plastic material as listed above shall not be placed on the market if the concentration of cadmium (expressed as Cd metal) is equal to or greater than 0,01 % by weight of the plastic material. 2. Shall not be used or placed on the market in paints with codes [3208] [3209] in a concentration (expressed as Cd metal) equal to or greater than 0,01 % by weight. For paints with codes [3208] [3209] with a zinc content exceeding 10 % by weight of the paint, the concentration of cadmium (expressed as Cd metal) shall not be equal to or greater than 0,1 % by weight. Painted articles shall not be placed on the market if the concentration of cadmium (expressed as Cd metal) is equal to or greater than 0,1 % by weight of the paint on the painted article. 5. For the purpose of this entry, 'cadmium plating' means any deposit or coating of metallic cadmium on a metallic surface. Shall not be used for cadmium plating metallic articles or components of the articles used in the following sectors/applications: (a) equipment and machinery for: — food production, agriculture, cooling and freezing, printing and book-binding (b) equipment and machinery for the production of: — household goods, furniture, sanitary ware, central heating and air conditioning plant In any case, whatever their use or intended final purpose, the placing on the market of cadmium-plated articles or components of such articles used in the sectors/applications listed in points (a) and (b) above and of articles manufactured in the sectors listed in point (b) above is prohibited. 6. The provisions referred to in paragraph 5 shall also be applicable to cadmium-plated articles or components of such articles when used in the sectors/applications listed in points (a) and (b) below and to articles manufactured in the sectors listed in (b) below: (a) equipment and machinery for the production of: — paper and board (b) equipment and machinery for the production of: — industrial handling equipment and machinery, road and agricultural vehiclesx, rolling stock, vessels 8. Shall not be used in brazing fillers in concentration equal to or greater than 0,01 % by weight. Brazing fillers shall not be placed on the market if the concentration of cadmium (expressed as Cd metal) is equal to or greater than 0,01 % by weight. For the purpose of this paragraph brazing shall mean a joining technique using alloys and undertaken at temperatures above 450 °C. 10. Shall not be used or placed on the market if the concentration is equal to or greater than 0,01 % by weight of the metal in: (i) metal beads and other metal components for jewellery making; (ii) metal parts of jewellery and imitation jewellery articles and hair accessories, including: — bracelets, necklaces and rings, piercing jewellery, wrist-watches and wrist-wear, brooches and cufflinks.	1. By way of derogation, the second subparagraph shall not apply to articles placed on the market before 10 December 2011. 3. By way of derogation, paragraphs 1 and 2 shall not apply to articles coloured with mixtures containing cadmium for safety reasons. 4. By way of derogation, paragraph 1, second sub paragraph shall not apply to: — mixtures produced from PVC waste, hereinafter referred to as 'recovered PVC', — mixtures and articles containing recovered PVC if their concentration of cadmium (expressed as Cd metal) does not exceed 0,1 % by weight of the plastic material in the following rigid PVC applications: (a) profiles and rigid sheets for building applications; (b) doors, windows, shutters, walls, blinds, fences, and roof gutters; (c) decks and terraces; (d) cable ducts; (e) pipes for non-drinking water if the recovered PVC is used in the middle layer of a multilayer pipe and is entirely covered with a layer of newly produced PVC in compliance with paragraph 1 above. 7. However, the restrictions in paragraphs 5 and 6 shall not apply to: — articles and components of the articles used in the aeronautical, aerospace, mining, offshore and nuclear sectors whose applications require high safety standards and in safety devices in road and agricultural vehicles, rolling stock and vessels, — electrical contacts in any sector of use, where that is necessary to ensure the reliability required of the apparatus on which they are installed. 9. By way of derogation, paragraph 8 shall not apply to brazing fillers used in defence and aerospace applications and to brazing fillers used for safety reasons. 11. By way of derogation, paragraph 10 shall not apply to articles placed on the market before 10 December 2011 and jewellery more than 50 years old on 10 December 2011.
24	76253-60-6	Monomethyl — tetrachlorodiphenyl methane Trade name: UgilEC 141	1. Shall not be placed on the market, or used, as a substance or in mixtures. Articles containing the substance shall not be placed on the market.	2. By way of derogation, paragraph 1 shall not apply: (a) in the case of plant and machinery already in service on 18 June 1994, until such plant and machinery is disposed of; (b) in the case of the maintenance of plant and machinery already in service within a Member State on 18 June 1994. For the purposes of point (a) Member States may, on grounds of human health protection and environmental protection, prohibit within their territory the use of such plant or machinery before it is disposed of.
25	–	Monomethyl-dichloro-diphenyl methane Trade name: UgilEC 121UgilEC 21	Shall not be placed on the market, or used, as a substance or in mixtures. Articles containing the substance shall not be placed on the market	–
26	99688-47-8	Monomethyl-dibromo-diphenyl methane bromobenzylbromotoluene, mixture of isomers Trade name: DBBT	Shall not be placed on the market, or used, as a substance or in mixtures. Articles containing the substance shall not be placed on the market.	–

27	7440-02-0	Nickel and its compounds	1. Shall not be used: (a) in any post assemblies which are inserted into pierced ears and other pierced parts of the human body unless the rate of nickel release from such post assemblies is less than 0,2 μg/cm²/week (migration limit); (b) in articles intended to come into direct and prolonged contact with the skin such as: — earrings, — necklaces, bracelets and chains, anklets, finger rings, — wrist-watch cases, watch straps and tighteners, — rivet buttons, tighteners, rivets, zippers and metal marks, when these are used in garments, if the rate of nickel release from the parts of these articles coming into direct and prolonged contact with the skin is greater than 0,5 μg/cm²/week. (c) in articles referred to in point (b) where these have a non-nickel coating unless such coating is sufficient to ensure that the rate of nickel release from those parts of such articles coming into direct and prolonged contact with the skin will not exceed 0,5 μg/cm²/week for a period of at least two years of normal use of the article. 2. Articles which are the subject of paragraph 1 shall not be placed on the market unless they conform to the requirements set out in that paragraph. 3. The standards adopted by the European Committee for Standardisation (CEN) shall be used as the test methods for demonstrating the conformity of articles to paragraphs 1 and 2.	-
28	-	Substances which are classified as carcinogen category 1A or 1B in Part 3 of Annex VI to Regulation (EC) No 1272/2008 and are listed in Appendix 1 or Appendix 2, respectively.	1. Shall not be placed on the market, or used, — as substances, — as constituents of other substances, or, — in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: — either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or, — the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008.	2. By way of derogation, paragraph 1 shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC; (c) the following fuels and oil products: — motor fuels which are covered by Directive 98/70/EC, — mineral oil products intended for use as fuel in mobile or fixed combustion plants, — fuels sold in closed systems (e.g. liquid gas bottles); (d) artists' paints covered by Regulation (EC) No 1272/2008; (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date. (f) devices covered by Regulation (EU) 2017/745
29	-	Substances which are classified as germ cell mutagen category 1A or 1B in Part 3 of Annex VI to Regulation (EC) No 1272/2008 and are listed in Appendix 3 or Appendix 4, respectively.	1. Shall not be placed on the market, or used, — as substances, — as constituents of other substances, or, — in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: — either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or, — the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008.	2. By way of derogation, paragraph 1 shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC; (c) the following fuels and oil products: — motor fuels which are covered by Directive 98/70/EC, — mineral oil products intended for use as fuel in mobile or fixed combustion plants, — fuels sold in closed systems (e.g. liquid gas bottles); (d) artists' paints covered by Regulation (EC) No 1272/2008; (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date. (f) devices covered by Regulation (EU) 2017/745
30	-	Substances which are classified as reproductive toxicant category 1A or 1B in Part 3 of Annex VI to Regulation (EC) No 1272/2008 and are listed in Appendix 5 or Appendix 6, respectively.	1. Shall not be placed on the market, or used, — as substances, — as constituents of other substances, or, — in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: — either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or, — the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008.	2. By way of derogation, paragraph 1 shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC; (c) the following fuels and oil products: — motor fuels which are covered by Directive 98/70/EC, — mineral oil products intended for use as fuel in mobile or fixed combustion plants, — fuels sold in closed systems (e.g. liquid gas bottles); (d) artists' paints covered by Regulation (EC) No 1272/2008; (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date. (f) devices covered by Regulation (EU) 2017/745

31	8001-58-9 61789-28-4 84650-04-4 90640-84-9 65996-91-0 90640-80-5 65996-85-2 8021-39-4 122384-78-5	Creosote and Creosote related substances: (a) Creosote; wash oil (b) Creosote oil; wash oil (c) Distillates (coal tar), naphthalene oils; naphthalene oil (d) Creosote oil, acenaphthene fraction; wash oil (e) Distillates (coal tar), upper; heavy anthracene oil (f) Anthracene oil (g) Tar acids, coal, crude; crude phenols (h) Creosote, wood (i) Low temperature tar oil, alkaline; extract residues (coal), low temperature coal tar alkaline	1. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is intended for the treatment of wood. Furthermore, wood so treated shall not be placed on the market. 3. Treated wood referred to under paragraph 2(b) and (c) shall not be used: — inside buildings, whatever their purpose, — in toys, — in playgrounds, — in parks, gardens, and outdoor recreational and leisure facilities where there is a risk of frequent skin contact, — in the manufacture of garden furniture such as picnic tables, — for the manufacture and use and any re-treatment of: — containers intended for growing purposes, — packaging that may come into contact with raw materials, intermediate or finished products destined for human and/or animal consumption, — other materials which may contaminate the articles mentioned above	2. By way of derogation from paragraph 1: (a) The substances and mixtures may be used for wood treatment in industrial installations or by professionals covered by Community legislation on the protection of workers for in situ retreatment only if they contain: (i) benzo[a]pyrene at a concentration of less than 50 mg/kg (0,005 % by weight), and (ii) water extractable phenols at a concentration of less than 3 % by weight. Such substances and mixtures for use in wood treatment in industrial installations or by professionals: — may be placed on the market only in packaging of a capacity equal to or greater than 20 litres, — shall not be sold to consumers. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is visibly, legibly and indelibly marked as follows: 'For use in industrial installations or professional treatment only'. (b) Wood treated in industrial installations or by professionals according to subparagraph (a) which is placed on the market for the first time or retreated in situ may be used for professional and industrial use only, for example on railways, in electric power transmission and telecommunications, for fencing, for agricultural purposes (for example stakes for tree support) and in harbours and waterways. (c) The prohibition in paragraph 1 on the placing on the market shall not apply to wood which has been treated with substances listed in entry 31 (a) to (i) before 31 December 2002 and is placed on the second-hand market for re-use.
32	67-66-3	Chloroform	1. Shall not be placed on the market, or used, — as substances, — as constituents of other substances, or in mixtures in concentrations equal to or greater than 0,1 % by weight, where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics.	By way of derogation this provision shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC.
33	Missing number			
34	79-00-5	1,1,2-Trichloroethane	1. Shall not be placed on the market, or used, — as substances, — as constituents of other substances, or in mixtures in concentrations equal to or greater than 0,1 % by weight, where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics.	By way of derogation this provision shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC.
35	79-34-5	1,1,2,2-Tetrachloroethane	1. Shall not be placed on the market, or used, — as substances, — as constituents of other substances, or in mixtures in concentrations equal to or greater than 0,1 % by weight, where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics.	By way of derogation this provision shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC.
36	630-20-6	1,1,1,2-Tetrachloroethane	1. Shall not be placed on the market, or used, — as substances, — as constituents of other substances, or in mixtures in concentrations equal to or greater than 0,1 % by weight, where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics.	By way of derogation this provision shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC.
37	76-01-7	Pentachloroethane	1. Shall not be placed on the market, or used, — as substances, — as constituents of other substances, or in mixtures in concentrations equal to or greater than 0,1 % by weight, where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics.	By way of derogation this provision shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC.
38	75-35-4	1,1-Dichloroethene	1. Shall not be placed on the market, or used, — as substances, — as constituents of other substances, or in mixtures in concentrations equal to or greater than 0,1 % by weight, where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics.	By way of derogation this provision shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC.
39	Missing number			

40	–	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not	1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following: — metallic glitter intended mainly for decoration, — artificial snow and frost, — 'whoopee' cushions, — silly string aerosols, — imitation excrement, — horns for parties, — decorative flakes and foams, — artificial cobwebs, — stink bombs.	3. By way of derogation, paragraphs 1 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/324/EEC.
41	67-72-1	Hexachloroethane	Shall not be placed on the market, or used, as substance or in mixtures, where the substance or mixture is intended for the manufacturing or processing of non-ferrous metals.	–
42	Missing number			
43	–	Azocolourants and Azodyes	1. Azodyes which, by reductive cleavage of one or more azo groups, may release one or more of the aromatic amines listed in Appendix 8, in detectable concentrations, i.e. above 30 mg/kg (0,003 % by weight) in the articles or in the dyed parts thereof, according to the testing methods listed in Appendix 10, shall not be used, in textile and leather articles which may come into direct and prolonged contact with the human skin or oral cavity, such as: — clothing, bedding, towels, hairpieces, wigs, hats, nappies and other sanitary items, sleeping bags, — footwear, gloves, wristwatch straps, handbags, purses/wallets, briefcases, chair covers, purses worn round the neck, — textile or leather toys and toys which include textile or leather garments, — yarn and fabrics intended for use by the final consumer. 2. Furthermore, the textile and leather articles referred to in paragraph 1 shall not be placed on the market unless they conform to the requirements set out in that paragraph. 3. Azodyes, which are contained in Appendix 9, 'List of azodyes' shall not be placed on the market, or used, as substances, or in mixtures in concentrations greater than 0,1 % by weight, where the substance or the mixture is intended for colouring textile and leather articles.	–
44	Missing number			
45	–	Diphenylether, octabromo derivative C12H2Br8O	1. Shall not be placed on the market, or used: — as a substance, — as a constituent of other substances, or in mixtures, in concentrations greater than 0,1 % by weight. 2. Articles shall not be placed on the market if they, or flame-retardant parts thereof, contain this substance in concentrations greater than 0,1 % by weight.	3. By way of derogation, paragraph 2 shall not apply: — to articles that were in use in the Community before 15 August 2004, — to electrical and electronic equipment within the scope of Directive 2002/95/EC.
46	25154-52-3 –	(a) Nonylphenol C6H4(OH)C9H19 (b) Nonylphenol ethoxylates (C2H4O)nC15H24O	Shall not be placed on the market, or used, as substances or in mixtures in concentrations equal to or greater than 0,1 % by weight for the following purposes: (1) industrial and institutional cleaning; (2) domestic cleaning; (3) textiles and leather processing; (4) emulsifier in agricultural teat dips; (5) metal working; (6) manufacturing of pulp and paper; (7) cosmetic products; (8) other personal care products; (9) co-formulants in pesticides and biocides.	(1) industrial and institutional cleaning except: — controlled closed dry cleaning systems where the washing liquid is recycled or incinerated, — cleaning systems with special treatment where the washing liquid is recycled or incinerated. (3) textiles and leather processing except: — processing with no release into waste water, — systems with special treatment where the process water is pre-treated to remove the organic fraction completely prior to biological waste water treatment (degreasing of sheepskin); (5) metal working except: — uses in controlled closed systems where the washing liquid is recycled or incinerated; (8) other personal care products except: — spermicides; (9) However national authorisations for pesticides or biocidal products containing nonylphenol ethoxylates as co-formulant, granted before 17 July 2003, shall not be affected by this restriction until their date of expiry.
46a	–	Nonylphenol ethoxylates (NPE) (C2H4O)nC15H24O	1. Shall not be placed on the market after 3 February 2021 in textile articles which can reasonably be expected to be washed in water during their normal lifecycle, in concentrations equal to or greater than 0,01 % by weight of that textile article or of each part of the textile article.	2. Paragraph 1 shall not apply to the placing on the market of second-hand textile articles or of new textile articles produced, without the use of NPE, exclusively from recycled textiles.

47	–	Chromium VI compounds	1. Cement and cement-containing mixtures shall not be placed on the market, or used, if they contain, when hydrated, more than 2 mg/kg (0,0002%) soluble chromium VI of the total dry weight of the cement. 2. If reducing agents are used, then without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of cement or cement containing mixtures is visibly, legibly and indelibly marked with information on the packing date, as well as on the storage conditions and the storage period appropriate to maintaining the activity of the reducing agent and to keeping the content of soluble chromium VI below the limit indicated in paragraph 1. 4. The standard adopted by the European Committee for Standardization (CEN) for testing the water-soluble chromium (VI) content of cement and cement-containing mixtures shall be used as the test method for demonstrating conformity with paragraph 1. 5. Leather articles coming into contact with the skin shall not be placed on the market where they contain chromium VI in concentrations equal to or greater than 3 mg/kg (0,0003 % by weight) of the total dry weight of the leather. 6. Articles containing leather parts coming into contact with the skin shall not be placed on the market where any of those leather parts contains chromium VI in concentrations equal to or greater than 3 mg/kg (0,0003 % by weight) of the total dry weight of that leather part.	3. By way of derogation, paragraphs 1 and 2 shall not apply to the placing on the market for, and use in, controlled closed and totally automated processes in which cement and cement containing mixtures are handled solely by machines and in which there is no possibility of contact with the skin. 7. Paragraphs 5 and 6 shall not apply to the placing on the market of second-hand articles which were in end-use in the Union before 1 May 2015.
48	108-88-3	Toluene	Shall not be placed on the market, or used, as a substance or in mixtures in a concentration equal to or greater than 0,1 % by weight where the substance or mixture is used in adhesives or spray paints intended for supply to the general public.	–
49	120-82-1	Trichlorobenzene	Shall not be placed on the market, or used, as a substance or in mixtures in a concentration equal to or greater than 0,1 % by weight for any use	Except: — as an intermediate of synthesis, or, — as a process solvent in closed chemical applications for chlorination reactions, or, — in the manufacture of 1,3,5-triamino-2,4,6-trinitrobenzene (TATB).
50		Polycyclic-aromatic hydrocarbons (PAH) 50-32-8 (a) Benzo[a]pyrene (BaP) 192-97-2 (b) Benzo[e]pyrene (BeP) 56-55-3 (c) Benzo[a]anthracene (BaA) 218-01-9 (d) Chrysen (CHR) 205-99-2 (e) Benzo[b]fluoranthene (BbFA) 205-82-3 (f) Benzo[j]fluoranthene (BjFA) 207-08-9 (g) Benzo[k]fluoranthene (BkFA) 53-70-3 (h) Dibenzo[a,h]anthracene (DBAhA)	1. From 1 January 2010, extender oils shall not be placed on the market, or used for the production of tyres or parts of tyres if they contain: — more than 1 mg/kg (0,0001 % by weight) BaP, or, — more than 10 mg/kg (0,001 % by weight) of the sum of all listed PAHs. 2. Furthermore, tyres and treads for retreading manufactured after 1 January 2010 shall not be placed on the market if they contain extender oils exceeding the limits indicated in paragraph 1. 4. For the purpose of this entry ‘tyres’ shall mean tyres for vehicles covered by: — Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, — Directive 2003/37/EC of the European Parliament and of the Council of 26 May 2003 on type approval of agricultural or forestry tractors, their trailers and interchangeable towed machinery, together with their systems, components and separate technical units, and — Directive 2002/24/EC of the European Parliament and of the Council of 18 March 2002 relating to the type-approval of two or three-wheel motor vehicles and repealing Council Directive 92/61/EEC. 5. Articles shall not be placed on the market for supply to the general public, if any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of use, contain more than 1 mg/kg (0,0001 % by weight of this component) of any of the listed PAHs. 6. Toys, including activity toys, and childcare articles, shall not be placed on the market, if any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of use, contain more than 0,5 mg/kg (0,00005 % by weight of this component) of any of the listed PAHs. 9. Granules or mulches shall not be placed on the market for use as infill material in synthetic urf pitches or in loose form on playgrounds or in sport applications if they contain more than 20 mg/kg (0,002 % by weight) of the sum of all listed PAHs. 10. Granules or mulches shall not be used as infill material in synthetic turf pitches or in loose form on playgrounds or in sport applications if they contain more than 20 mg/kg (0,002 % by weight) of the sum of all listed PAHs	3. By way of derogation, paragraph 2 shall not apply to retreaded tyres if their tread does not contain extender oils exceeding the limits referred to in paragraph 1. 7. By way of derogation from paragraphs 5 and 6, these paragraphs shall not apply to articles placed on the market for the first time before 27 December 2015.

51	117-81-7 84-74-2 85-68-7 84-69-5	The following phthalates (or other CAS numbers covering the substance): (a) Bis (2-ethylhexyl) phthalate (DEHP) (b) Dibutyl phthalate (DBP) (c) Benzyl butyl phthalate (BBP) (d) Diisobutyl phthalate (DIBP)	1. Shall not be used as substances or in mixtures, individually or in any combination of the phthalates listed in column 1 of this entry, in a concentration equal to or greater than 0,1 % by weight of the plasticised material, in toys and childcare articles. 2. Shall not be placed on the market in toys or childcare articles, individually or in any combination of the first three phthalates listed in column 1 of this entry, in a concentration equal to or greater than 0,1 % by weight of the plasticised material. In addition, DIBP shall not be placed on the market after 7 July 2020 in toys or childcare articles, individually or in any combination with the first three phthalates listed in column 1 of this entry, in a concentration equal to or greater than 0,1 % by weight of the plasticised material. 3. Shall not be placed on the market after 7 July 2020 in articles, individually or in any combination of the phthalates listed in column 1 of this entry, in a concentration equal to or greater than 0,1 % by weight of the plasticised material in the article. 5. For the purposes of paragraphs 1, 2, 3 and 4(a), (a) 'plasticised material' means any of the following homogeneous materials: – polyvinyl chloride (PVC), polyvinylidene chloride (PVDC),polyvinyl acetate (PVA), polyurethanes, – any other polymer (including, inter alia, polymer foams and rubber material) except silicone rubber and natural latex coatings, – surface coatings, non-slip coatings, finishes, decals, printed designs, – adhesives, sealants, paints and inks. (b) '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. (c) 'childcare article' shall mean any product intended to facilitate sleep, relaxation, hygiene, the feeding of children or sucking on the part of children. 6. For the purposes of paragraph 4(b), 'aircraft' means one of the following: (a) a civil aircraft produced in accordance with a type certificate issued under Regulation (EC) No 216/2008 or with a design approval issued under the national regulations of a contracting State of the International Civil Aviation Organisation (ICAO), or for which a certificate of airworthiness has been issued by an ICAO contracting State under Annex 8 to the Convention on International Civil Aviation, signed on December 7, 1944 , in Chicago; (b) a military aircraft.	4. Paragraph 3 shall not apply to: (a) articles exclusively for industrial or agricultural use, or for use exclusively in the open air, provided that no plasticised material comes into contact with human mucous membranes or into prolonged contact with human skin; (b) aircraft, placed on the market before 7 January 2024, or articles, whenever placed on the market, for use exclusively in the maintenance or repair of those aircraft, where those articles are essential for the safety and airworthiness of the aircraft; (c) motor vehicles within the scope of Directive 2007/46/EC, placed on the market before 7 January 2024, or articles, whenever placed on the market, for use exclusively in the maintenance or repair of those vehicles, where the vehicles cannot function as intended without those articles; (d) articles placed on the market before 7 July 2020; (e) measuring devices for laboratory use, or parts thereof; (f) materials and articles intended to come into contact with food within the scope of Regulation (EC) No 1935/2004 or Commission Regulation (EU) No 10/20111; (g) medical devices within the scope of Directives 90/385/EEC, 93/42/EEC or 98/79/EC, or parts thereof; (h) electrical and electronic equipment within the scope of Directive 2011/65/EU; (i) the immediate packaging of medicinal products within the scope of Regulation (EC) No 726/2004, Directive 2001/82/EC or Directive 2001/83/EC; (j) toys and childcare articles covered by paragraphs 1 or 2.
52	28553-12-0 68515-48-0 26761-40-0 68515-49-1 117-84-0	The following phthalates (or other CAS numbers covering the substance): (a) Di-'isononyl' phthalate (DINP) (b) Di-'isodecyl' phthalate (DIDP) (c) Di-n-octyl phthalate (DNOP)	1. Shall not be used as substances or in mixtures, in concentrations greater than 0,1 % by weight of the plasticised material, in toys and childcare articles which can be placed in the mouth by children. 2. Such toys and childcare articles containing these phthalates in a concentration greater than 0,1 % by weight of the plasticised material shall not be placed on the market.	–
53	Missing number			
54	111-77-3	2-(2-methoxyethoxy)ethanol (DEGME)	Shall not be placed on the market after 27 June 2010, for supply to the general public, as a constituent of paints, paint strippers, cleaning agents, self-shining emulsions or floor sealants in concentrations equal to or greater than 0,1 % by weight.	–
55	112-34-5	2-(2-butoxyethoxy)ethanol (DEGBE)	1. Shall not be placed on the market for the first time after 27 June 2010, for supply to the general public, as a constituent of spray paints or spray cleaners in aerosol dispensers in concentrations equal to or greater than 3 % by weight. 2. Spray paints and spray cleaners in aerosol dispensers containing DEGBE and not conforming to paragraph 1 shall not be placed on the market for supply to the general public after 27 December 2010.	–
56	26447-40-5 101-68-8 5873-54-1 2536-05-2	Methylenediphenyl diisocyanate (MDI) including the following specific isomers: (a) 4,4' -Methylenediphenyl diisocyanate: (b) 2,4' -Methylenediphenyl diisocyanate: (c) 2,2' -Methylenediphenyl diisocyanate	1. Shall not be placed on the market after 27 December 2010, as a constituent of mixtures in concentrations equal to or greater than 0,1 % by weight of MDI for supply to the general public, unless suppliers shall ensure before the placing on the market that the packaging: (a) contains protective gloves which comply with the requirements of Council Directive 89/686/EEC (*); (b) is marked visibly, legibly and indelibly as follows, and without prejudice to other Community legislation concerning the classification, packaging and labelling of substances and mixtures: '— Persons already sensitised to diisocyanates may develop allergic reactions when using this product. — Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. — This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.'	2. By way of derogation, paragraph 1(a) shall not apply to hot melt adhesives.
57	110-82-7	Cyclohexane	1. Shall not be placed on the market for the first time after 27 June 2010, for supply to the general public, as a constituent of neoprene-based contact adhesives in concentrations equal to or greater than 0,1 % by weight in package sizes greater than 350 g. 2. Neoprene-based contact adhesives containing cyclohexane and not conforming to paragraph 1 shall not be placed on the market for supply to the general public after 27 December 2010.	–
58	6484-52-2	Ammonium nitrate (AN)	1. Shall not be placed on the market for the first time after 27 June 2010 as a substance, or in mixtures that contain more than 28 % by weight of nitrogen in relation to ammonium nitrate, for use as a solid fertiliser, straight or compound, unless the fertiliser complies with the technical provisions for ammonium nitrate fertilisers of high nitrogen content set out in Annex III to Regulation (EC) No 2003/2003 of the European Parliament and of the Council.	–
59	75-09-2	Dichloromethane	1. Paint strippers containing dichloromethane in a concentration equal to or greater than 0,1 % by weight shall not be: (a) placed on the market for the first time for supply to the general public or to professionals after 6 December 2010; (b) placed on the market for supply to the general public or to professionals after 6 December 2011; (c) used by professionals after 6 June 2012.	2. By way of derogation from paragraph 1, Member States may allow on their territories and for certain activities the use, by specifically trained professionals, of paint strippers containing dichloromethane and may allow the placing on the market of such paint strippers for supply to those professionals.

60	79-06-1	Acrylamide	Shall not be placed on the market or used as a substance or constituent of mixtures in a concentration, equal to or greater than 0,1 % by weight for grouting applications after 5 November 2012.	–
61	624-49-7	Dimethylfumarate (DMF)	Shall not be used in articles or any parts thereof in concentrations greater than 0,1 mg/kg. Articles or any parts thereof containing DMF in concentrations greater than 0,1 mg/kg shall not be placed on the market.	–
62	62-38-4 103-27-5 13302-00-6 13864-38-5 2654-49-3	(a) Phenylmercury acetate (b) Phenylmercury propionate (c) Phenylmercury 2-ethylhexanoate (d) Phenylmercury octanoate (e) Phenylmercury neodecanoate	1. Shall not be manufactured, placed on the market or used as substances or in mixtures after 10 October 2017 if the concentration of mercury in the mixtures is equal to or greater than 0,01 % by weight. 2. Articles or any parts thereof containing one or more of these substances shall not be placed on the market after 10 October 2017 if the concentration of mercury in the articles or any part thereof is equal to or greater than 0,01 % by weight.	–
63	7439-92-1	Lead and its compounds	1. Shall not be placed on the market or used in any individual part of jewellery articles if the concentration of lead (expressed as metal) in such a part is equal to or greater than 0,05 % by weight. 2. For the purposes of paragraph 1: (i) 'jewellery articles' shall include jewellery and imitation jewellery articles and hair accessories, including: (a) bracelets, necklaces and rings; (b) piercing jewellery; (c) wrist watches and wrist-wear; (d) brooches and cufflinks; (ii) 'any individual part' shall include the materials from which the jewellery is made, as well as the individual components of the jewellery articles. 3. Paragraph 1 shall also apply to individual parts when placed on the market or used for jewellery-making. 7. Shall not be placed on the market or used in articles supplied to the general public, if the concentration of lead (expressed as metal) in those articles or accessible parts thereof is equal to or greater than 0,05 % by weight, and those articles or accessible parts thereof may, during normal or reasonably foreseeable conditions of use, be placed in the mouth by children.	4. By way of derogation, paragraph 1 shall not apply to: (a) crystal glass as defined in Annex I (categories 1, 2, 3 and 4) to Council Directive 69/493/EEC (*); (b) internal components of watch timepieces inaccessible to consumers; (c) non-synthetic or reconstructed precious and semiprecious stones (CN code 7103, as established by Regulation (EEC) No 2658/87), unless they have been treated with lead or its compounds or mixtures containing these substances; (d) enamels, defined as vitrifiable mixtures resulting from the fusion, vitrification or sintering of minerals melted at a temperature of at least 500 °C. 5. By way of derogation, paragraph 1 shall not apply to jewellery articles placed on the market for the first time before 9 October 2013 and jewellery articles produced before 10 December 1961.
64	106-46-7	1,4-dichlorobenzene	Shall not be placed on the market or used, as a substance or as a constituent of mixtures in a concentration equal to or greater than 1 % by weight, where the substance or the mixture is placed on the market for use or used as an air freshener or deodoriser in toilets, homes, offices or other indoor public areas.	–
65	–	Inorganic ammonium salts	1. Shall not be placed on the market, or used, in cellulose insulation mixtures or cellulose insulation articles after 14 July 2018 unless the emission of ammonia from those mixtures or articles results in a concentration of less than 3 ppm by volume (2,12 mg/m3).	2. By way of derogation, paragraph 1 shall not apply to placing on the market of cellulose insulation mixtures intended to be used solely for the production of cellulose insulation articles, or to the use of those mixtures in the production of cellulose insulation articles.
66	80-05-7	Bisphenol A	Shall not be placed on the market in thermal paper in a concentration equal to or greater than 0,02 % by weight after 2 January 2020.	–
68	–	C9-C14 linear and/or branched perfluorocarboxylic acids (C9-C14 PFCAs), their salts and C9-C14 PFCAs-related substances	1. Shall not be manufactured, or placed on the market as substances on their own from 25 February 2023. 2. Shall not, from 25 February 2023, be used in, or placed on the market in: (a) another substance, as a constituent; (b) a mixture; (c) an article, except if the concentration in the substance, the mixture, or the article is below 25 ppb for the sum of C9-C14 PFCAs and their salts or 260 ppb for the sum of C9-C14 PFCA-related substances.	5. By way of derogation to paragraph 2, the use of C9-C14 PFCAs, their salts and C9-C14 PFCA-related substances shall be allowed until 4 July 2025 for: (i) photolithography or etch processes in semiconductor manufacturing; (ii) photographic coatings applied to films; (iii) invasive and implantable medical devices; (iv) fire-fighting foam for liquid fuel vapour suppression and liquid fuel fire (Class B fires) already installed in systems, including both mobile and fixed systems, subject to the following conditions: – fire-fighting foam that contains or may contain C9-C14 PFCAs, their salts and C9-C14 PFCA-related substances shall not be used for training; – fire-fighting foam that contains or may contain C9-C14 PFCAs, their salts and C9-C14 PFCA-related substances shall not be used for testing unless all releases are contained; – from 1 January 2023, uses of fire-fighting foam that contains or may contain C9-C14 PFCAs, their salts and C9-C14 PFCA-related substances shall only be allowed to sites where all releases can be contained; – fire-fighting foam stockpiles that contain or may contain C9-C14 PFCAs, their salts and C9-C14 PFCA-related substances shall be managed in accordance with Article 5 of Regulation (EU) 2019/1021.
69	67-56-1	Methanol	Shall not be placed on the market to the general public after 9 May 2019 in windscreen washing or defrosting fluids, in a concentration equal to or greater than 0,6 % by weight.	–
70	556-67-2 541-02-6 540-97-6	Octamethylcyclotetrasiloxane (D4) Decamethylcyclopentasiloxane (D5) Dodecamethylcyclohexasiloxane (D6)	1. Shall not be placed on the market (a) as a substance on its own; (b) as a constituent of other substances; or (c) in mixtures; in a concentration equal to or greater than 0,1 % by weight of the respective substance after 6 June 2026. 2. Shall not be used as a solvent for the dry cleaning of textiles, leather and fur after 6 June 2026.	3. By way of derogation: (a) for D4 and D5 in wash-off cosmetic products, paragraph 1, point (c), shall apply after 31 January 2020.

71	872-50-4	1-methyl-2-pyrrolidone (NMP)	1. Shall not be placed on the market as a substance on its own or in mixtures in a concentration equal to or greater than 0,3 % after 9 May 2020 unless manufacturers, importers and downstream users have included in the relevant chemical safety reports and safety data sheets, Derived No-Effect Levels (DNELs) relating to exposure of workers of 14,4 mg/m3 for exposure by inhalation and 4,8 mg/kg/day for dermal exposure. 2. Shall not be manufactured, or used, as a substance on its own or in mixtures in a concentration equal to or greater than 0,3 % after 9 May 2020 unless manufacturers and downstream users take the appropriate risk management measures and provide the appropriate operational conditions to ensure that exposure of workers is below the DNELs specified in paragraph 1. 3. By way of derogation from paragraphs 1 and 2, the obligations laid down therein shall apply from 9 May 2024 in relation to placing on the market for use, or use, as a solvent or reactant in the process of coating wires.	-
72	-	The substances listed in column 1 of the Table in Appendix 12	1. Shall not be placed on the market after 1 November 2020 in any of the following: (a) clothing or related accessories; (b) textiles other than clothing which, under normal or reasonably foreseeable conditions of use, come into contact with human skin to an extent similar to clothing; (c) footwear; if the clothing, related accessory, textile other than clothing or footwear is for use by consumers and the substance is present in a concentration, measured in homogeneous material, equal to or greater than that specified for that substance in Appendix 12. 2. By way of derogation, in relation to the placing on the market of formaldehyde [CAS No 50-00-0] in jackets, coats or upholstery, the relevant concentration for the purposes of paragraph 1 shall be 300 mg/kg during the period between 1 November 2020 and 1 November 2023. The concentration specified in Appendix 12 shall apply thereafter.	3. Paragraph 1 shall not apply to: (a) clothing, related accessories or footwear, or parts of clothing, related accessories or footwear, made exclusively of natural leather, fur or hide; (b) non-textile fasteners and non-textile decorative attachments; (c) second-hand clothing, related accessories, textiles other than clothing or footwear (d) wall-to-wall carpets and textile floor coverings for indoor use, rugs and runners. 4. Paragraph 1 shall not apply to clothing, related accessories, textiles other than clothing, or footwear within the scope of Regulation (EU) 2016/425 of the European Parliament and of the Council or Regulation (EU) 2017/745 of the European Parliament and of the Council. 5. Paragraph 1(b) shall not apply to disposable textiles. 'Disposable textiles' means textiles that are designed to be used only once or for a limited time and are not intended for subsequent use for the same or a similar purpose.
73	-	(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl) silanetriol Any of its mono-, di- or tri-O-(alkyl) derivatives (TDFAs)	1. Shall not be placed on the market for supply to the general public after 2 January 2021 individually or in any combination, in a concentration equal to or greater than 2 ppb by weight of the mixtures containing organic solvents, in spray products.	4. Section 2.3 of Safety Data Sheets shall contain the following information: "mixtures of (3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl) silanetriol and/or any of its mono-, di- or tri-O-(alkyl) derivatives in a concentration equal to or greater than 2 ppb and organic solvents in spray products, are for professional users only and marked 'Fatal if inhaled' ".
74	-	Diisocyanates, O = C=N-R-N = C=O, with R an aliphatic or aromatic hydrocarbon unit of unspecified length	1. Shall not be used as substances on their own, as a constituent in other substances or in mixtures for industrial and professional use(s) after 24 August 2023, unless: (a) the concentration of diisocyanates individually and in combination is less than 0,1 % by weight, or (b) the employer or self-employed ensures that industrial or professional user(s) have successfully completed training on the safe use of diisocyanates prior to the use of the substance(s) or mixture(s). 2. Shall not be placed on the market as substances on their own, as a constituent in other substances or in mixtures for industrial and professional use(s) after 24 February 2022, unless: (a) the concentration of diisocyanates individually and in combination is less than 0,1 % by weight, or (b) the supplier ensures that the recipient of the substance(s) or mixture(s) is provided with information on the requirements referred to in point (b) of paragraph 1 and the following statement is placed on the packaging, in a manner that is visibly distinct from the rest of the label information: "As from 24 August 2023 adequate training is required before industrial or professional use".	-

75	–	Substances in tattoo inks and permanent make up	1. Shall not be placed on the market in mixtures for use for tattooing purposes, and mixtures containing any such substances shall not be used for tattooing purposes, after 4 January 2022 if the substance or substances in question is or are present in the following circumstances: (a) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight; (b) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as reproductive toxicant category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight; (c) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin sensitiser category 1, 1A or 1B, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight; (d) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2, or as serious eye damage category 1 or eye irritant category 2, the substance is present in the mixture in a concentration equal to or greater than: (i) 0,1 % by weight, if the substance is used solely as a pH regulator; (ii) 0,01 % by weight, in all other cases; (e) in the case of a substance listed in Annex II to Regulation (EC) No 1223/20091, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight; (f) in the case of a substance for which a condition of one or more of the following kinds is specified in column g (Product type, Body parts) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight: (i) “Rinse-off products”; (ii) “Not to be used in products applied on mucous membranes”; (iii) “Not to be used in eye products” (g) in the case of a substance for which a condition is specified in column h (Maximum concentration in ready for use preparation) or column i (Other) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration, or in some other way, that does not accord with the condition specified in that column; (h) in the case of a substance listed in Appendix 13 to this Annex, the substance is present in the mixture in a concentration equal to or greater than the concentration limit specified for that substance in that Appendix.	–
76	68-12-2	N,N-dimethylformamide	1. Shall not be placed on the market as a substance on its own, as a constituent of other substances, or in mixtures in a concentration equal to or greater than 0,3 % after 12 December 2023 unless manufacturers, importers and downstream users have included in the relevant chemical safety reports and safety data sheets, Derived No-Effect Levels (DNELs) relating to exposure of workers of 6 mg/m3 for exposure by inhalation and 1,1 mg/kg/day for dermal exposure. 2. Shall not be manufactured, or used, as a substance on its own, as a constituent of other substances, or in mixtures in a concentration equal to or greater than 0,3 % after 12 December 2023 unless manufacturers and downstream users take the appropriate risk management measures and provide the appropriate operational conditions to ensure that exposure of workers is below the DNELs specified in paragraph 1.	3. By way of derogation from paragraphs 1 and 2, the obligations laid down therein shall apply from 12 December 2024 in relation to placing on the market for use, or use, as a solvent in direct or transfer polyurethane coating processes of textiles and paper material or the production of polyurethane membranes, and from 12 December 2025 in relation to placing on the market for use, or use, as a solvent in the dry and wet spinning processes of synthetic fibres
77	50-00-0	Formaldehyde and formaldehyde-releasing substances	1. Shall not be placed on the market in articles, after 6 August 2026, if, under the test conditions specified in Appendix 14, the concentration of formaldehyde released from those articles exceeds: (a) 0,062 mg/m3 for furniture and wood-based articles; (b) 0,080 mg/m3 for articles other than furniture and wood-based articles. 2. Shall not be placed on the market in road vehicles after 6 August 2027 if, under the test conditions specified in Appendix 14, the concentration of formaldehyde in the interior of those vehicles exceeds 0,062 mg/m3.	1. Shall not apply to: (a) articles in which formaldehyde or formaldehyde releasing substances are exclusively naturally present in the materials from which the articles are produced; (b) articles that are exclusively for outdoor use under foreseeable conditions; (c) articles in constructions, that are exclusively used outside the building shell and vapour barrier and that do not emit formaldehyde into indoor air; (d) articles exclusively for industrial or professional use unless formaldehyde released from them leads to exposure of the general public under foreseeable conditions of use; (e) articles for which the restriction laid down in entry 72 applies; (f) articles that are biocidal products within the scope of Regulation (EU) No 528/2012 of the European Parliament and of the Council1; (g) devices within the scope of Regulation (EU) 2017/745; (h) personal protective equipment within the scope of Regulation (EU) 2016/425; (i) articles intended to come into contact directly or indirectly with food within the scope of Regulation (EC) No 1935/2004; (j) second-hand articles. 2. Shall not apply to: (a) road vehicles exclusively for industrial or professional use unless the concentration of formaldehyde in the interior of those vehicles leads to exposure of the general public under foreseeable conditions of use; (b) second-hand vehicles

78	–	Synthetic polymer microparticles: polymers that are solid and which fulfil both of the following conditions: (a) are contained in particles and constitute at least 1 % by weight of those particles; or build a continuous surface coating on particles; (b) at least 1 % by weight of the particles referred to in point (a) fulfil either of the following conditions: (i) all dimensions of the particles are equal to or less than 5 mm; (ii) the length of the particles is equal to or less than 15 mm and their length to diameter ratio is greater than 3.	1. Shall not be placed on the market as substances on their own or, where the synthetic polymer microparticles are present to confer a sought-after characteristic, in mixtures in a concentration equal to or greater than 0,01 % by weight. 2. --- 3. --- 6. Paragraph 1 shall apply as follows regarding the following uses: (a) from 17 October 2029 to synthetic polymer microparticles for use in the encapsulation of fragrances; (b) from 17 October 2027 for “rinse-off products” as defined in point (1)(a) of the Preamble to Annexes II to VI to Regulation (EC) No 1223/2009 unless such products are covered by point (a) of this paragraph or contain synthetic polymer microparticles for use as an abrasive, i.e. namely to exfoliate, polish or clean (“microbeads”); (c) from 17 October 2035 for lip products as defined in point (1)(e) of the Preamble to Annexes II to VI to Regulation (EC) No 1223/2009, nail products as defined in point (1)(g) of the Preamble to Annexes II to VI to that Regulation, and make-up products within the scope of that Regulation, unless such products are covered by points (a) or (b) of this paragraph or contain microbeads; (d) from 17 October 2029 for leave-on products, as defined in point (1)(b) of the Preamble to Annexes II to VI to Regulation (EC) No 1223/2009, unless such products are covered by points (a) or (c) of this paragraph; (e) from 17 October 2028 for detergents, as defined in Article 2(1) of Regulation (EC) No 648/2004, waxes, polishes and air care products, unless those products are covered by point (a) of this paragraph or contain microbeads; (f) from 17 October 2029 for “devices”, within the scope of Regulation (EU) 2017/745 of the European Parliament and of the Council5, unless those devices contain microbeads; (g) from 17 October 2028 for “fertilising products”, as defined in Article 2, point (1), of Regulation (EU) 2019/1009, which do not fall within the scope of that Regulation; (h) from 17 October 2031 for plant protection products within the meaning of Article 2(1) of Regulation (EC) No 1107/2009 of the European Parliament and of the Council6 and seeds treated with those products, and biocidal products as defined in Article 3(1), point (a), of Regulation (EU) No 528/2012 of the European Parliament and of the Council7; (i) from 17 October 2028 for products for agricultural and horticultural uses not covered by points (g) or (h); (j) from 17 October 2031 for granular infill for use on synthetic sports surfaces. 7.--- 8.--- 9.--- 10.--- 11.--- 12.--- 13.--- 14.--- 15.---	The following polymers are excluded from this designation: (a) polymers that are the result of a polymerisation process that has taken place in nature, independently of the process through which they have been extracted, which are not chemically modified substances; (b) polymers that are degradable as proved in accordance with Appendix 15; (c) polymers that have a solubility greater than 2 g/L as proved in accordance with Appendix 16; (d) polymers that do not contain carbon atoms in their chemical structure. 4. Paragraph 1 shall not apply to the placing on the market of: (a) synthetic polymer microparticles, as substances on their own or in mixtures, for use at industrial sites; (b) medicinal products within the scope of Directive 2001/83/EC and veterinary medicinal products within the scope of Regulation (EU) 2019/6 of the European Parliament and of the Council; (c) EU fertilising products within the scope of Regulation (EU) 2019/1009 of the European Parliament and of the Council; (d) food additives within the scope of Regulation (EC) No 1333/2008 of the European Parliament and of the Council; (e) in vitro diagnostic devices, including devices within the scope of Regulation (EU) 2017/746 of the European Parliament and of the Council; (f) food within the meaning of Article 2 of Regulation (EC) No 178/2002, not covered by point (d) of this paragraph, and feed as defined in Article 3(4) of that Regulation 5. Paragraph 1 shall not apply to the placing on the market of the following synthetic polymer microparticles, as substances on their own or in mixtures: (a) synthetic polymer microparticles which are contained by technical means so that releases to the environment are prevented when used in accordance with the instructions for use during the intended end use; (b) synthetic polymer microparticles the physical properties of which are permanently modified during intended end use in such a way that the polymer no longer falls within the scope of this entry; (c) synthetic polymer microparticles which are permanently incorporated into a solid matrix during intended end use. 16. Paragraph 1 shall not apply to placing on the market of synthetic polymers microparticles, on their own or in mixtures, placed on the market before 17 October 2023. However, the first subparagraph shall not apply to the placing on the market of synthetic polymers microparticles for uses listed in paragraph 6

2. Europe/Americas
(3) EU POPs Annex A (Elimination)
All POPs listed in the Stockholm Convention
http://www.pops.int/TheConvention/ThePOPs/AllPOPs/tabid/2509/Default.aspx

No.	CAS No.	Substance Name	Examples of Inclusion
1	309-00-2	Aldrin	Pesticide
2	319-84-6	Alpha hexachlorocyclohexane	by-product of lindane
3	319-85-7	Beta hexachlorocyclohexane	by-product of lindane
4	5103-71-9	Chlordane	Termite control, etc.
5	143-50-0	Chlordecone	agricultural pesticide
6	60-57-1	Dieldrin	Pesticide
7	115-29-7 959-98-8 33213-65-9	Technical endosulfan and its related isomers	Pesticide
8	72-20-8	Endrin	Pesticide
9	57-74-9 (※1)	Heptachlor	Termite control, etc.
10	36355-01-8	Hexabromobiphenyl	Flame retardant
11	25637-99-4 3194-55-6	Hexabromocyclododecane	Flame retardant
12	31153-30-7 (※1)	Hexabromodiphenyl ether	Flame retardant
13	68928-80-3 (※1)	Heptabromodiphenyl ether	Flame retardant
14	118-74-1	Hexachlorobenzene (HCB)	Fungicide
15	87-68-3	Hexachlorobutadiene	Solvent
16	58-89-9	Lindane	Pesticide
17	2385-85-5	Mirex	Flame retardant, pesticide
18	608-93-5	Pentachlorobenzene (PeCB)	Dyestuff carrier, fungicide, flame retardant
19	87-86-5 (※1)	Pentachlorophenol and its salts and esters	Pesticide
20	2051-24-3 (※1)	Polychlorinated biphenyls (PCB)	Heat exchange fluid, etc
21	2050-69-3 (※1)	Polychlorinated naphthalenes	Insulating coating, etc
22	5436-43-1 (※1)	Tetrabromodiphenyl ether	Flame retardant
23	60348-60-9 (※1)	Pentabromodiphenyl ether	Flame retardant
24	8001-35-2	Toxaphene	Pesticide
25	1163-19-5	Decabromodiphenyl ether	Flame retardant
26	85535-84-8	Short-chained chlorinated paraffins(SCCPs)	Flame retardant
27	115-32-2	Dicofol	Pesticide
28	335-67-1 (※1)	Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds	Fluoropolymer processing aid, surfactant, etc
29	355-46-4 (※1)	Perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds	Manufacture of electronics and semiconductors
30	72-43-5 (※1) (※3)	Methoxychlor	Pesticide
31	13560-89-9 (※3)	Dechlorane Plus	Flame retardant
32	25973-55-1	UV-328	UV absorber

※1：There are other CAS No. to be covered.
※2：For the purposes of the entries on No.12, 13, 22, 23 and 25, point (b) of Article 4(1) shall apply to the sum of the concentration of those substances up to 500 mg/kg where they are present in mixtures or article Regulation (EU) 2019/1021 ANNEX I
※3：Managed as a decision by letter dated February 26, 2024 (C.N.77.2024.TREATIES-XXVII.15).

2. Europe/Americas
(4) Five PBT Chemicals under TSCA
https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/persistent-bioaccumulative-and-toxic-pbt-chemicals

No.	CAS No.	Chemical	Uses
1	68937-41-7	Phenol, isopropylated phosphate (3:1) PIP(3:1)	Flame retardants in polyvinyl chloride (PVC) plastics, polyurethanes, BPA epoxies, and lubricants
2	1163-19-5	Decabromodiphenyl ether DecaBDE	Flame retardant for heat shrink and nylon connectors
3	87-68-3	Hexachlorobutadiene HCBD	Intermediate substance formed during the production of chlorinated hydrocarbons
4	133-49-3	Pentachlorothiophenol PCTP	May be present in butadiene or isoprene rubber
5	732-26-3	2,4,6-Tris(tert-butyl)phenol 2,4,6-TTBP	Some types of oils used to lubricate parts

Monitoring substances

● What are monitoring substances?
Chemical substances whose content in products and parts must be reported when disclosure is required by laws and regulations.

◎ If there are threshold values according to various laws and regulations, the minimum value among the threshold values specified for each condition is used.
◎ The percentage of ingredients contained is confirmed by chemSHERPA.
◎ Substances that can be answered by submitting chem HERPA data will be deemed to have been declared by submitting such data.
◎ For substances that have not yet been chemSHERPA compliant or have not yet been applied under the promulgated laws and regulations, please cooperate with us by submitting a written pledge.
◎ Even for chemSHERPA-compliant substances, we may ask you to submit a written pledge for certain reasons.
◎ Even if the content is below the threshold value, if you know the content, please report it.

SVHC	No.	CAS No.	Substance Name
1st	1	120-12-7	Anthracene
	2	101-77-9	4,4'- Diaminodiphenylmethane [MDA]
	3	84-74-2	Dibutyl phthalate [DBP]
	4	7646-79-9	Cobalt dichloride
	5	1303-28-2	Diarsenic pentaoxide
	6	1327-53-3	Diarsenic trioxide
	7	7789-12-0 10588-01-9	Sodium dichromate
	8	81-15-2	5-tert-butyl-2,4,6-trinitro-m-xylene [musk xylene]
	9	117-81-7	Bis (2-ethylhexyl)phthalate [DEHP]
	10	25637-99-4 3194-55-6 134237-51-7 134237-50-6 134237-52-8	Hexabromocyclododecane [HBCDD] 1,2,5,6,9,10-hexabromocyclododecane α-HBCDD β-HBCDD γ-HBCDD
	11	85535-84-8	Alkanes, C10-13, chloro [Short Chain Chlorinated Paraffins]
	12	56-35-9	Bis(tributyltin)oxide [TBTO]
	13	7784-40-9	Lead hydrogen arsenate
	14	85-68-7	Benzyl butyl phthalate [BBP]
	15	15606-95-8	Triethyl arsenate
2nd	16	90640-80-5	Anthracene oil
	17	91995-17-4	Anthracene oil, anthracene paste, distn. lights
	18	91995-15-2	Anthracene oil, anthracene paste, anthracene fraction
	19	90640-82-7	Anthracene oil, anthracene-low
	20	90640-81-6	Anthracene oil, anthracene paste
	21	65996-93-2	Pitch, Coal tar, high temp.
	22	121-14-2	2,4-Dinitrotoluene
	23	84-69-5	Diisobutyl phthalate [DIBP]
	24	7758-97-6	Lead chromate
	25	12656-85-8	Lead chromate molybdate sulfate red (C.I. Pigment Red 104)
	26	1344-37-2	Lead sulfochromate yellow (C.I. Pigment Yellow 34)
	27	115-96-8	Tris(2-chloroethyl)phosphate
	28	79-06-1	Acrylamide
3rd	29	79-01-6	Trichloroethylene
	30	10043-35-3 11113-50-1	Boric acid
	31	12179-04-3 1330-43-4 1303-96-4	Disodium tetraborate, anhydrous
	32	12267-73-1	Tetraboron disodium heptaoxide, hydrate
	33	7775-11-3	Sodium chromate
	34	7789-00-6	Potassium chromate
	35	7789-09-5	Ammonium dichromate
	36	7778-50-9	Potassium dichromate
4th	37	10124-43-3	Cobalt(Ⅱ) sulphate
	38	10141-05-6	Cobalt(Ⅱ) dinitrate
	39	513-79-1	Cobalt(Ⅱ) carbonate
	40	71-48-7	Cobalt(Ⅱ) diacetate
	41	109-86-4	2-Methoxyethanol
	42	110-80-5	2-Ethoxyethanol
	43	1333-82-0	Chromium trioxide
	44	7738-94-5 13530-68-2	Acids generated from chromium trioxide and their oligomers Chromic acid Dichromic acid Oligomers of chromic acid and dichromic acid
5th	45	111-15-9	2-Ethoxyethyl acetate
	46	7789-06-2	Strontium chromate
	47	68515-42-4	1,2-Benzenedicarboxylic acid,di-C7-11-branched and linear alkyl esters
	48	302-01-2 7803-57-8	Hydrazine
	49	872-50-4	1-Methyl-2-pyrrolidone
	50	96-18-4	1,2,3-Trichloropropane
	51	71888-89-6	1,2-Benzenedicarboxylic acid,di-C6-8-branched alkyl esters, C7-rich
6th	52	—	Zirconia Aluminosilicate, Refractory Ceramic Fibres※2
	53	7778-44-1	Calcium arsenate
	54	111-96-6	Bis(2-methoxyethyl) ether
	55	—	Aluminosilicate, Refractory Ceramic Fibres
	56	11103-86-9	Potassium hydroxyoctaoxodizincatedichromate
	57	6477-64-1	Lead dipicrate
	58	127-19-5	N,N-dimethylacetamide
	59	7778-39-4	Arsenic acid
	60	90-04-0	2-Methoxyaniline; o-Anisidine
	61	3687-31-8	Trilead diarsenate
	62	107-06-2	1,2-Dichloroethane
	63	49663-84-5	Pentazinc chromate octahydroxide
	64	140-66-9	4-(1,1,3,3-tetramethylbutyl)phenol
	65	25214-70-4	Formaldehyde, oligomeric reaction products with aniline
	66	117-82-8	Bis(2-methoxyethyl) phthalate
	67	13424-46-9	Lead diazide, Lead azide
	68	15245-44-0	Lead styphnate
	69	101-14-4	2,2'-dichloro-4,4'-methylenedianiline
	70	77-09-8	Phenolphthalein
	71	24613-89-6	Dichromium tris(chromate)

7th	72	112-49-2	トリエチレングリコールジメチルエーテル
	73	110-71-4	1,2-ジメトキシエタン
	74	1303-86-2	Diboron trioxide
	75	75-12-7	Formamide
	76	17570-76-2	Lead(II) bis(methanesulfonate)
	77	2451-62-9	TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)
	78	59653-74-6	β-TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)
	79	90-94-8	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)
	80	101-61-1	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)
	81	2580-56-5	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)
	82	548-62-9	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)
	83	561-41-1	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol
	84	6786-83-0	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)
8th	85	1163-19-5	Bis(pentabromophenyl) ether (DecaBDE)
	86	72629-94-8	Pentacosafluorotridecanoic acid
	87	307-55-1	Tricosafluorododecanoic acid
	88	2058-94-8	Henicosafluoroundecanoic acid
	89	376-06-7	Heptacosafluorotetradecanoic acid
	90	123-77-3	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))
	91	85-42-7 13149-00-3 14166-21-3	Cyclohexane-1,2-dicarboxylic anhydride cis-cyclohexane-1,2-dicarboxylic anhydride trans-cyclohexane-1,2-dicarboxylic anhydride
	92	25550-51-0 19438-60-9 48122-14-1 57110-29-9	Hexahydromethylphathalic anhydride Hexahydro-4-methylphathalic anhydride Hexahydro-1-methylphathalic anhydride Hexahydro-3-methylphathalic anhydride
	93	—	4-Nonylphenol, branched and linear
	94	—	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated
	95	625-45-6	Methoxy acetic acid
	96	68-12-2	N,N-dimethylformamide; dimethyl formamide
	97	683-18-1	Dibutyltin dichloride (DBT)
	98	1317-36-8	Lead oxide (lead monoxide)
	99	1314-41-6	Lead tetroxide (orange lead)
	100	13814-96-5	Lead bis (tetrafluoroborate)
	101	1319-46-6	Trilead bis(carbonate)dihydroxide (basic lead carbonate)
	102	12060-00-3	Lead titanium trioxide
	103	12626-81-2	Lead Titanium Zirconium Oxide
	104	11120-22-2	Silicic acid, lead salt
	105	68784-75-8	Silicic acid, barium salt, lead-doped
	106	106-94-5	1-bromopropane
	107	75-56-9	Propylene oxide; 1,2-epoxypropane; methyloxirane
	108	84777-06-0	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear
	109	605-50-5	Diisopentylphthalate
	110	776297-69-9	N-pentyl-isopentylphtalate
	111	629-14-1	1,2-Diethoxyethane
	112	51404-69-4	Acetic acid, lead salt, basic
	113	12036-76-9	Lead oxide sulfate
	114	69011-06-9	[Phthalato(2-)]dioxotrilead
	115	12578-12-0	Dioxobis(stearato)trilead
	116	91031-62-8	Fatty acids, C16-18, lead salts
	117	20837-86-9	Lead cyanamidate
	118	10099-74-8	Lead dinitrate
	119	12065-90-6	Pentalead tetraoxide sulphate
	120	8012-00-8	Pyrochlore, antimony lead yellow
	121	62229-08-7	Sulfurous acid, lead salt, dibasic
	122	78-00-2	Tetraethyllead
	123	12202-17-4	Tetralead trioxide sulphate
	124	12141-20-7	Trilead dioxide phosphonate
	125	110-00-9	Furan
	126	64-67-5	Diethyl sulphate
	127	77-78-1	Dimethyl sulphate
	128	143860-04-2	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine
	129	88-85-7	Dinoseb
	130	838-88-0	4,4'-methylenedi-o-toluidine
	131	101-80-4	4,4'-oxydianiline and its salts
	132	60-09-3	4-Aminoazobenzene; 4-Phenylazoaniline
	133	95-80-7	4-methyl-m-phenylenediamine (2,4-toluene-diamine)
	134	120-71-8	6-methoxy-m-toluidine (p-cresidine)
	135	92-67-1	Biphenyl-4-ylamine
	136	97-56-3	o-aminoazotoluene
	137	95-53-4	o-Toluidine; 2-Aminotoluene
	138	79-16-3	N-methylacetamide
9th	139	7440-43-9	Cadmium
	140	1306-19-0	Cadmium oxide
	141	3825-26-1	Ammonium pentadecafluorooctanoate (APFO)
	142	335-67-1	Pentadecafluorooctanoic acid (PFOA)
	143	131-18-0	Dipentyl phthalate (DPP)
	144	—	4-Nonylphenol, branched and linear, ethoxylated
10th	145	1306-23-6	Cadmium sulphide
	146	573-58-0	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)
	147	1937-37-7	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)
	148	84-75-3	Dihexyl phthalate
	149	96-45-7	Imidazolidine-2-thione; 2-imidazoline-2-thiol
	150	301-04-2	Lead di(acetate)
	151	25155-23-1	Trixylyl phosphate
11th	152	68515-50-4	1,2-Benzenedicarboxylic acid, dihexylester, branched and linear
	153	10108-64-2	Cadmium chloride
	154	—	Sodium perborate; perboric acid, sodiumsalt
	155	7632-04-4	Sodium peroxometaborate
12th	156	7790-79-6	Cadmium fluoride
	157	10124-36-4 31119-53-6	Cadmium sulphate
	158	3846-71-7	2-benzotriazol-2-yl-4,6-di-tertbutylphenol(UV-320)
	159	25973-55-1	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol(UV-328)
	160	15571-58-1	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate(DOTE)
	161	—	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 (reactionmass of DOTE and MOTE)

13th	162	68515-51-5 68648-93-1	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)
	163	—	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-secbutyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any ofthe individual isomers of [1] and [2] or anycombination thereof]
14th	164	1120-71-4	1,3-propanesultone
	165	3864-99-1	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327
	166	36437-37-3	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)
	167	98-95-3	Nitrobenzene
	168	375-95-1 21049-39-8 4149-60-4	Perfluorononan-1-oic-acid and its sodium and ammonium salts
15th	169	50-32-8	Benzo[def]chrysene (Benzo[a]pyrene)
16th	170	80-05-7	4,4'-isopropylidenediphenol (bisphenol A; BPA)
	171	335-76-2 3830-45-3 3108-42-7	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts
	172	80-46-6	p-(1,1-dimethylpropyl)phenol
	173	—	4-heptylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]
17th	174	355-46-4	Perfluorohexane-1-sulphonic acid and its salts
18th	175	218-01-9	Chrysene
	176	56-55-3	Benz[a]anthracene
	177	10325-94-7	Cadmium nitrate
	178	21041-95-2	Cadmium hydroxide
	179	513-78-0	Cadmium carbonate
	180	—	1,6,7,8,9,14,15,16,17,17,18,18- Dodecachloropentacyclo [12.2.1.16,9.02,13.05,10] octadeca-7,15-diene ("Dechlorane Plus"TM) [covering any of its individual anti- and syn-isomers or any combination thereof]
	181	—	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP
19th	182	556-67-2	Octamethylcyclotetrasiloxane (D4)
	183	541-02-6	Decamethylcyclopentasiloxane (D5)
	184	540-97-6	Dodecamethylcyclohexasiloxane (D6)
	185	7439-92-1	Lead
	186	12008-41-2	Disodium Octaborate
	187	191-24-2	Benzo[ghi]perylene
	188	61788-32-7	Terphenyl, hydrogenated
	189	107-15-3	Ethylenediamine(EDA)
	190	552-30-7	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride(trimellitic anhydride)(TMA)
	191	84-61-7	Dicyclohexyl phthalate(DCHP)
20th	192	6807-17-6	2,2-bis(4'-hydroxyphenyl)-4-methylpentane
	193	207-08-9	Benzo[k]fluoranthene
	194	206-44-0	Fluoranthene
	195	85-01-8	Phenanthrene
	196	129-00-0	Pyrene
	197	15087-24-8	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one
21st	198	110-49-6	2-methoxyethyl acetate
	199	—	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≧ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)
	200	—	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof)
	201	98-54-4	4-tert-butylphenol
22nd	202	71850-09-4	Diisohexyl phthalate
	203	119313-12-1	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone
	204	71868-10-5	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one
	205	—	Perfluorobutane sulfonic acid (PFBS) and its salts
23rd	206	1072-63-5	1-vinylimidazole
	207	693-98-1	2-methylimidazole
	208	94-26-8	Butyl 4-hydroxybenzoate
	209	22673-19-4	Dibutylbis(pentane-2,4-dionato-O,O')tin
24th	210	143-24-8	bis(2-(2-methoxyethoxy)ethyl) ether
	211	—	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
25th	212	—	2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers
	213	13840-56-7	Orthoboric acid, sodium salt
	214	3296-90-0 36483-57-5 1522-92-5 96-13-9	2,2-bis(bromomethyl)propane1,3-diol (BMP); 2,2-dimethylpropan-1-ol, tribromo derivative (TBNPA); 3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA); 2,3-dibromo-1-propanol (2,3-DBPA)
	215	111-30-8	Glutaral
	216	—	Medium-chain chlorinated paraffins (MCCP) [UVCB substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain lengths within the range from C14 to C17]
	217	—	Phenol, alkylation products (mainly in para position) with C12-rich branched or linear alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)
	218	123-91-1	1,4-dioxane
	219	77-40-7	4,4'-(1-methylpropylidene)bisphenol; (bisphenol B)
26th	220	119-47-1	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol (DBMC)
	221	1067-53-4	tris(2-methoxyethoxy)vinylsilane
	222	—	(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)
	223	255881-94-8	S-(tricyclo[5.2.1.0'2,6]deca-3-en-8(or 9)-yl) O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate
27th	224	924-42-5	N-(hydroxymethyl)acrylamide
28th	225	37853-59-1	1,1'-[ethane-1,2-diylbisoxy]bis[2,4,6-tribromobenzene]
	226	79-94-7	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol
	227	80-09-1	4,4'-sulphonyldiphenol
	228	13701-59-2	Barium diboron tetraoxide
	229	-	Bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof
	230	4247-02-3	Isobutyl 4-hydroxybenzoate
	231	108-78-1	Melamine
	232	-	Perfluoroheptanoic acid and its salts
	233	-	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
29th	234	75980-60-8	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide
	235	80-07-9	Bis(4-chlorophenyl) sulphone
30th	236	732-26-3	2,4,6-tri-tert-butylphenol
	237	3147-75-9	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol
	238	119344-86-4	2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one
	239	3896-11-5	Bumetrizole
	240	-	Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol

RoHS Exemptions list (Annex III)

RoHS Directive
https://environment.ec.europa.eu/topics/waste-and-recycling/rohs-directive_en
RoHS Directive (consolidated version)
https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1584116022829&uri=CELEX:02011L0065-20200301
Exemptions Procedure
https://environment.ec.europa.eu/topics/waste-and-recycling/rohs-directive/implementation-rohs-directive_en
Exemptions list
https://environment.ec.europa.eu/document/download/683f0651-ffbd-4f2b-a070-c67311203c79_en?filename=Exemptions%20list%20%20validity%20and%20rolling%20planJan2023_1246033057.xlsx

No.	Exemption	Exemption (Japanese)	Scope and dates of applicability	Expiration (Japanese)
1	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):	片口金(コンパクト形)蛍光ランプに含まれる1バーナー当たりの含有量が次の量を超えない水銀	–	–
1(a)	For general lighting purposes ＜ 30 W: 5 mg	一般照明用で30W未満:5mg	Expires on 31 December 2011; 3,5 mg may be used per burner after 31 December 2011 until 31 December 2012; 2,5 mg shall be used per burner after 31 December 2012	・2011年12月31日まで ・2011年12月31～2012年12月31日:3.5mg/バーナー ・2012年12月31日以降:2.5mg/バーナー
1(b)	For general lighting purposes ≧ 30 W and ＜ 50 W: 5 mg	一般照明用で30W以上50W未満:5mg	Expires on 31 December 2011; 3,5 mg may be used per burner after 31 December 2011	・2011年12月31日まで ・2011年12月31日以降:3.5mg/バーナー
1(c)	For general lighting purposes ≧ 50 W and ＜150 W: 5 mg	一般照明用で50W以上150W未満:5mg		
1(d)	For general lighting purposes ≧ 150 W: 15 mg	一般照明用で150W以上:15mg		
1(e)	For general lighting purposes with circular or square structural shape and tube diameter ≦ 17 mm	円形または四角型の一般照明用で、かつチューブの直径17mm以下	No limitation of use until 31 December 2011; 7 mg may be used per burner after 31 December 2011	・2011年12月31日まで制限なし ・2011年12月31日以降:7mg/バーナー
1(f)	For special purposes: 5 mg	特殊用:5mg		
1(g)	For general lighting purposes < 30 W with a lifetime equal or above 20 000 h: 3,5 mg	一般照明用で寿命が20000時間以上の30W未満:3.5mg	Expires on 31 December 2017	・2017年12月31日まで
2(a)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp):	一般照明用途の2口金直管蛍光ランプに含まれるランプ当たりの含有量が次の量を超えない水銀	–	–
2(a)(1)	Tri-band phosphor with normal lifetime and a tube diameter＜9mm (e.g. T2): 5mg	通常寿命の3波長形、管径9mm未満(例 T2):5mg	Expires on 31 December 2011; 4 mg may be used per lamp after 31 December 2011	・2011年12月31日まで ・2011年12月31日以降:4mg/ランプ
2(a)(2)	Tri-band phosphor with normal lifetime and a tube diameter ≧ 9 mm and ≦ 17 mm (e.g. T5): 5 mg	標準寿命の3波長形蛍光ランプで管径9mm以上17mm以下(例 T5):5mg	Expires on 31 December 2011; 3 mg may be used per lamp after 31 December 2011	・2011年12月31日まで ・2011年12月31日以降:3mg/ランプ
2(a)(3)	Tri-band phosphor with normal lifetime and a tube diameter ＞ 17 mm and ≦ 28 mm (e.g. T8): 5 mg	標準寿命の3波長形蛍光ランプで管径17mm超28mm以下(例 T8):5mg	Expires on 31 December 2011; 3,5 mg may be used per lamp after 31 December 2011	・2011年12月31日まで ・2011年12月31日以降:3.5mg/ランプ
2(a)(4)	Tri-band phosphor with normal lifetime and a tube diameter ＞ 28 mm (e.g. T12): 5 mg	標準寿命の3波長形蛍光ランプで管径28mm超(例 T12):5mg	Expires on 31 December 2012; 3,5 mg may be used per lamp after 31 December 2012	・2012年12月31日まで ・2012年12月31日以降:3.5mg/ランプ
2(a)(5)	Tri-band phosphor with long lifetime (≧ 25000 h): 8 mg	長寿命(25000時間以上)の3波長形蛍光ランプ:8mg	Expires on 31 December 2011; 5 mg may be used per lamp after 31 December 2011	・2011年12月31日まで ・2011年12月31日以降:5mg/ランプ
2(b)	Mercury in other fluorescent lamps not exceeding (per lamp):	その他の蛍光ランプに含まれるランプ当たりの含有量が次の量を超えない水銀	–	–
2(b)(3)	Non-linear tri-band phosphor lamps with tube diameter ＞ 17 mm (e.g. T9)	非直管の3波長形蛍光ランプで管径17mm超(例 T9)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011	・2011年12月31日まで制限なし ・2011年12月31日以降:15mg/ランプ
2(b)(4)	Lamps for other general lighting and special purposes (e.g. induction lamps)	一般照明用および特殊用のその他のランプ(例 電磁誘導灯)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011	・2011年12月31日まで制限なし ・2011年12月31日以降:15mg/ランプ
3	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp):	特殊用途の冷陰極蛍光ランプおよび外部電極蛍光ランプ(CCFLおよびEEFL)に含まれる、ランプ当たりの含有量が次の量を超えない水銀	–	–
3(a)	Short length (≦ 500 mm)	短型ランプ(500mm以下)	No limitation of use until 31 December 2011; 3,5 mg may be used per lamp after 31 December 2011	・2011年12月31日まで制限なし ・2011年12月31日以降:3.5mg/ランプ
3(b)	Medium length (＞ 500 mm and ≦ 1500 mm)	中型ランプ(500mm超、1500mm以下)	No limitation of use until 31 December 2011; 5 mg may be used per lamp after 31 December 2011	・2011年12月31日まで制限なし ・2011年12月31日以降:5mg/ランプ
3(c)	Long length (＞ 1500 mm)	長型ランプ(1500mm超)	No limitation of use until 31 December 2011; 13 mg may be used per lamp after 31 December 2011	・2011年12月31日まで制限なし ・2011年12月31日以降:13mg/ランプ
4(a)	Mercury in other low pressure discharge lamps (per lamp)	その他の低圧放電管ランプに含まれるランプ当たりの水銀	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011	・2011年12月31日まで制限なし ・2011年12月31日以降:15mg/ランプ
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 ＞ 60:	平均演色評価数が60を超えるように改善された一般照明用の高圧ナトリウム(蒸気)ランプに含まれる、ランプ中の含有量が1バーナー当たり次の量を超えない水銀	–	–
4(b)-I	P ≦ 155 W	P≦155W	No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011	・2011年12月31日まで制限なし ・2011年12月31日以降:30mg/バーナー
4(b)-II	155 W ＜ P ≦ 405 W	155W＜P≦405W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011	・2011年12月31日まで制限なし ・2011年12月31日以降:40mg/バーナー
4(b)-III	P ＞ 405 W	405W＜P	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011	・2011年12月31日まで制限なし ・2011年12月31日以降:40mg/バーナー
4(c)	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner):	その他の一般照明用の高圧ナトリウム(蒸気)ランプに含まれるランプ中の含有量が1バーナー当たり次の量を超えない水銀	–	–
4(c)-I	P ≦ 155 W	P≦155W	No limitation of use until 31 December 2011; 25 mg may be used per burner after 31 December 2011	・2011年12月31日まで制限なし ・2011年12月31日以降:25mg/バーナー
4(c)-II	155 W ＜ P ≦ 405 W	155W≦P＜405W	No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011	・2011年12月31日まで制限なし ・2011年12月31日以降:30mg/バーナー
4(c)-III	P ＞ 405 W	P＞405W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011	・2011年12月31日まで制限なし ・2011年12月31日以降:40mg/バーナー
4(e)	Mercury in metal halide lamps (MH)	金属ハロゲン化物ランプ(MH)に含まれる水銀		
4(f)	Mercury in other discharge lamps for special purposes not specifically mentioned in this Annex	本付属書に特に定められていないその他のランプに含まれる水銀		
5(b)	Lead in glass of fluorescent tubes not exceeding 0,2 % by weight	蛍光管のガラスに含まれる0.2wt%を超えない鉛		
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	機械加工用の鋼材中に合金成分として含まれる0.35wt%の鉛および バッチ式の溶融亜鉛めっき鋼材部品中に含まれる0.2wt%までの鉛	Expires on 21 July 2021 for categories 1-7 and 10.	カテゴリ1～7、10について有効期限:2021年7月21日
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	鉛を含有するアルミニウムのスクラップをリサイクルして得られたアルミニウムに合金成分として含まれる0.4wt%までの鉛	Expires on 21 July 2021 for categories 1-7 and 10.	カテゴリ1～7、10について有効期限:2021年7月21日
6(b)-II	Lead as an alloying element in aluminium for machining purposes with a lead content up to 0,4 % by weight	機械加工用のアルミニウムに合金成分として含まれる0.4wt%までの鉛	Expires on 18 May 2021 for categories 1-7 and 10.	カテゴリ1～7、10について有効期限:2021年5月18日
6(c)	Copper alloy containing up to 4 % lead by weight	銅合金に含まれる4wt%までの鉛	21 July 2021 for categories 1-7 and 10, 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments, 21 July 2023 for category 8 in vitro diagnostic medical de-vices, 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.	・カテゴリ1～7、10:2021年7月21日 ・体外診断用医療機器および産業用監視・制御機器を除くカテゴリ8、9:2021年7月21日 ・カテゴリ8体外診断用医療機器:2023年7月21日 ・カテゴリ9産業用監視・制御機器、カテゴリ11:2024年7月21日
7(a)	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)	高融点はんだ(すなわち鉛含有率が85w%以上の鉛ベースの合金)に含まれる鉛	Applies to categories 1-7 and 10 (except applications covered by point 24 of this Annex) and expires on 21 July 2021. For categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments expires on 21 July 2021. For category 8 in vitro diagnostic medical devices expires on 21 July 2023. For category 9 industrial monitoring and control instruments, and for category 11 expires on 21 July 2024.	・カテゴリ1～7、10(本付属書の24項でカバーされる範囲を除く):2021年7月21日 ・体外診断用医療機器および産業用監視・制御機器を除くカテゴリ8、9:2021年7月21日 ・カテゴリ8体外診断用医療機器:2023年7月21日 ・カテゴリ9産業用監視・制御機器、カテゴリ11:2024年7月21日

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	電気電子部品中のコンデンサ中の誘電体セラミック以外（例えば圧電素子）のガラスまたはセラミック、またはガラスまたはセラミックを母材とする化合物中に含まれる鉛	Applies to categories 1-7 and 10 (except applications covered under point 34) and expires on 21 July 2021. For categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments expires on 21 July 2021. For category 8 in vitro diagnostic medical devices expires on 21 July 2023. For category 9 industrial monitoring and control instruments, and for category 11 expires on 21 July 2024.	・2011年12月31日以降：25mg/バーナー ・体外診断用医療機器および産業用監視・制御機器を除くカテゴリ8、9：2021年7月21日 ・カテゴリ8体外診断用医療機器：2023年7月21日 ・カテゴリ9産業用監視・制御機器、カテゴリ11：2024年7月21日
7(c)-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher	定格電圧がAC125VまたはDC250Vまたはそれ以上のコンデンサ内の誘電体セラミック中の鉛	Does not apply to applications covered by point 7(c)-I and 7(c)-IV of this Annex. 21 July 2021 for categories 1-7 and 10; 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments; 21 July 2023 for category 8 in vitro diagnostic medical devices; 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.	この附属書のNo.7(c)-I、7(c)-IVでカバーされる用途には適用されない。 ・カテゴリ1～7、10：2021年7月21日 ・体外診断用医療機器・産業用監視・制御機器以外のカテゴリ8、9：2021年7月21日 ・カテゴリ8体外診断用医療機器：2023年7月21日 ・カテゴリ9産業用監視・制御機器、カテゴリ11：2024年7月21日
7(c)-IV	Lead in PZT based dielectric ceramic materials for capacitors which are part of integrated circuits or discrete semiconductors	IC（集積回路）またはディスクリート半導体の一部品であるコンデンサ用のPZT系誘電体セラミック材料中の鉛	21 July 2021 for categories 1-7 and 10; 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments; 21 July 2023 for category 8 in vitro diagnostic medical devices; 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.	・カテゴリ1～7、10：2021年7月21日 ・体外診断用医療機器・産業用監視・制御機器以外のカテゴリ8、9：2021年7月21日 ・カテゴリ8体外診断用医療機器：2023年7月21日 ・カテゴリ9産業用監視・制御機器、カテゴリ11：2024年7月21日
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.	以下で使用される電気接点中のカドミウムとその化合物 ・回路遮断器 ・熱感知制御器 ・過熱モータプロテクタ（密閉型過熱モータプロテクタを除く） ・下記定格のACスイッチ 250V AC以上において6A以上 125V AC以上において12A以上 ・18V DC以上において20A以上の定格のDCスイッチ ・200Hz以上の周波数の電源で使用するスイッチ	Applies to categories 1 to 7 and 10 and expires on 21 July 2021.	カテゴリ1～7、10に適用。有効期限：2021年7月21日
9(a)- I	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 (including minibars) designed to operate fully or partly with electrical heater, having an average utilised power input < 75 W at constant running conditions	一定の条件下で75W未満の平均使用電力となる電気ヒーターを使用した吸収型冷蔵庫中のカーボン・スチール冷却システムの防錆用として冷却溶液中に含まれる0.75wt%までの六価クロム	Applies to categories 1-7 and 10 and expires on 5 March 2021.	カテゴリ1～7、10について有効期限：2021年3月5日
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.	吸収型冷蔵庫中のカーボン・スチール冷却システムの防錆用として冷却溶液中に含まれる0.75wt%までの六価クロム 一定の条件下で75W未満の平均使用電力となる電気ヒーターを使用したもの 電気ヒーターなしのもの。	Applies to categories 1-7 and 10 and expires on 21 July 2021.	カテゴリ1～7、10について有効期限：2021年7月21日
13(a)	Lead in white glasses used for optical applications	光学機器用の白色ガラスに含まれる鉛	Applies to all categories; expires on: 21 July 2023 for category 8 in vitro diagnostic medical devices; 21 July 2024 for category 9 industrial monitoring and control instruments and for category 11; 21 July 2021 for all other categories and subcategories	全てのカテゴリに適用；有効期限 ・カテゴリ8体外診断用医療機器：2023年7月21日 ・カテゴリ9産業用監視・制御機器、カテゴリ11：2024年7月21日 ・上記を除く全てのカテゴリおよび他のサブカテゴリ：2021年7月21日
13(b)-I	Cadmium and lead in filter glasses and glasses used for reflectance standards	イオン着色された光学フィルタガラスタイプ中の鉛	Applies to categories 1 to 7 and 10; expires on 21 July 2021 for categories 1 to 7 and 10	カテゴリ1～7、10に適用；有効期限：2021年7月21日
13(b)-II	Cadmium in striking optical filter glass types; excluding applications falling under point 39 of this Annex	本付属書の39項に該当する用途を除く、ストライキング（二次熱処理）光学フィルタガラスタイプ中のカドミウム	Applies to categories 1 to 7 and 10; expires on 21 July 2021 for categories 1 to 7 and 10	カテゴリ1～7、10に適用；有効期限：2021年7月21日
13(b)-III	Cadmium and lead in glazes used for reflectance standards	反射標準物質用のグレーズに含まれる鉛およびカドミウム	Applies to categories 1 to 7 and 10; expires on 21 July 2021 for categories 1 to 7 and 10	カテゴリ1～7、10に適用；有効期限：2021年7月21日
15(a)	Lead in solders to complete a viable electrical connection between the semiconductor die and carrier within integrated circuit flip chip packages where at least one of the following criteria applies: – a semiconductor technology node of 90 nm or larger; – a single die of 300 mm2 or larger in any semiconductor technology node;	以下の基準の少なくとも一つが当てはまる際の集積回路フリップチップパッケージ内の半導体ダイとキャリア間における確実な電気接続に必要なはんだに含まれる鉛 90nm以上の半導体テクノロジーノード いかなる半導体テクノロジーノードにおいても単一ダイサイズが300mm2以上 300mm2以上のダイまたは300mm2以上のシリコンのインターポーザ付きスタック型ダイパッケージ	Applies to categories 1 to 7 and 10 and expires on 21 July 2021.	カテゴリ1～7、10に適用。有効期限：2021年7月21日
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 2 O 5 :Pb)	BSP（BaSi2O5：Pb）等の蛍光体を含む日焼け用ランプとして使用される放電ランプの蛍光パウダー（1wt%以下の鉛）に活性剤として含まれる鉛	21 July 2021 for categories 1-7 and 10; 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments; 21 July 2023 for category 8 in vitro diagnostic medical devices; 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.	・カテゴリ1～7、10：2021年7月21日 ・体外診断用医療機器・産業用監視・制御機器以外のカテゴリ8、9：2021年7月21日 ・カテゴリ8体外診断用医療機器：2023年7月21日 ・カテゴリ9産業用監視・制御機器、カテゴリ11：2024年7月21日
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	医療用光療法機器に使用される際のBSP（BaSi2O5：Pb）等の蛍光体を含む日焼け用ランプとして使用される放電ランプの蛍光パウダー（1wt%以下の鉛）に活性剤として含まれる鉛	Applies to categories 5 and 8, excluding applications covered by entry 34 of Annex IV, and expires on 21 July 2021.	この附属書IVのNo.34でカバーされる用途を除くカテゴリ5、8に適用。有効期限：2021年7月21日
21(a)	Cadmium when used in colour printed glass to provide filtering functions, used as a component in lighting applications installed in displays and control panels of EEE	電気電子機器のディスプレイおよびコントロールパネル中に設置される照明用途のコンポーネントとして使用されるフィルタ機能を提供するカラー印刷ガラスに使用される際のカドミウム	Applies to categories 1 to 7 and 10 except applications covered by entry 21(b) or entry 39 and expires on 21 July 2021.	No.21(b)または39でカバーされる用途を除くカテゴリ1～7、10に適用。有効期限：2021年7月21日
21(b)	Cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	ホウケイ酸ガラスやソーダ石灰ガラスへのエナメル塗布用印刷インキに含まれるカドミウム	Applies to categories 1 to 7 and 10 except applications covered by entry 21(a) or 39 and expires on 21 July 2021.	No.21(a)または39でカバーされる用途を除くカテゴリ1～7、10に適用。有効期限：2021年7月21日
21(c)	Lead in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	ホウケイ酸ガラスやソーダ石灰ガラスへのエナメル塗布用印刷インキに含まれる鉛	Applies to categories 1 to 7 and 10 and expires on 21 July 2021.	カテゴリ1～7、10に適用。有効期限：2021年7月21日
24	Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors	セラミック多層コンデンサを円盤状または平面状に機械加工されたスルーホールへはんだ付けするためのはんだに含まれる鉛	21 July 2021 for categories 1-7 and 10, 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments, 21 July 2023 for category 8 in vitro diagnostic medical devices, 21 July 2024 for category 9 industr ial monitoring and control instruments, and for category 11.	・カテゴリ1～7、10：2021年7月21日 ・体外診断用医療機器および産業用監視・制御機器を除くカテゴリ8、9：2021年7月21日 ・カテゴリ8体外診断用医療機器：2023年7月21日 ・カテゴリ9産業用監視・制御機器、カテゴリ11：2024年7月21日
29	Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC(*) (*) Council Directive 69/493/EEC of 15 December 1969 on the approximation of the laws of the Member States relating to crystal glass (OJ L 326, 29.12.1969, p. 36).	理事会指令69/493/EECの付属書 I （カテゴリ1、2、3および4）で定められているクリスタルガラスに含まれる鉛(*) (*)クリスタルガラスに関する1969年12月15日の理事会指令69/493/EEC（1969年12月29日のOJ L326、p.36）	21 July 2021 for categories 1-7 and 10; 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments; 21 July 2023 for category 8 in vitro diagnostic medical devices; 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.	・カテゴリ1～7、10：2021年7月21日 ・体外診断用医療機器・産業用監視・制御機器以外のカテゴリ8、9：2021年7月21日 ・カテゴリ8体外診断用医療機器：2023年7月21日 ・カテゴリ9産業用監視・制御機器、カテゴリ11：2024年7月21日
32	Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes	アルゴンやクリプトンレーザ管のウィンドウアッセンブリを製造するために用いられるシールフリット中の酸化鉛	21 July 2021 for categories 1-7 and 10; 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments; 21 July 2023 for category 8 in vitro diagnostic medical devices; 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.	・カテゴリ1～7、10：2021年7月21日 ・体外診断用医療機器・産業用監視・制御機器以外のカテゴリ8、9：2021年7月21日 ・カテゴリ8体外診断用医療機器：2023年7月21日 ・カテゴリ9産業用監視・制御機器、カテゴリ11：2024年7月21日
34	Lead in cermet-based trimmer potentiometer elements	サーメットベーストリマー電位差計の構成部品中の鉛	21 July 2021 for categories 1-7 and 10, 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments, 21 July 2023 for category 8 in vitro diagnostic medical devices, 21 July 2024 for category 9 industr ial monitoring and control instruments, and for category 11.	・カテゴリ1～7、10：2021年7月21日 ・体外診断用医療機器および産業用監視・制御機器を除くカテゴリ8、9：2021年7月21日 ・カテゴリ8体外診断用医療機器：2023年7月21日 ・カテゴリ9産業用監視・制御機器、カテゴリ11：2024年7月21日

37	Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body	ホウ酸亜鉛ガラス基板上の高電圧ダイオードのめっき層中の鉛	21 July 2021 for categories 1–7 and 10; 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments; 21 July 2023 for category 8 in vitro diagnostic medical devices; 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.	・カテゴリ1～7、10：2021年7月21日 ・体外診断用医療機器・産業用監視・制御機器以外のカテゴリ8、9：2021年7月21日 ・カテゴリ8体外診断用医療機器：2023年7月21日 ・カテゴリ9産業用監視・制御機器、カテゴリ11：2024年7月21日
39(a)	Cadmium selenide in downshifting cadmium-based semiconductor nanocrystal quantum dots for use in display lighting applications (< 0,2 μg Cd per mm2 of display screen area)	ディスプレイの照明用途で使用するダウンシフトカドミウムベースの半導体ナノクリスタル量子ドット中のセレン化カドミウム（ディスプレイスクリーンエリアmm2あたり<0.2μgのカドミウム）	Expires for all categories on 31 October 2019	全てのカテゴリについて2019年10月31日まで
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	電気電子構成部品のはんだ及び端子処理部分、並びに点火用モジュール及びその他の電気電子的エンジン制御システムに用いるプリント配線基板の仕上げ処理部分中にあって、技術的理由から携帯式の燃焼機関（欧州議会及び理事会指令97/68/ECのクラスSH:1,SH:2, SH:3）のクランクケースまたはシリンダー上に直接、またはそれらの内部に取り付けられねばならないものに含まれる鉛	31 March 2022 for categories 1 to 7, 10 and 11; 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments; 21 July 2023 for category 8 in vitro diagnostic medical devices; 21 July 2024 for category 9 industrial monitoring and control instruments.	・カテゴリ1～7、10、11：2022年3月31日 ・体外診断用医療機器・産業用監視・制御機器以外のカテゴリ8、9：2021年7月21日 ・カテゴリ8体外診断用医療機器：2023年7月21日 ・カテゴリ9産業用監視・制御機器：2024年7月21日
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.	道路以外の業務用機器に適用される内燃エンジンを動かすディーゼル、ガス燃料のベアリングとブッシュ中の鉛。 －エンジンの総排気量が15L以上 または －エンジンの総排気量が15L未満で、そのエンジンが開始から全負荷の間の時間が10秒以下である用途に動作するよう設計されているか、もしくは鉱業、建設、農業のような過酷で汚い屋外の環境で通常のメンテナンスが行われていること。	Applies to category 11, excluding applications covered by entry 6(c) of this Annex. Expires on 21 July 2024.'	・No.6©でカバーされる用途を除くカテゴリ11：2024年7月21日
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.	人が使用することを想定していない、もしくは可塑性物資が人の粘膜に接触しない、或いは人の皮膚に長期にわたり接触しないことを規定した機器用に設計されたエンジンシステムの、ゴム部品中のフタル酸ビス（2－エチルヘキシル） フタル酸ビス（2－エチルヘキシル）の濃度は以下の量を超えないこと。 (a)以下の（ｉ）～（ｉｉｉ）のゴム中の30重量% (i)ガスケットコーティング (ii)固形ゴムガスケット (iii)作業を行うために電気的、機械的、油圧式エネルギーを使用する少なくとも3個の部品の組み合わせを含み、エンジンに取り付けるゴム部品 (b)(a)以外のゴム含有部品中の10重量% ″人の皮膚に長期にわたる接触″とは、10分以上の継続的な接触もしくは1日あたり30分以上の接触のこと	Applies to category 11 and expires on 21 July 2024.	・カテゴリ11：2024年7月21日
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 (*1), installed in equipment used at fixed positions while in operation which is designed for professionals, but also used by non-professional users	位置が固定されている機器(専門家向けの機器ではあるが、専門ではないユーザーも使用するもの)に取り付けられ、欧州議会・理事会規則(EU)2016/1628に適合している内燃機関のセンサー、アクチュエーター、およびエンジン制御ユニットのはんだ中の鉛。	Applies to category 11 and expires on 21 July 2024.	・カテゴリ11：2024年7月21日

RoHS Exemptions list (Annex IV)

No.	Exemption	Exemption (Japanese)	Expiration (Japanese)
Equipment utilising or detecting ionising radiation 電離放射線の利用または検出に使用される機器			
1	Lead, cadmium and mercury in detectors for ionising radiation.	電離放射線用検出器に含まれる鉛、カドミウムおよび水銀	
2	Lead bearings in X-ray tubes.	X線管中の鉛ベアリング	
3	Lead in electromagnetic radiation amplification devices: micro-channel plate and capillary plate.	電磁波増幅デバイスに含まれる鉛：マイクロチャンネルプレートおよびキャピラリープレート	
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.	X線管および蛍光増倍管用のガラスフリット中に含まれる鉛、並びにガスレーザの組立て用および電磁放射線を電子に変換する真空管用のガラスフリットバインダに含まれる鉛	
5	Lead in shielding for ionising radiation.	電離放射線用のシールドに含まれる鉛	
6	Lead in X-ray test objects.	X線試験体に含まれる鉛	
7	Lead stearate X-ray diffraction crystals.	X線回折結晶に含まれるステアリン酸鉛	
8	Radioactive cadmium isotope source for portable X-ray fluorescence spectrometers.	携帯型蛍光X線分析装置用の放射性カドミウム同位体源	
Sensors, detectors and electrodes センサー、検出器および電極			
1a	Lead and cadmium in ion selective electrodes including glass of pH electrodes.	pH電極のガラスを含むイオン選択電極に含まれる鉛およびカドミウム	
1b	Lead anodes in electrochemical oxygen sensors.	電気化学的酸素センサーの陽電極に含まれる鉛	
1c	Lead, cadmium and mercury in infra-red light detectors.	赤外線検出器に含まれる鉛、カドミウムおよび水銀	
1d	Mercury in reference electrodes: low chloride mercury chloride, mercury sulphate and mercury oxide.	基準電極に含まれる水銀：低塩素の塩化水銀、硫酸水銀および酸化水銀	
Others その他			
9	Cadmium in helium-cadmium lasers.	ヘリウムーカドミウムレーザに含まれるカドミウム	
10	Lead and cadmium in atomic absorption spectroscopy lamps.	原子吸光分光分析用ランプに含まれる鉛およびカドミウム	
11	Lead in alloys as a superconductor and thermal conductor in MRI.	MRI（磁気共鳴画像診断装置）中の超伝導体および熱伝導体用の合金に含まれる鉛	
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. Expires on 30 June 2021.	MRI（磁気共鳴画像診断装置）、SQUID（超伝導量子干渉計）、NMR（Nuclear Magnetic Resonance）（磁気共鳴）または FTMS（Fourier Transform Mass Spectrometer）（フーリエ変換質量分析計）検出器の超伝導磁気回路を構成している金属結合中に含まれる鉛およびカドミウム。	2021年6月30日まで
13	Lead in counterweights.	カウンタウェイト中の鉛	
14	Lead in single crystal piezoelectric materials for ultrasonic transducers.	超音波トランスデューサ用の単結晶圧電結晶材料に含まれる鉛	
15	Lead in solders for bonding to ultrasonic transducers.	超音波トランスデューサの接合用はんだに含まれる鉛	
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.	超高精度キャパシタンスおよび損失測定ブリッジに含まれる水銀および監視および制御機器に使われる高周波RFスイッチおよびリレーに含まれる水銀であって、1スイッチまたは1リレーあたり20mgを超えないもの	
17	Lead in solders in portable emergency defibrillators.	携帯型緊急用除細動器に使われるはんだに含まれる鉛	
18	Lead in solders of high performance infrared imaging modules to detect in the range 8-14 μm.	8-14μm帯を検出する高性能赤外線画像モジュールに使われるはんだに含まれる鉛	
19	Lead in Liquid crystal on silicon (LCoS) displays.	LCoS（反射型液晶表示パネル）ディスプレイに含まれる鉛	
20	Cadmium in X-ray measurement filters.	X線測定フィルタに含まれるカドミウム	
21	Cadmium in phosphor coatings in image intensifiers for X-ray images until 31 December 2019 and in spare parts for X-ray systems placed on the EU market before 1 January 2020.	(1) X線画像用イメージインテンシファイア中の蛍光コーティング中に含まれるカドミウム (2) 2020年1月1日以前にEU市場に上市されたX線システム用スペアパーツ中に含まれるカドミウム	（無効）
22	Lead acetate marker for use in stereotactic head frames for use with CT and MRI and in positioning systems for gamma beam and particle therapy equipment. Expires on 30 June 2021.	CTおよびMRI用の定位ヘッドフレーム、およびガンマ線および粒子線治療装置のための位置決め装置に用いられる酢酸鉛マーカー	2021年6月30日まで
23	Lead as an alloying element for bearings and wear surfaces in medical equipment exposed to ionising radiation. Expires on 30 June 2021.	電離放射線にさらされる医療機器のベアリングおよび摩耗表面のための合金要素としての鉛	2021年6月30日まで
24	Lead enabling vacuum tight connections between aluminium and steel in X-ray image intensifiers. Expires on 31 December 2019.	X線イメージインテンシファイア中のアルミニウムと鉄の間の真空気密接続を可能にする鉛	（無効）
25	Lead in the surface coatings of pin connector systems requiring nonmagnetic connectors which are used durably at a temperature below ? 20 ° C under normal operating and storage conditions. Expires on 30 June 2021.	通常動作および貯蔵状態でマイナス20℃以下の温度で永続的に使用されている非磁性コネクタを必要とするピンコネクタシステムの表面コーティングに含まれる鉛	2021年6月30日まで
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 to be used periodically at temperatures below − 150 ° C. These exemptions expire on 30 June 2021.	通常動作および貯蔵状態でマイナス20℃未満の温度で永続的に使用される以下に含まれている鉛： (a) プリント配線基板上のはんだ、 (b) 電気・電子部品の末端のコーティングおよびプリント配線基板のコーティング、 (c) ワイヤおよびケーブルを接続するためのはんだ、 (d) トランスデューサおよびセンサを接続するはんだ マイナス150℃未満の温度で定期的に使われるように設計されている装置の温度測定センサへの電気接続に含まれる鉛。	2021年6月30日まで

27	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 isocentre 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. Expires on 30 June 2020.	(a) この範囲内で使用されるように設計された患者の監視装置を含む医療用磁気共鳴画像装置(MRI)中の磁石のアイソセンタ周囲の半径1m圏内の磁場、または (b) 粒子線治療のために適用されるサイクロトロン磁石、ビーム輸送およびビームの方向制御のための磁石から距離1mの範囲内の磁場 の中で使用されている以下に含まれている鉛 ーはんだ、 ー電気・電子部品およびプリント配線基板の末端のコーティング、 ー電線、シールドおよび封入されたコネクタの接続部分	2020年6月30日まで
28	Lead in solders for mounting cadmium telluride and cadmium zinc telluride digital array detectors to printed circuit boards. Expires on 31 December 2017.	テルル化カドミウムおよびテルル化亜鉛カドミウムのデジタルアレイ検出器をプリント配線基板上に搭載させるためのはんだに含まれる鉛	(無効)
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. Expires on 30 June 2021.	医療機器(カテゴリ8)及び/または産業用監視制御機器のクライオクーラーの冷却ヘッド及び/またはクライオクーラーで冷却された低温プローブ及び/またはクライオクーラーで冷却された等電位ボンディングシステム中で使用される超伝導体または熱伝導体としての合金中の鉛	2021年6月30日まで
30	Hexavalent chromium in alkali dispensers used to create photocathodes in X-ray image intensifiers until 31 December 2019 and in spare parts for X-ray systems placed on the EU market before 1 January 2020.'	(1) X線イメージインテンシファイアにおいて電子銃を作るために用いられるアルカリディスペンサに含まれる六価クロム (2) 2020年1月1日以前にEU市場に上市されるX線システム用スペアパーツに含まれる六価クロム	(無効)
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. Expires on: (a) 21 July 2021 for the use in medical devices other than in vitro diagnostic medical devices; (b) 21 July 2023 for the use in in vitro diagnostic medical devices; (c) 21 July 2024 for the use in electron microscopes and their accessories.	監視可能な閉ループのBtoB返却システムからの再利用が行われ、さらに各々の部品の再利用が消費者に通知される場合に限り、体外診断用医療機器および電子顕微鏡とそのアクセサリを含む医療機器の修理または改良のために回収されて、使われるスペアパーツに含まれる鉛、カドミウム、六価クロムとポリブロモジフェニルエーテル(PBDE)	(a)体外診断用医療機器以外の医療機器への使用:2021年7月21日まで (b)体外診断用医療機器への使用:2023年7月21日まで (c)電子顕微鏡とそのアクセサリへの使用:2024年7月21日まで
32	Lead in solders on printed circuit boards of detectors and data acquisition units for Positron Emission Tomographs which are integrated into Magnetic Resonance Imaging equipment. Expires on 31 December 2019.	核磁気共鳴画像(MRI)機器に組込まれるポジトロン断層法(PET)用検出器およびデータ収集装置のプリント配線基板のはんだに含まれる鉛	(無効)
33	Lead in solders on populated printed circuit boards used in Directive 93/42/EEC class IIa and IIb mobile medical devices other than portable emergency defibrillators. Expires on 30 June 2016 for class IIa and on 31 December 2020 for class IIb.	携帯型緊急用除細動器を除く、指令93/42/EEC(医療機器指令)クラス IIa および IIbの携帯型医療機器に使用される部品実装済みプリント配線基板上のはんだに含まれる鉛	(無効)
34	Lead as an activator in the fluorescent powder of discharge lamps when used for extracorporeal photopheresis lamps containing BSP (BaSi 2 O 5 :Pb) phosphors. Expires on 22 July 2021.	BSP(BaSi2O5:Pb)蛍光体を含む体外循環光療法ランプに使用される場合の放電ランプの蛍光パウダー中の活性剤としての鉛	2021年7月22日まで
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. Expires on 21 July 2024.	2017年7月22日より前に上市された産業用の監視および制御機器で使用されるバックライティング液晶ディスプレイ用の冷陰極蛍光ランプの中の水銀であって、1ランプにつき5mgを超えないもの	2024年7月21日まで
36	Lead used in other than C-press compliant pin connector systems for industrial monitoring and control instruments. Expires on 31 December 2020. May be used after that date in spare parts for industrial monitoring and control instruments placed on the market before 1 January 2021.	産業用の監視および制御機器用のC-プレスに準拠したピン・コネクタ・システム以外の中で使われる鉛	(無効)
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 instruments. Expires on 31 December 2025.	伝導率測定のために使用される以下の条件の少なくとも1つが適用される白金めっき白金電極中の鉛: (a) 試験所の未知の濃度測定用アプリケーションとして1桁以上(例えば0.1mS/m～5mS/mレンジ)をカバーする伝導率が広範囲の測定用; (b) プラスマイナス1%の精度と電極の高耐蝕性が必要な以下の溶液の測定用: (i) pH1未満の酸性溶液 (ii) pH13超のアルカリ性溶液 (iii) ハロゲンガスを含む腐食性の溶液 (c) 携帯型計器で測定しなくてはならない100mS/m以上の伝導率測定用	2025年12月31日まで
38	Lead in solder in one interface of large area stacked die elements with more than 500 interconnects per interface which are used in X-ray detectors of computed tomography and X-ray systems. Expires on 31 December 2019. May be used after that date in spare parts for CT and X-ray systems placed on the market before 1 January 2020.	CTとX線装置のX線検出器で使用されるインターフェースにつき500以上を接続する広範囲の積層型素子の1つのインターフェースに含まれるはんだの鉛	(無効)

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 mm2; (iii) a multiplication factor larger than 1,3 × 103. (c) a response time shorter than 5 ns for detecting electrons or ions; (d) a sample detection area larger than 314 mm2 for detecting electrons or ions; (e) a multiplication factor larger than 4,0 × 107. The exemption expires on the following dates: (a) 21 July 2021 for medical devices and monitoring and control instruments; (b) 21 July 2023 for in-vitro diagnostic medical devices; (c) 21 July 2024 for industrial monitoring and control instruments.	以下の特性の少なくとも1つが存在する装置で使われるマイクロチャンネルプレート(MCPs)中の鉛： (a) 最高3mm/MCP(検出器の厚さ＋MCP設置スペース)、全体で最高6mmを限度としたスペースの小さいサイズの電子またはイオン検出器ならびにより大きいスペースを必要とする代替設計でないと科学技術的に代替不可能な検出器 (b) 以下の少なくとも1つが適用される電子またはイオン検出用の二次元の空間分解能： (i) 25nsより短い応答時間 (i) 149mm2より大きな検出領域 (iii) 1.3×103より大きい増倍率 (c) 電子またはイオン検出用の5nsより短い応答時間； (d) 電子またはイオン検出用の314mm2より大きな検出領域 (e)4.0×107より大きい増倍率	以下の日付まで免除有効。 (a)医療装置と監視および制御機器：2021年7月21日 (b)体外診断用医療機器：2023年7月21日 (c)産業用の監視および制御機器：2024年7月21日
40	Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC for industrial monitoring and control instruments. Expires on 31 December 2020. May be used after that date in spare parts for industrial monitoring and control instruments placed on the market before 1 January 2021.	産業用の監視および制御機器用の定格電圧AC125VまたはDC250Vより小さいコンデンサの中の誘電セラミックの鉛	(無効)
41	Lead as a thermal stabiliser in polyvinyl chloride (PVC) used as base material in amperometric, potentiometric and conductometric electrochemical sensors which are used in in-vitro diagnostic medical devices for the analysis of blood and other body fluids and body gases. Expires on 31 March 2022.	血液、他の体液、体内ガス分析のために体外診断用医療機器で使われる電流、電位差、導電率の電気化学的センサ中の主成分素材として使われるポリ塩化ビニル（PVC）中のサーマルスタビライザとしての鉛	2022年3月31日まで
42	Mercury in electric rotating connectors used in intravascular ultrasound imaging systems capable of high operating frequency (> 50 MHz) modes of operation. Expires on 30 June 2019.	高周波(>50MHz)モードで運転可能な血管内超音波画像処理システムで使われる電気回転コネクタ中の水銀	2019年6月30日まで
43	Cadmium anodes in Hersch cells for oxygen sensors used in industrial monitoring and control instruments, where sensitivity below 10 ppm is required. Expires on 15 July 2023.	10ppm未満の感度が要求される産業用監視・制御機器で使用される酸素センサのためのエルシュ セル（ハーシュ セル）中のカドミウムアノード	2023年7月15日まで
44	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. Applies to category 9. Expires on 31 March 2027.	100Gy/hを超える電離放射線の曝露があり、かつ総量が100kGyを超える環境で使用される中央解像度が450TV line(訳注：アナログカメラにおける水平解像度。画面を左右に横断する直線の本数を解像度の基準とする。)より高いカメラ用に設計された耐放射線ビデオカメラ管の中のカドミウムカテゴリ9：2027年3月31日に終了。	2027年3月31日まで