< KUBOTA Group Green Procurement Guidelines Appendix >

Substances of Concern List

January-25

KUBOTA Corporation

Introduction

This document is for providing information related to "3. Substances of Concern" of "Eco-friendliness standards for products" specified in "KUBOTA Group Green Procurement Guidelines" revised on January 2025.

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[Disclaimer]

While the information is made based on the related regulatory control etc. of December 1, 2023, we make no warranties about the completeness and accuracy. Please confirm the original of the related regulatory control or the industry standards of the latest version properly in yourself when you use it. The publisher, Kubota Corporation, doesn't assume the responsibility of the damage suffers by using it. Moreover, we may revise it without a previous notice according to the reorganization of the related regulatory control and the industry standards.

[Revision History] (Last 5 times)

Date of revision	Table Number	Revision
2025.1.1	Table1-1. Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc	Addition of "Perfluoro(hexane-1-sulfonic acid) (Synonym: PFHxS) or perfluoro(alkanesulfonic acid)(It is limited to those with a branched structure and the number of carbon is 6.) or their salts" Addition of example substances.
	Table1-2. Poisonous and Deleterious Substances Control Law of Japan Table1-3. The Industrial Safety and Health Act of Japan	Addition of reference CAS No.and example substances.
	Table1-4. Law Concerning the Protection of the Ozone Layer through the Control of Specified Substances and Other Measures	Addition of reference CAS No.
	Table1-5. Stockholm Convention on persistent organic pollutants and EU Regulation on persistent organic pollutants (EC) No 850/2004	Addition of relevant Annex number to the table title. Addition of example substances.
	Table2-1. RoHS ANNEX II	Addition of example substances.
	Table2-2.Montreal Protocol Annex C Group I	Addition of reference CAS No.
	Table2-3. REACH Annex XVII, substances restricted to use in articles	Addition of "Undecafluorohexanoic acid (PFHxA), its salts and PFHxA-related substances" Addition of example substances.
	Table2-4. TSCA PBT Chemicals	Addition of CAS No.
2024.1.1	Table1-5.	Added substances that have been decided to be eliminated under the Stockholm Convention on persistent organic pollutants to the list of prohibited substances.
	Table2-3.	Additions and reviews were made as a consequence of the amendment to the REACH Annex XVII (Restricted substances). Entry numbers for each substance in the REACH Annex XVII were added.
2023.1.1	Table2-4. TSCA PBT Chemicals	Phase-in Prohibition for PIP (3:1) was revised according to the Federal Register (87 FR 12875)03/08/2022.
2022.1.1	Table 1: Prohibited	・"2.2.2-Trichloro-1- (2-chlorophenyl) -1- (4-chlorophenyl) ethanol" and "PFOA's salt" were added as a consequence of the amendment to the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.
	Table1-5. EU Regulation- on persistent organic pollutants (EC)	Addition of CAS No. Addition of "Dicofol."
	Table1-6. Other substances specified independently by KUBOTA Group	Addition of CAS No.
	Table2-3. REACH Annex XVII, substances restricted to use in articles	Addition of CAS No.
	Table2-4. TSCA PBT Chemicals	Additions were made TSCA PBT substance as Substances to be Restricted.
	Attached Table I-A,B: RoHS exemptions list Annex III, IV	Reflected until March 5, 2020 Promulgation Committee Directive (EU) 2020/366 and January 15, 2021 Promulgation Committee Directive (EU) 2021/647.
2021.1.1	Table 1: Prohibited	Addition of "PFOA"
	Table 2: Restricted	Additions and reviews were made as a consequence of the amendment to the REACH Annex XVII (Restricted substances).
	Attached Table I-A,B: RoHS exemptions list Annex III, IV	Amended as Commission Regulation 2020/364/EU of 5 March 2020 and application for extension submitted between November 2019 and January 2020.

Table 1 : Substances to be Prohibited

Following substances should not be contained in the products nor used in the production process. The content as impurities should be less than 0.1 percent by weight per homogeneous material.

Table1-1. Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc./ Class I Specified Chemical Substances

No.	Substance Name	Synonym
1	Polychlorinated biphenyls	
	Example substances	**CAS No.**
	polychlorobiphenyl	1336-36-3
	3,3'-dichlorobiphenyl	2050-67-1
	4,4'-dichlorobiphenyl	2050-68-2
	2,2',3,3',4,4',5,5',6,6'-decachlorobiphenyl	2051-24-3
	2-chlorobiphenyl	2051-60-7
	3-chlorobiphenyl	2051-61-8
	4-chlorobiphenyl	2051-62-9
	2,2',3,3',5,5',6,6'-octachlorobiphenyl	2136-99-4
	2,2',4,4'-tetrachlorobiphenyl	2437-79-8
	3,4'-dichlorobiphenyl	2974-90-5
	3,4-dichlorobiphenyl	2974-92-7
	2,4,4'-trichlorobiphenyl	7012-37-5
	PCB 1254	11097-69-1
	Aroclor 1221	11104-28-2
	Aroclor 1232	11141-16-5
	PCB 1248	12672-29-6
	Aroclor 1016	12674-11-2
	2,2'-dichlorobiphenyl	13029-08-8
	2,4,5-trichlorobiphenyl	15862-07-4
	2,2',6,6'-tetrachlorobiphenyl	15968-05-5
	2,3-dichlorobiphenyl	16605-91-7
	2,4',5-trichlorobiphenyl	16606-02-3
	2,3,4,5,6-pentachlorobiphenyl	18259-05-7
	trichlorobiphenyl	25323-68-6
	pentachlorobiphenyl	25429-29-2
	dichlorobiphenyl	25512-42-9
	2,3'-dichlorobiphenyl	25569-80-6
	hexachlorobiphenyl	26601-64-9
	tetrachlorobiphenyl	26914-33-0
	chlorobiphenyl	27323-18-8
	heptachlorobiphenyl	28655-71-2
	ar,ar,ar-trichlorobiphenyl	30605-61-9
	octachlorobiphenyl	31472-83-0
	2,3',4,4',5-pentachlorobiphenyl	31508-00-6
	2,3',4,4'-tetrachlorobiphenyl	32598-10-0
	2,3',4',5-tetrachlorobiphenyl	32598-11-1
	2,4,4',6-tetrachlorobiphenyl	32598-12-2
	3,3',4,4'-tetrachlorobiphenyl	32598-13-3
	2,3,3',4,4'-pentachlorobiphenyl	32598-14-4
	2,4,4',5-tetrachlorobiphenyl	32690-93-0
	3,3',4,4',5,5'-hexachlorobiphenyl	32774-16-6
	2,3,4,4'-tetrachlorobiphenyl	33025-41-1
	ar,ar'-dichlorobiphenyl	33039-81-5
	2,2',3,3',4,4',6,6'-octachlorobiphenyl	33091-17-7
	2,6-dichlorobiphenyl	33146-45-1
	2,4-dichlorobiphenyl	33284-50-3
	3,3',5,5'-tetrachlorobiphenyl	33284-52-5
	2,3,4,5-tetrachlorobiphenyl	33284-53-6
	2,3,5,6-tetrachlorobiphenyl	33284-54-7
	2,2',4,4',6,6'-hexachlorobiphenyl	33979-03-2
	2,5-dichlorobiphenyl	34883-39-1
	3,5-dichlorobiphenyl	34883-41-5
	2,4'-dichlorobiphenyl	34883-43-7
	2,2',4,4',5,5'-hexachlorobiphenyl	35065-27-1
	2,2',3,4,4',5'-hexachlorobiphenyl	35065-28-2
	2,2',3,4,4',5,5'-heptachlorobiphenyl	35065-29-3
	2,2',3,3',4,4',5-heptachlorobiphenyl	35065-30-6
	2,4,6-trichlorobiphenyl	35693-92-6
	2,2',5,5'-tetrachlorobiphenyl	35693-99-3
	2,2',3,3',5,5'-hexachlorobiphenyl	35694-04-3
	2,2',3,4,4',5-hexachlorobiphenyl	35694-06-5
	2,2',3,3',4,4',5,5'-octachlorobiphenyl	35694-08-7
	2,2',3,4'-tetrachlorobiphenyl	36559-22-5

	Kanechlor 300	37353-63-2
	2,2',5-trichlorobiphenyl	37680-65-2
	2,2',4-trichlorobiphenyl	37680-66-3
	2,3',5'-trichlorobiphenyl	37680-68-5
	3,3',4-trichlorobiphenyl	37680-69-6
	2,2',4,5,5'-pentachlorobiphenyl	37680-73-2
	2,2',3,5',6-pentachlorobiphenyl	38379-99-6
	2,2',4,4',5-pentachlorobiphenyl	38380-01-7
	2,2',3,4,5'-pentachlorobiphenyl	38380-02-8
	2,3,3',4',6-pentachlorobiphenyl	38380-03-9
	2,2',3,4',5',6-hexachlorobiphenyl	38380-04-0
	2,2',3,3',4,6'-hexachlorobiphenyl	38380-05-1
	2,2',3,3',4,4'-hexachlorobiphenyl	38380-07-3
	2,3,3',4,4',5-hexachlorobiphenyl	38380-08-4
	2,2',3,3',6,6'-hexachlorobiphenyl	38411-22-2
	2,2',3,3',4,5,6'-heptachlorobiphenyl	38411-25-5
	2,2',6-trichlorobiphenyl	38444-73-4
	2,3',6-trichlorobiphenyl	38444-76-7
	2,4',6-trichlorobiphenyl	38444-77-8
	2,2',3-trichlorobiphenyl	38444-78-9
	2,3',5-trichlorobiphenyl	38444-81-4
	2,3,3'-trichlorobiphenyl	38444-84-7
	2,3,4'-trichlorobiphenyl	38444-85-8
	2',3,4-trichlorobiphenyl	38444-86-9
	3,3',5-trichlorobiphenyl	38444-87-0
	3,4',5-trichlorobiphenyl	38444-88-1
	3,4,4'-trichlorobiphenyl	38444-90-5
	2,2',3,3'-tetrachlorobiphenyl	38444-93-8
	2,2',4,4',6-pentachlorobiphenyl	39485-83-1
	2,3,3',4,4',5,5'-heptachlorobiphenyl	39635-31-9
	2,3,3',5,5'-pentachlorobiphenyl	39635-32-0
	3,3',4,5,5'-pentachlorobiphenyl	39635-33-1
	2,3,3',4',5,5'-hexachlorobiphenyl	39635-34-2
	2,3,3',4,5,5'-hexachlorobiphenyl	39635-35-3
	2,2',3,3',4,5',6-heptachlorobiphenyl	40186-70-7
	2,2',3,3',4,5',6,6'-octachlorobiphenyl	40186-71-8
	2,2',3,3',4,4',5,5',6-nonachlorobiphenyl	40186-72-9
	2,2',3,4,5,6-hexachlorobiphenyl	41411-61-4
	2,3,3',4,5,6-hexachlorobiphenyl	41411-62-5
	2,3,4,4',5,6-hexachlorobiphenyl	41411-63-6
	2,3,3',4,4',5,6-heptachlorobiphenyl	41411-64-7
	2,2',3,5'-tetrachlorobiphenyl	41464-39-5
	2,2',4,5'-tetrachlorobiphenyl	41464-40-8
	2,2',5,6'-tetrachlorobiphenyl	41464-41-9
	2,3',5,5'-tetrachlorobiphenyl	41464-42-0
	2,3,3',4'-tetrachlorobiphenyl	41464-43-1
	2,3',4',6-tetrachlorobiphenyl	41464-46-4
	2,2',3,6'-tetrachlorobiphenyl	41464-47-5
	3,3',4,5'-tetrachlorobiphenyl	41464-48-6
	2,3,3',5'-tetrachlorobiphenyl	41464-49-7
	2,2',3,4',5'-pentachlorobiphenyl	41464-51-1
	2,2',3,3',4,4',5,6'-octachlorobiphenyl	42740-50-1
	2,2',3,4',5,5'-hexachlorobiphenyl	51908-16-8
	2,3,4',6-tetrachlorobiphenyl	52663-58-8
	2,2',3,4-tetrachlorobiphenyl	52663-59-9
	2,2',3,3',6-pentachlorobiphenyl	52663-60-2
	2,2',3,5,5'-pentachlorobiphenyl	52663-61-3
	2,2',3,3',4-pentachlorobiphenyl	52663-62-4
	2,2',3,5,5',6-hexachlorobiphenyl	52663-63-5
	2,2',3,3',5,6,6'-heptachlorobiphenyl	52663-64-6
	2,2',3,3',4,6,6'-heptachlorobiphenyl	52663-65-7
	2,2',3,3',4,5'-hexachlorobiphenyl	52663-66-8
	2,2',3,3',5,5',6-heptachlorobiphenyl	52663-67-9
	2,2',3,4',5,5',6-heptachlorobiphenyl	52663-68-0
	2,2',3,4,4',5',6-heptachlorobiphenyl	52663-69-1
	2,2',3,3',4,5',6'-heptachlorobiphenyl	52663-70-4
	2,2',3,3',4,4',6-heptachlorobiphenyl	52663-71-5
	2,3',4,4',5,5'-hexachlorobiphenyl	52663-72-6
	2,2',3,3',4,5,6,6'-octachlorobiphenyl	52663-73-7
	2,2',3,3',4,5,5'-heptachlorobiphenyl	52663-74-8
	2,2',3,3',4,5,5',6'-octachlorobiphenyl	52663-75-9

	2,2',3,4,4',5,5',6-octachlorobiphenyl	52663-76-0
	2,2',3,3',4,5,5',6,6'-nonachlorobiphenyl	52663-77-1
	2,2',3,3',4,4',5,6-octachlorobiphenyl	52663-78-2
	2,2',3,3',4,4',5,6,6'-nonachlorobiphenyl	52663-79-3
	2,2',3,3',5,6-hexachlorobiphenyl	52704-70-8
	2,2',3,4,5,5'-hexachlorobiphenyl	52712-04-6
	2,2',3,4,5,5',6-heptachlorobiphenyl	52712-05-7
	2,2',3,3',5,6'-hexachlorobiphenyl	52744-13-5
	PCB 1242	53469-21-9
	3,4,5-trichlorobiphenyl	53555-66-1
	nonachlorobiphenyl	53742-07-7
	2,3,4,6-tetrachlorobiphenyl	54230-22-7
	(+-)-2,2',3,4,6-pentachlorobiphenyl	55215-17-3
	2,2',3,3',4,5-hexachlorobiphenyl	55215-18-4
	2,2',3,4,5-pentachlorobiphenyl	55312-69-1
	2,3,6-trichlorobiphenyl	55702-45-9
	2,3,4-trichlorobiphenyl	55702-46-0
	2,3',4-trichlorobiphenyl	55712-37-3
	2,3,5-trichlorobiphenyl	55720-44-0
	octachlorobiphenyl	55722-26-4
	(+-)-2,2',3,4,4',6-hexachlorobiphenyl	56030-56-9
	2,2',4,6,6'-pentachlorobiphenyl	56558-16-8
	2,3',4,4',6-pentachlorobiphenyl	56558-17-9
	2,3',4,5',6-pentachlorobiphenyl	56558-18-0
	3,3',4,4',5-pentachlorobiphenyl	57465-28-8
	2,2',3,4,4',6'-hexachlorobiphenyl	59291-64-4
	2,3',4,4',5',6-hexachlorobiphenyl	59291-65-5
	2,2',3,3',5-pentachlorobiphenyl	60145-20-2
	2,2',4,5',6-pentachlorobiphenyl	60145-21-3
	2,2',4,4',5,6'-hexachlorobiphenyl	60145-22-4
	2,2',3,4,4',5,6'-heptachlorobiphenyl	60145-23-5
	2,3',4,6-tetrachlorobiphenyl	60233-24-1
	2,2',3,4',6'-pentachlorobiphenyl	60233-25-2
	2,2',3,3',4,6-hexachlorobiphenyl	61798-70-7
	2,4,4'(or 3,4,4')-trichlorobiphenyl	62461-62-5
	2,2',4,6-tetrachlorobiphenyl	62796-65-0
	2,3',4,4',5'-pentachlorobiphenyl	65510-44-3
	2,2',3,4,4'-pentachlorobiphenyl	65510-45-4
	2,2',4,6'-tetrachlorobiphenyl	68194-04-7
	2,2',3,4',6-pentachlorobiphenyl	68194-05-8
	2,2',4,5,6'-pentachlorobiphenyl	68194-06-9
	2,2',3,4',5-pentachlorobiphenyl	68194-07-0
	2,2',3,4',6,6'-hexachlorobiphenyl	68194-08-1
	2,2',3,5,6,6'-hexachlorobiphenyl	68194-09-2
	2,3,3',5',6-pentachlorobiphenyl	68194-10-5
	2,3,4',5,6-pentachlorobiphenyl	68194-11-6
	2,3',4,5,5'-pentachlorobiphenyl	68194-12-7
	2,2',3,4',5,6-hexachlorobiphenyl	68194-13-8
	2,2',3,4,5',6-hexachlorobiphenyl	68194-14-9
	2,2',3,4,5,6'-hexachlorobiphenyl	68194-15-0
	2,2',3,3',4,5,6-heptachlorobiphenyl	68194-16-1
	2,2',3,3',4,5,5',6-octachlorobiphenyl	68194-17-2
	2,3,3',4,4',5'-hexachlorobiphenyl	69782-90-7
	2,3,3',4',5,5',6-heptachlorobiphenyl	69782-91-8
	2,3,3',4,5'-pentachlorobiphenyl	70362-41-3
	2,2',3,6-tetrachlorobiphenyl	70362-45-7
	2,2',3,5-tetrachlorobiphenyl	70362-46-8
	2,2',4,5-tetrachlorobiphenyl	70362-47-9
	2,3',4',5'-tetrachlorobiphenyl	70362-48-0
	3,3',4,5-tetrachlorobiphenyl	70362-49-1
	3,4,4',5-tetrachlorobiphenyl	70362-50-4
	2,3,3',5-tetrachlorobiphenyl	70424-67-8
	2,3,3',4',5-pentachlorobiphenyl	70424-68-9
	2,3,3',4,5-pentachlorobiphenyl	70424-69-0
	2,3',4',5,5'-pentachlorobiphenyl	70424-70-3
	2,3',4,5'-tetrachlorobiphenyl	73575-52-7
	2,3',4,5-tetrachlorobiphenyl	73575-53-8
	2,2',3,6,6'-pentachlorobiphenyl	73575-54-9
	2,2',3,5,6'-pentachlorobiphenyl	73575-55-0
	2,2',3,5,6-pentachlorobiphenyl	73575-56-1
	2,2',3,4,6'-pentachlorobiphenyl	73575-57-2

	2,3',5',6-tetrachlorobiphenyl	74338-23-1
	2,3,3',4-tetrachlorobiphenyl	74338-24-2
	2,3,3',6-tetrachlorobiphenyl	74472-33-6
	2,3,4',5-tetrachlorobiphenyl	74472-34-7
	2,3,3',4,6-pentachlorobiphenyl	74472-35-8
	2,3,3',5,6-pentachlorobiphenyl	74472-36-9
	2,3,4,4',5-pentachlorobiphenyl	74472-37-0
	2,3,4,4',6-pentachlorobiphenyl	74472-38-1
	2,3',4',5',6-pentachlorobiphenyl	74472-39-2
	2,2',3,4,6,6'-hexachlorobiphenyl	74472-40-5
	2,2',3,4',5,6'-hexachlorobiphenyl	74472-41-6
	2,3,3',4,4',6-hexachlorobiphenyl	74472-42-7
	2,3,3',4,5',6-hexachlorobiphenyl	74472-43-8
	2,3,3',4',5,6-hexachlorobiphenyl	74472-44-9
	2,3,3',4',5',6-hexachlorobiphenyl	74472-45-0
	2,3,3',5,5',6-hexachlorobiphenyl	74472-46-1
	2,2',3,4,4',5,6-heptachlorobiphenyl	74472-47-2
	2,2',3,4,4',6,6'-heptachlorobiphenyl	74472-48-3
	2,2',3,4,5,6,6'-heptachlorobiphenyl	74472-49-4
	2,3,3',4,4',5',6-heptachlorobiphenyl	74472-50-7
	2,3,3',4,5,5',6-heptachlorobiphenyl	74472-51-8
	2,2',3,4,4',5,6,6'-octachlorobiphenyl	74472-52-9
	2,3,3',4,4',5,5',6-octachlorobiphenyl	74472-53-0
	2,2',3,4',5,6,6'-heptachlorobiphenyl	74487-85-7
	2,3,3',4',5'-pentachlorobiphenyl	76842-07-4
	Mixture of PCB 1248 and PCB 1254	89000-29-3
	2,4',?-trichlorobiphenyl	94487-00-0
	2,3,?'(or 3,4,?')-trichlorobiphenyl	97122-18-4
	2,4,?'(2,6,?' or 3,5,?')-trichlorobiphenyl	97122-20-8
	(+-)-2,2',3,4,6-pentachlorobiphenyl	99554-08-2
	(+-)-2,2',3,4,4',6-hexachlorobiphenyl	99554-09-3
	(+)-2,2',3,4,6-pentachlorobiphenyl	99554-10-6
	(-)-2,2',3,4,6-pentachlorobiphenyl	99554-11-7
	(+)-2,2',3,4,4',6-hexachlorobiphenyl	99554-12-8
	(-)-2,2',3,4,4',6-hexachlorobiphenyl	99554-13-9
	2,2',3,4,4',5(or 2,2',3,4,4',5')-hexachlorobiphenyl	108145-39-7
	(R)-2,2',3,3',4,4',6,6'-octachlorobiphenyl	109328-45-2
	(S)-2,2',3,3',4,4',6,6'-octachlorobiphenyl	109328-46-3
	2,2',3,6,6',?-hexachlorobiphenyl	111276-74-5
	2,4,4',?,?-pentachlorobiphenyl	111276-75-6
	2,2',6',?,?-pentachlorobiphenyl	111276-76-7
	2,2',5,6',?,?-hexachlorobiphenyl	111276-77-8
	2,?,?-trichlorobiphenyl	111276-78-9
	4,4',?,?,?,?-hexachlorobiphenyl	111276-79-0
	2,2',5,6',?,?,?-heptachlorobiphenyl	111276-80-3
	4,4',?,?,?-pentachlorobiphenyl	111276-81-4
	2,3,3',4,4',5,5',?-octachlorobiphenyl	111276-82-5
	2,2',5,6',?,?,?,?-octachlorobiphenyl	111276-83-6
	(+)-2,2',3,6-tetrachlorobiphenyl	151262-31-6
	(-)-2,2',3,6-tetrachlorobiphenyl	151262-32-7
	(+)-2,2',3,5',6-pentachlorobiphenyl	151262-34-9
	(-)-2,2',3,5',6-pentachlorobiphenyl	151262-35-0
	(S)-2,2',3,3',6-pentachlorobiphenyl	153153-43-6
	(R)-2,2',3,3',6-pentachlorobiphenyl	153153-44-7
	(S)-2,2',3,4',6-pentachlorobiphenyl	153153-45-8
	(R)-2,2',3,4',6-pentachlorobiphenyl	153153-46-9
	(S)-2,2',3,3',4,6'-hexachlorobiphenyl	153153-47-0
	(R)-2,2',3,3',4,6'-hexachlorobiphenyl	153153-48-1
	(S)-2,2',3,3',6,6'-hexachlorobiphenyl	153153-49-2
	(R)-2,2',3,3',6,6'-hexachlorobiphenyl	153153-50-5
	(R)-2,2',3,4',5,6-hexachlorobiphenyl	159000-96-1
	(S)-2,2',3,4',5,6-hexachlorobiphenyl	159000-97-2
	(R)-2,2',3,3',4,4',6-heptachlorobiphenyl	176914-46-8
	(R)-2,2',3,4,4',5',6-heptachlorobiphenyl	176914-47-9
	(S)-2,2',3,3',4,4',6-heptachlorobiphenyl	176914-48-0
	(S)-2,2',3,4,4',5',6-heptachlorobiphenyl	176914-49-1
	(R)-2,2',3,3',4,4',5,6'-octachlorobiphenyl	177020-15-4
	(S)-2,2',3,3',4,4',5,6'-octachlorobiphenyl	177020-16-5
	(R)-2,2',3,3',4,6-hexachlorobiphenyl	179678-26-3
	(S)-2,2',3,3',4,6-hexachlorobiphenyl	179678-27-4
	(R)-2,2',3,3',4,5,6'-heptachlorobiphenyl	179678-28-5

	(S)-2,2',3,3',4,5,6'-heptachlorobiphenyl	179678-29-6
	(R)-2,2',3,3',4,5',6-heptachlorobiphenyl	179678-30-9
	(S)-2,2',3,3',4,5',6-heptachlorobiphenyl	179678-31-0
	(R)-2,2',3,3',4,6,6'-heptachlorobiphenyl	179678-32-1
	(S)-2,2',3,3',4,6,6'-heptachlorobiphenyl	179678-33-2
	(R)-2,2',3,3',5,6'-hexachlorobiphenyl	205991-67-9
	(S)-2,2',3,3',5,6'-hexachlorobiphenyl	205991-68-0
	(R)-2,2',3,4,5',6-hexachlorobiphenyl	205991-69-1
	(S)-2,2',3,4,5',6-hexachlorobiphenyl	205991-70-4
	(+)-2,2',3,3',6-pentachlorobiphenyl	207004-27-1
	(+)-2,2',3,3',4,6'-hexachlorobiphenyl	207004-28-2
	(-)-2,2',3,3',5,6'-hexachlorobiphenyl	207004-29-3
	(+)-2,2',3,3',6,6'-hexachlorobiphenyl	207004-30-6
	(-)-2,2',3,3',4,5,6'-heptachlorobiphenyl	207004-31-7
	(+)-2,2',3,3',4,6,6'-heptachlorobiphenyl	207004-32-8
	(+)-2,2',3,3',4,6-hexachlorobiphenyl	207004-33-9
	(+)-2,2',3,3',4,5',6-heptachlorobiphenyl	207004-34-0
	(+)-2,2',3,3',4,4',5,6'-octachlorobiphenyl	207004-35-1
	(+)-2,2',3,4',5',6-hexachlorobiphenyl	207004-36-2
	(+)-2,2',3,4,5',6-hexachlorobiphenyl	228420-06-2
	(+)-2,2',3,4,4',5',6-heptachlorobiphenyl	228420-07-3
2	Polychlorinated naphthalenes (limited to those containing two or more chlorine atoms)	
	Example substances	**CAS No.**
	Pentachloronaphthalene	1321-64-8
	Trichloronaphthalene	1321-65-9
	Hexachloronaphthalene	1335-87-1
	Tetrachloronaphthalene	1335-88-2
	1,5-Dichloronaphthalene	1825-30-5
	1,4-Dichloronaphthalene	1825-31-6
	1,2-Dichloronaphthalene	2050-69-3
	1,6-Dichloronaphthalene	2050-72-8
	1,7-Dichloronaphthalene	2050-73-9
	1,8-Dichloronaphthalene	2050-74-0
	2,3-Dichloronaphthalene	2050-75-1
	2,6-Dichloronaphthalene	2065-70-5
	1,3-Dichloronaphthalene	2198-75-6
	2,7-Dichloronaphthalene	2198-77-8
	Perchloronaphthalene	2234-13-1
	1,4,6-Trichloronaphthalene	2437-54-9
	1,4,5-Trichloronaphthalene	2437-55-0
	1,4,5,8-Tetrachloronaphthalene	3432-57-3
	1,2,4,8-Tetrachloronaphthalene	6529-87-9
	1,2,4,5-Tetrachloronaphthalene	6733-54-6
	1,2,3,6,7,8-Hexachloronaphthalene	17062-87-2
	1,2,3,4-Tetrachloronaphthalene	20020-02-4
	Dichloronaphthalene	28699-88-9
	1,3,5,8-Tetrachloronaphthalene	31604-28-1
	Heptachloronaphthalene	32241-08-0
	2,3,6,7-Tetrachloronaphthalene	34588-40-4
	1,2,4-Trichloronaphthalene	50402-51-2
	1,2,3-Trichloronaphthalene	50402-52-3
	1,3,5-Trichloronaphthalene	51570-43-5
	1,2,6-Trichloronaphthalene	51570-44-6
	1,2,4,6-Tetrachloronaphthalene	51570-45-7
	1,2,3,5-Tetrachloronaphthalene	53555-63-8
	1,3,5,7-Tetrachloronaphthalene	53555-64-9
	1,2,3,5,7-Pentachloronaphthalene	53555-65-0
	1,2,5-Trichloronaphthalene	55720-33-7
	1,2,7-Trichloronaphthalene	55720-34-8
	1,2,8-Trichloronaphthalene	55720-35-9
	1,3,6-Trichloronaphthalene	55720-36-0
	1,3,7-Trichloronaphthalene	55720-37-1
	1,3,8-Trichloronaphthalene	55720-38-2
	1,6,7-Trichloronaphthalene	55720-39-3
	2,3,6-Trichloronaphthalene	55720-40-6
	1,2,3,7-Tetrachloronaphthalene	55720-41-7
	1,3,6,7-Tetrachloronaphthalene	55720-42-8
	1,4,6,7-Tetrachloronaphthalene	55720-43-9
	1,2,3,4,5,6,7-Heptachloronaphthalene	58863-14-2
	1,2,3,4,5,6,8-Heptachloronaphthalene	58863-15-3
	1,2,3,4,5,6-Hexachloronaphthalene	58877-88-6

	1,2,4,7-Tetrachloronaphthalene	67922-21-8
	1,2,5,6-Tetrachloronaphthalene	67922-22-9
	1,2,5,7-Tetrachloronaphthalene	67922-23-0
	1,2,6,8-Tetrachloronaphthalene	67922-24-1
	1,2,3,4,5-Pentachloronaphthalene	67922-25-2
	1,2,3,4,6-Pentachloronaphthalene	67922-26-3
	1,2,3,4,5,7-Hexachloronaphthalene	67922-27-4
	Naphthalene, chloro derivatives	70776-03-3
	1,2,4,5,6,8-Hexachloronaphthalene	90948-28-0
	1,2,4,5,7,8-Hexachloronaphthalene	103426-92-2
	1,2,3,4,5,8-Hexachloronaphthalene	103426-93-3
	1,2,3,5,7,8-Hexachloronaphthalene	103426-94-4
	1,2,3,5,6,8-Hexachloronaphthalene	103426-95-5
	1,2,3,4,6,7-Hexachloronaphthalene	103426-96-6
	1,2,3,5,6,7-Hexachloronaphthalene	103426-97-7
	1,2,3,6-Tetrachloronaphthalene	149864-78-8
	1,2,6,7-Tetrachloronaphthalene	149864-79-9
	1,2,5,8-Tetrachloronaphthalene	149864-80-2
	1,2,3,8-Tetrachloronaphthalene	149864-81-3
	1,2,7,8-Tetrachloronaphthalene	149864-82-4
	1,2,3,7,8-Pentachloronaphthalene	150205-21-3
	1,3,6,8-Tetrachloronaphthalene	150224-15-0
	1,2,3,6,7-Pentachloronaphthalene	150224-16-1
	1,2,4,6,7-Pentachloronaphthalene	150224-17-2
	1,2,3,5,6-Pentachloronaphthalene	150224-18-3
	1,2,4,5,7-Pentachloronaphthalene	150224-19-4
	1,2,4,5,6-Pentachloronaphthalene	150224-20-7
	1,2,4,7,8-Pentachloronaphthalene	150224-21-8
	1,2,4,6,8-Pentachloronaphthalene	150224-22-9
	1,2,3,6,8-Pentachloronaphthalene	150224-23-0
	1,2,3,5,8-Pentachloronaphthalene	150224-24-1
	1,2,4,5,8-Pentachloronaphthalene	150224-25-2
3	Hexachlorobenzene	
	Example substances	**CAS No.**
	Perchlorobenzene	118-74-1
4	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-dimethanonaphthalene	Aldrin
	Example substances	**CAS No.**
	rel-(1R,2R,3R,6S,7S,8S)-1,8,9,10,11,11-Hexachlorotetracyclo[6.2.1.1(3,6).0(2,7)]dodeca-4,9-diene	309-00-2
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	Dieldrin
	Example substances	**CAS No.**
	rel-(1R,2S,3S,6R,7R,8S,9S,11R)-3,4,5,6,13,13-Hexachloro-10-oxapentacyclo[6.3.1.1(3,6).0(2,7).0(9,11)]tridec-4-ene	60-57-1
	1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4:5,8-dimethanonaphthalene	128-10-9
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	Endrin
	Example substances	**CAS No.**
	rel-(1R,2R,3R,6S,7S,8S,9S,11R)-3,4,5,6,13,13-Hexachloro-10-oxapentacyclo[6.3.1.1(3,6).0(2,7).0(9,11)]tridec-4-ene	72-20-8
	1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4:5,8-dimethanonaphthalene	128-10-9
7	1,1,1-Trichloro-2,2-bis(4-chlorophenyl)ethane	DDT
	Example substances	**CAS No.**
	1,1,1-Trichloro-2,2-bis(4-chlorophenyl)ethane	50-29-3
8	mixture of 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 analogue compounds	Chlordane, Heptachlor
	Example substances	**CAS No.**
	1,3,4,7,8,9,10,10-Octachlorotricyclo[5.2.1.0(2,6)]dec-8-ene	57-74-9
	1,5,7,8,9,10,10-Heptachlorotricyclo[5.2.1.0(2,6)]deca-3,8-diene	76-44-8
	rel-(1R,2S,3R,4S,6S,7S)-1,3,4,7,8,9,10,10-Octachlorotricyclo[5.2.1.0(2,6)]dec-8-ene	5103-71-9
	rel-(1R,2S,3R,4R,6S,7S)-1,3,4,7,8,9,10,10-Octachlorotricyclo[5.2.1.0(2,6)]dec-8-ene	5103-74-2
	1,4,4,7,8,9,10,10-Octachlorotricyclo[5.2.1.0(2,6)]dec-8-ene	5566-34-7
	1,8,9,10,11,11-Hexachloro-4-oxatetracyclo[6.2.1.0(2,7).0(3,5)]undec-9-ene	6058-23-7
	Chlordane	12789-03-6
	rel-(1aR,1bS,2R,5S,5aR,6S,6aS)-2,3,4,5,6,6a,7,7-Octachloro-1a,1b,5,5a,6,6a-hexahydro-2H-2,5-methanoindeno[1,2-b]oxirene	27304-13-8

	rel-(1R,4S,7S,8S,9S)-2,3,4,5,6,9-Hexachlorotricyclo[5.2.1.0(4,8)]deca-2,5-diene	56534-03-3
	rel-(1R,4S,7S,8S,10S)-2,3,4,5,6,10-Hexachlorotricyclo[5.2.1.0(4,8)]deca-2,5-diene	56641-38-4
9	Bis(tributyltin) oxide	
	Example substances	**CAS No.**
	1,1,1,3,3,3-Hexabutyldistannoxane	56-35-9
10	N,N'-Ditolyl-p-phenylenediamine, N-tolyl-N'-xylyl-p-phenylenediamine, or N,N'-dixylyl-p-phenylenediamine	
	Example substances	**CAS No.**
	N,N'-Di-4-tolyl-1,4-phenylenediamine	620-91-7
	N,N'-Di-2-tolyl-1,4-phenylenediamine	15017-02-4
	N,N'-Ditolyl-1,4-phenylenediamine	27417-40-9
	N,N'-Bis(dimethylphenyl)-1,4-phenylenediamine	28726-30-9
	N,N'-(Mixed phenyl and tolyl) derivatives of benzene-1,4-diamine	68953-84-4
	N-(Dimethylphenyl)-N'-tolyl-1,4-phenylenediamine	70290-05-0
11	2,4,6-Tri- tert-butylphenol	
	Example substances	**CAS No.**
	2,4,6-Tri-tert-butylphenol	732-26-3
12	Polychloro-2,2-dimethyl-3-methylidenebicyclo[2.2.1]heptane	Toxaphene
	Example substances	**CAS No.**
	Toxaphene	8001-35-2
13	Dodecachloropentacyclo [5.3.0.0(2,6).0(3,9).0(4,8)] decane	Mirex
	Example substances	**CAS No.**
	Perchloropentacyclo[5.3.0.0(2,6).0(3,9).0(4,8)]decane	2385-85-5
14	2,2,2-Trichloro-1-(2-chlorophenyl)-1-(4-chlorophenyl)ethanol or 2,2,2-Trichloro-1,1- bis(4-chlorophenyl) ethanol	Kelthane, Dicofol
	Example substances	**CAS No.**
	2,2,2-Trichloro-1,1-bis(4-chlorophenyl)ethanol	115-32-2
	2,2,2-Trichloro-1-(2-chlorophenyl)-1-(4-chlorophenyl)ethanol	10606-46-9
15	Hexachlorobuta-1,3-diene	
	Example substances	**CAS No.**
	Perchlorobuta-1,3-diene	87-68-3
16	2-(2H-1,2,3-Benzotriazol-2-yl)-4,6-di-tert-butylphenol	
	Example substances	**CAS No.**
	2-(2H-1,2,3-Benzotriazol-2-yl)-4,6-di-tert-butylphenol	3846-71-7
17	Perfluoro(octane-1-sulfonic acid) or its salts	PFOS
	Example substances	**CAS No.**
	Perfluoro(octane-1-sulfonic acid)	1763-23-1
	Potassium perfluorooctane-1-sulfonate	2795-39-3
	Sodium perfluoro(octane-1-sulfonate)	4021-47-0
	Ammonium perfluorooctane-1-sulfonate	29081-56-9
	Lithium perfluorooctane-1-sulfonate	29457-72-5
	Tetraethylammonium perfluorooctane-1-sulfonate	56773-42-3
	Potassium salt of perfluoroalkane(C=6-12)sulfonic acid	68391-09-3
	Compound of 2,2'-iminodiethanol and perfluorooctane-1-sulfonic acid (1:1)	70225-14-8
	Piperidin-1-ium perfluorooctane-1-sulfonate	71463-74-6
	Magnesium bis(perfluorooctane-1-sulfonate)	91036-71-4
	Sulfonic acids, C6-12-alkane, perfluoro	93572-72-6
	Perfluoro(octane-1-sulfonic acid) (Synonym: PFOS) or its salts	160869-62-5
	Didecan-1-yl(dimethyl)ammonium perfluorooctane-1-sulfonate	251099-16-8
	Compounds of perfluoroalkane(C=6-8)sulfonic acid and polyethylene-polypropylene glycol bis(2-aminopropyl) ether	306974-45-8
18	Perfluoro(octane-1-sulfonyl) fluoride	PFOSF
	Example substances	**CAS No.**
	Perfluorooctane-1-sulfonyl fluoride	307-35-7
19	Pentachlorobenzene	
	Example substances	**CAS No.**
	1,2,3,4,5-Pentachlorobenzene	608-93-5
20	r-1,c-2,t-3,c-4,t-5,t-6-Hexachlorocyclohexane	alpha-Hexachlorocyclohexane
	Example substances	**CAS No.**
	r-1,c-2,t-3,c-4,t-5,t-6-Hexachlorocyclohexane	319-84-6
21	r-1,t-2,c-3,t-4,c-5,t-6-Hexachlorocyclohexane	beta-Hexachlorocyclohexane
	Example substances	**CAS No.**
	r-1,t-2,c-3,t-4,c-5,t-6-Hexachlorocyclohexane	319-85-7

22	r-1,c-2,t-3,c-4,c-5,t-6-Hexachlorocyclohexane	gamma-Hexachlorocyclohexane, Lindane
	Example substances	**CAS No.**
	r-1,c-2,t-3,c-4,c-5,t-6-Hexachlorocyclohexane	58-89-9
23	Decachloropentacyclo[5.3.0.0(2,6).0(3,9).0(4,8)]decan-5-one	Chlordecone
	Example substances	**CAS No.**
	Perchloropentacyclo[5.3.0.0(2,6).0(3,9).0(4,8)]decan-5-one	143-50-0
24	Hexabromobiphenyl	
	Example substances	**CAS No.**
	Hexabromobiphenyl	36355-01-8
	2,2',4,4',5,6'-Hexabromobiphenyl	36402-15-0
	2,2',3,3',5,5'-Hexabromobiphenyl	55066-76-7
	2,2',4,4',5,5'-Hexabromobiphenyl	59080-40-9
	2,2',4,4',6,6'-Hexabromobiphenyl	59261-08-4
	3,3',4,4',5,5'-Hexabromobiphenyl	60044-26-0
	2,2',3,4,4',5'-Hexabromobiphenyl	67888-98-6
	2,3',4,4',5,5'-Hexabromobiphenyl	67888-99-7
	2,2',3,4',5',6-Hexabromobiphenyl	69278-59-7
	2,3,3',4,4',5-Hexabromobiphenyl	77607-09-1
	2,2',3,4,4',5-Hexabromobiphenyl	81381-52-4
	2,2',3,3',4,4'-Hexabromobiphenyl	82865-89-2
	2,2',3,3',4,5'-Hexabromobiphenyl	82865-90-5
	2,3,3',4',5',6-Hexabromobiphenyl	82865-91-6
	2,3,3',4,4',5'-Hexabromobiphenyl	84303-47-9
	2,3',4,4',5',6-Hexabromobiphenyl	84303-48-0
	2,2',3,4',6,6'-Hexabromobiphenyl	93261-83-7
	2,2',3,3',4,6'-Hexabromobiphenyl	119264-50-5
	2,2',3,3',5,6'-Hexabromobiphenyl	119264-51-6
	2,2',3,4,5',6-Hexabromobiphenyl	119264-52-7
	2,2',3,5,5',6-Hexabromobiphenyl	119264-53-8
	2,2',3,4,5,5'-Hexabromobiphenyl	120991-47-1
	2,3,3',4,5,5'-Hexabromobiphenyl	120991-48-2
25	Tetrabromo(phenoxybenzene)	Tetrabromodiphenyl ether
	Example substances	**CAS No.**
	2,4-Dibromo-1-(2,4-dibromophenoxy)benzene	5436-43-1
	Tetrabromo(phenoxybenzene)	40088-47-9
	1,2-Dibromo-4-(3,4-dibromophenoxy)benzene	93703-48-1
	1,3-Dibromo-5-(3,5-dibromophenoxy)benzene	103173-66-6
26	Pentabromo(phenoxybenzene)	Pentabromodiphenyl ether
	Example substances	**CAS No.**
	Pentabromo(phenoxybenzene)	32534-81-9
	1,2,4-Tribromo-5-(2,4-dibromophenoxy)benzene	60348-60-9
	1,2,3,4,5-Pentabromo-6-phenoxybenzene	189084-65-9
27	Hexabromo(phenoxybenzene)	Hexabromodiphenyl ether
	Example substances	**CAS No.**
	Tribromo(tribromophenoxy)benzene	31153-30-7
	1,3,5-Tribromo-2-(2,4,6-tribromophenoxy)benzene	35854-94-5
	Hexabromo(phenoxybenzene)	36483-60-0
	1,2,4-Tribromo-5-(2,4,5-tribromophenoxy)benzene	68631-49-2
	1,2,4,5-Tetrabromo-3-(2,4-dibromophenoxy)benzene	116995-33-6
	1,3,5-Tribromo-2-(2,4,5-tribromophenoxy)benzene	207122-15-4
28	Heptabromo(phenoxybenzene)	Heptabromodiphenyl ether
	Example substances	**CAS No.**
	Heptabromo(phenoxybenzene)	68928-80-3
	1,2,4,5-Tetrabromo-3-(2,4,6-tribromophenoxy)benzene	116995-32-5
	1,2,3,5-Tetrabromo-4-(2,4,6-tribromophenoxy)benzene	117948-63-7
	1,2,3,5-Tetrabromo-4-(2,4,5-tribromophenoxy)benzene	207122-16-5
	1,2,3,5-Tetrabromo-4-(2,3,5-tribromophenoxy)benzene	446255-22-7
29	6,7,8,9,10,10-Hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3-oxide	Endosulfan or Benzoepin
	Example substances	**CAS No.**
	1,9,10,11,12,12-Hexachloro-5-oxo-4,6-dioxa-5lambda(4)-thiatricyclo[7.2.1.0(2,8)]dodec-10-ene	115-29-7
	(3s,5aR,6R,9S,9aS)-6,7,8,9,10,10-Hexachloro-1,5,5a,6,9,9a-hexahydro-3H-6,9-methano-2,4,3-benzodioxathiepine 3-oxide	959-98-8
	(3r,5aR,6R,9S,9aS)-6,7,8,9,10,10-Hexachloro-1,5,5a,6,9,9a-hexahydro-3H-6,9-methano-2,4,3-benzodioxathiepine 3-oxide	33213-65-9

30	Hexabromocyclododecane	
	Example substances	**CAS No.**
	1,2,5,6,9,10-Hexabromocyclododecane	3194-55-6
	rel-(1R,2S,5R,6S,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane	4736-49-6
	Hexabromocyclododecane	25637-99-4
	rel-(1R,2S,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane	65701-47-5
	Hexabromocyclododecane	74398-41-7
	rel-(1R,2R,5S,6R,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane	134237-50-6
	rel-(1R,2S,5R,6R,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane	134237-51-7
	rel-(1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane	134237-52-8
	(1R,2R,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane	138257-17-7
	(1R,2R,5R,6S,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane	138257-18-8
	(1R,2S,5S,6R,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane	138257-19-9
	(1R,2S,5S,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane	169102-57-2
	Hexabromocyclododecane	673456-49-0
	(1R,2R,5S,6R,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane	678970-15-5
	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane	678970-16-6
	(1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane	678970-17-7
	Hexabromocyclododecane	878049-04-8
	Hexabromocyclododecane	878049-05-9
	The CAS RN before replacement had been CAS RN 1380399-86-9.	878049-06-0
	The CAS RN before replacement had been CAS RN 138257-17-7.	878049-07-1
	Hexabromocyclododecane	878049-08-2
	Hexabromocyclododecane	1027045-74-4
	Hexabromocyclododecane	1093632-34-8
	Hexabromocyclododecane	1235106-66-7
	Hexabromocyclododecane	1380399-84-7
	Hexabromocyclododecane	1380399-85-8
	Hexabromocyclododecane	1380399-87-0
	Hexabromocyclododecane	1392102-29-2
	Hexabromocyclododecane	1392102-30-5
	Hexabromocyclododecane	1392102-31-6
31	Pentachlorophenol or its chloride or ester	
	Example substances	**CAS No.**
	1-Hexadecanaminium, N,N,N-trimethyl-, salt with pentachlorophenol (1:1)	87-76-3
	2,3,4,5,6-Pentachlorophenol	87-86-5
	Sodium Pentachlorophenate	131-52-2
	Copper(II) bis(2,3,4,5,6-pentachlorophenolate)	2917-31-9
	Zinc bis(pentachlorophenolate)	2917-32-0
	Tributyl(pentachlorophenoxy)stannane	3644-38-0
	Pentachlorophenyl laurate	3772-94-9
	Methyl(pentachlorophenolato)mercury	5902-76-1
	Bis(pentachlorophenyl) carbonate	7497-08-7
	Potassium pentachlorophenolate	7778-73-6
	Pentachlorophenyl oleate	10443-46-6
	Pentachlorophenyl N(2)-[(benzyloxy)carbonyl]-L-glutaminate	13673-51-3
	Pentachlorophenyl N-[(benzyloxy)carbonyl]-L-isoleucinate	13673-53-5
	Pentachlorophenyl (R)-2-{[(benzyloxy)carbonyl]amino}-3-(benzylsulfanyl)propanoate	13673-54-6
	Pentachlorophenyl N-{[(4-methoxybenzyl)oxy]carbonyl}-L-serinate	23234-97-1
	Sodium pentachlorophenolate decahydrate	27735-63-3
	Sodium pentachlorophenolate monohydrate	27735-64-4
	Pentachlorophenyl (S)-5-oxopyrrolidine-2-carboxylate	28990-85-4
	Phenol, pentachloro-, compd. with 2,2',2''-nitrilotris[ethanol] (1:1)	32978-79-3
	Compound of abieta-8(14),9(11),12-trien-18-amine and pentachlorophenol	35109-57-0
	Benzoic acid, 2-hydroxy-, pentachlorophenyl ester	36994-69-1
	Pentachlorophenyl (R)-5-oxopyrrolidine-2-carboxylate	50654-95-0
	Pentachlorophenyl N-[(benzyloxy)carbonyl]-L-tyrosinate	55593-07-2
	Calcium bis(pentachlorophenolate)	55868-72-9
	Pentachlorophenyl 5-oxopyrrolidine-2-carboxylate	67246-71-3
	Compounds of coco alkyl amines and pentachlorophenol (1:1)	90640-52-1
	Coco-alkyl(trimethyl)ammonium pentachlorophenolates	91080-93-2
	Pentachlorophenyl ester of fatty acids(C=8-12)	98219-40-0
	Pentachlorophenyl ester of fatty acids(C=16-18)	98219-41-1

32	Polychlorinated normal paraffin (limited to those with the number of carbon atoms is 10 to 13 and the content of chlorine is over 48% of the total weight)	
	Example substances	**CAS No.**
	Undecane, 1,1,1,3,5,7,9,11,11-nonachloro-	18993-26-5
	Undecane, octachloro-	36312-81-9
	Paraffin waxes and Hydrocarbon waxes, chloro	63449-39-8
	1,1,1,2-Tetrachloroundecane	63981-28-2
	Chlorinated microcrystalline hydrocarbon waxes (petroleum)	68938-43-2
	Chloroparaffin oils	85422-92-0
	Chloroparaffins(C>10, linear chain, petroleum)	97553-43-0
	Chloroalkanes	61788-76-9
	Chloroalkanes(C=6-18)	68920-70-7
	Chloroalkanes(C=12-13)	71011-12-6
	Chloroalkanes(C=10-21)	84082-38-2
	Chloroalkanes(C=10-32)	84776-06-7
	Chloroalkanes(C=10-13)	85535-84-8
	Chloroalkanes(C=12-14)	85536-22-7
	Chloroalkanes(C=10-14)	85681-73-8
	Chloroalkanes(C=10-26)	97659-46-6
	Chloroalkanes(C=10-22)	104948-36-9
	Alkanes, C10-12, chloro	108171-26-2
	Undecane, heptachloro-	219697-10-6
	Undecane, nonachloro-	219697-11-7
	Undecane, 1,2,10,11,?,?,?,?-octachloro-	221174-07-8
	Undecane, decachloro-	276673-33-7
	Undecane, 1,1,1,3,6,7,10,11-octachloro-	601523-20-0
	Undecane, 1,1,1,3,9,11,11,11-octachloro-	601523-25-5
	Chloroalkanes(C=12-16)	866758-65-8
33	1,1'-oxybis(2,3,4,5,6-pentabromobenzene)	Decabromodiphenyl oxide
	Example substances	**CAS No.**
	Decabromo-1,1'-oxybis(benzene)	1163-19-5
34	Perfluorooctanoic acid (Synonym: PFOA) or its salt	
	Example substances	**CAS No.**
	2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Pentadecafluorooctanoic acid	335-67-1
	Silver(1+) pentadecafluorooctanoate	335-93-3
	Sodium pentadecafluorooctanoate	335-95-5
	Potassium pentadecafluorooctanoate	2395-00-8
	Ammonium 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanoate	3825-26-1
	Lithium pentadecafluorooctanoate	17125-58-5
	Tetramethylammonium pentadecafluorooctanoate	32609-65-7
	Pentadecafluorooctanoate	45285-51-6
	Chromium(3+) tris(pentadecafluorooctanoate)	68141-02-6
	Perfluoro fatty acid(C=7-13)	68333-92-6
	Fatty acids, C7-13, perfluoro, compds. with ethylamine	69278-80-4
	Ammonium salts of perfluorofatty acids(C=6-18)	72623-77-9
	Ammonium salts of perfluorofatty acids(C=7-13)	72968-38-8
	Octanoic acid, pentadecafluoro-, branched	90480-55-0
	Octanoic acid, pentadecafluoro-, branched, ammonium salt	90480-56-1
	Perfluorofatty acids(C=7-19)	91032-01-8
	Potassium pentadecafluorooctanoate dihydrate	98065-31-7
	Tetraethylammonium pentadecafluorooctanoate	98241-25-9
	Tetrapropylammonium pentadecafluorooctanoate	277749-00-5
	Trimethyl(octyl)ammonium pentadecafluorooctanoate	927835-01-6
35	Perfluoro(hexane-1-sulfonic acid) or perfluoro(alkanesulfonic acid)(It is limited to those with a branched structure and the number of carbon is 6.) or their salts	
	Example substances	**CAS No.**
	Tridecafluorohexane-1-sulfonic acid	355-46-4
	Potassium 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexane-1-sulfonate	3871-99-6
	Neodymium tris(tridecafluorohexane-1-sulfonate)	41184-65-0
	Yttrium tris(tridecafluorohexane-1-sulfonate)	41242-12-0
	Lithium 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexane-1-sulfonate	55120-77-9
	Ammonium tridecafluorohexane-1-sulfonate	68259-08-5
	Potassium salt of perfluoroalkane(C=6-12)sulfonic acid	68391-09-3
	Zinc bis(tridecafluorohexane-1-sulfonate)	70136-72-0
	Compound of tridecafluorohexane-1-sulfonic acid and 2,2'-iminodiethanol (1:1)	70225-16-0
	Compound of tridecafluorohexane-1-sulfonic acid and triethylamine (1:1)	72033-41-1
	Sodium 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexane-1-sulfonate	82382-12-5
	Cesium tridecafluorohexane-1-sulfonate	92011-17-1
	Sulfonic acids, C6-12-alkane, perfluoro	93572-72-6

	Tetrabutylammonium tridecafluorohexane-1-sulfonate	108427-54-9
	Tetraethylammonium tridecafluorohexane-1-sulfonate	108427-55-0
	Triphenylsulfonium tridecafluorohexane-1-sulfonate	144116-10-9
	Diphenyliodonium tridecafluorohexane-1-sulfonate	153443-35-7
	Perfluoro(octane-1-sulfonic acid) (Synonym: PFOS) or its salts	160869-62-5
	Tetramethylammonium tridecafluorohexane-1-sulfonate	189274-31-5
	Compound of 2-methylpropan-2-amine and tridecafluorohexane-1-sulfonic acid (1:1)	202189-84-2
	Bis(4-tert-butylphenyl)iodonium tridecafluorohexane-1-sulfonate	213740-81-9
	Gallium tris(tridecafluorohexane-1-sulfonate)	341035-71-0
	Phenyl(di-p-tolyl)sulfonium tridecafluorohexane-1-sulfonate	341548-85-4
	Scandium tris(tridecafluorohexane-1-sulfonate)	350836-93-0
	S,S,S',S'-Tetraphenyl[sulfanediylbis(4,1-phenylene)]bis(sulfonium) bis(tridecafluorohexane-1-sulfonate)	421555-73-9
	Bis(4-tert-pentylphenyl)iodonium tridecafluoro-1-hexanesulfonate	421555-74-0
	Tris(4-tert-butylphenyl)sulfonium tridecafluorohexane-1-sulfonate	425670-70-8
	Bis(tert-butylphenyl)iodonium tridecafluorohexane-1-sulfonate	866621-50-3
	Diphenyl(p-tolyl)sulfonium tridecafluorohexane-1-sulfonate	910606-39-2
	[4-(Methacryloyloxy)phenyl](diphenyl)sulfonium tridecafluorohexane-1-sulfonate	911027-68-4
	Polymer of 2-ethyl-2-adamantyl methacrylate / 3-hydroxy-1-adamantyl methacrylate / [4-(methacryloyloxy)phenyl](diphenyl)sulfonium tridecafluorohexane-1-sulfonate / 2-oxooxolan-3-yl methacrylate	911027-69-5
	19-(4-tert-Butylphenyl)-4a,6,7,9,10,12,13,19a-octahydrodibenzo[k,n][1,4,7,10,13]tetraoxathiacyclopentadecin-19-ium tridecafluorohexane-1-sulfonate	928049-42-7
	Benzyl(triphenyl)phosphonium tridecafluorohexane-1-sulfonate	1000597-52-3
	Compound of pyrrolidine and tridecafluorohexane-1-sulfonic acid (1:1)	1187817-57-7
	(4-{[4-(Diethylamino)phenyl][4-(ethylamino)-1-naphthyl]methylidene}cyclohexa-2,5-dien-1-ylidene)(diethyl)ammonium tridecafluorohexane-1-sulfonate	1310480-24-0
	(4-{[4-(Dimethylamino)phenyl][4-(ethylamino)-1-naphthyl]methylidene}cyclohexa-2,5-dien-1-ylidene)(dimethyl)ammonium tridecafluorohexane-1-sulfonate	1310480-27-3
	(4-{(4-Anilino-1-naphthyl)[4-(dimethylamino)phenyl]methylidene}cyclohexa-2,5-dien-1-ylidene)(dimethyl)ammonium tridecafluorohexane-1-sulfonate	1310480-28-4
	1-(Carboxymethyl)-4-(2-{4-[4-(2,2-diphenylvinyl)phenyl]-1,2,3,3a,4,8b-hexahydrocyclopenta[b]indol-7-yl}vinyl)quinolin-1-ium tridecafluorohexane-1-sulfonate	1462414-59-0
	Tetrabutylphosphonium tridecafluorohexane-1-sulfonate	2310194-12-6

Table 1 : Substances to be Prohibited

Following substances should not be contained in the products nor used in the production process. The content as impurities should be less than 0.1 percent by weight per homogeneous material.

Table1-2. Poisonous and Deleterious Substances Control Law of Japan/ Poisonous Substances

No.	Substance Name	Reference CAS No.
1	Octamethyl pyrophosphoramide	152-16-9
2	Tetraalkyl lead	
	Example substances	
	Lead, tetramethyl-	75-74-1
	Tetraethyllead	78-00-2
	Ethyltrimethylplumbane	1762-26-1
	Diethyldimethylplumbane	1762-27-2
	Triethylmethylplumbane	1762-28-3
3	Diethyl paranitrophenyl thiophosphate	56-38-2
4	Dimethylethylmercaptoethyl thiophosphate	8022-00-2
5	Dimethyl-(diethylamido-1-chlorocrotonyl)-phosphate	13171-21-6
6	Dimethyl paranitrophenyl thiophosphate	298-00-0
7	Tetraethyl pyrophosphate	107-49-3
8	Monofluoro acetate	144-49-0
9	Monofluoroacetamide	640-19-7
10	Preparations containing Octamethyl pyrophosphoramide	
11	Preparations containing Tetraalkyl lead	
12	Preparations containing Diethyl paranitrophenyl thiophosphate	
13	Preparations containing Dimethylethylmercaptoethyl thiophosphate	
14	Preparations containing Dimethyl-(diethylamido-1-chlorocrotonyl)-phosphate	
15	Preparations containing Dimethyl paranitrophenyl thiophosphate	
16	Preparations containing Tetraethyl pyrophosphate	
17	Preparations containing Monofluoro acetate and its salts	
	Example substances	
	Sodium fluoroacetate	62-74-8
18	Preparations containing Monofluoroacetamide	
19	Preparations containing Aluminium phosphide and its degradation accelerator	
	Example substances	
	Aluminium phosphide	20859-73-8

Table 1 : Substances to be Prohibited

Following substances should not be contained in the products nor used in the production process. The content as impurities should be less than 0.1 percent by weight per homogeneous material.

Table1-3. The Industrial Safety and Health Act of Japan/ Substances Subject to Prohibition of Manufacturing, etc.

No.	Substance Name	Reference CAS No.
1	Yellow phosphorus matches	
	Example substances	
	Tetraphosphorus	12185-10-3
2	Benzidine and its salts	
	Example substances	
	Benzidine	92-87-5
3	4-aminodiphenyl and its salts	
	Example substances	
	Biphenyl-4-ylamine	92-67-1
4	Asbestos (We prohibit the use of asbestos regardless of the concentrations, regardless of the laws or regulations or others.)	
	Example substances	
	Asbestos	1332-21-4
	Crocidolite	12001-28-4
	Chrysotile	12001-29-5
	Amosite	12172-73-5
	Actinolite	77536-66-4
	Anthophyllite	77536-67-5
	Tremolite	77536-68-6
5	4-nitrodiphenyl and its salts	
	Example substances	
	4-nitrobiphenyl	92-93-3
6	Bis (chloromethyl) ether	542-88-1
7	Beta-naphthylamine and its salts	
	Example substances	
	2-Naphthylamine	91-59-8
8	Gum containing benzene, in which the volume of contained benzene exceeds 5 % of the solvent (including diluents) of the said gum	
	Example substances	
	Benzene	71-43-2

Table1-4. Law Concerning the Protection of the Ozone Layer through the Control of Specified Substances and Other Measures/ Specified Substances (Montreal Protocol Annex A GroupI, II, Annex B GroupI, II, III, Annex C Group II, III, Annex E Group I)

No.	Substance Name	Synonym
1	Trichlorofluoromethane	CFC-11
	Reference CAS No 75-69-4	
2	Dichlorodifluoromethane	CFC-12
	Reference CAS No 75-71-8	
3	Trichlorotrifluoroethane	CFC-113
	Reference CAS No 76-13-1,354-58-5,26523-64-8	
4	Dichlorotetrafluoroethane	CFC-114
	Reference CAS No 76-14-2,374-07-2,1320-37-2	
5	chloropentafluoroethane	CFC-115
	Reference CAS No 76-15-3	
6	Bromochlorodifluoromethane	Halone-1211
	Reference CAS No 353-59-3	
7	Bromotrifluoromethane	Halone-1301
	Reference CAS No 75-63-8	
8	Dibromotetrafluoroethane	Halone-2402
	Reference CAS No 124-73-2,25497-30-7,27336-23-8	
9	Chlorotrifluoromethane	CFC-13
	Reference CAS No 75-72-9	
10	Pentachlorofluoroethane	CFC-111
	Reference CAS No 354-56-3	
11	Tetrachlorodifluoroethane	CFC-112
	Reference CAS No 76-11-9,76-12-0,28605-74-5	
12	Heptachlorofluoropropane	CFC-211
13	Hexachlorodifluoropropane	CFC-212
	Reference CAS No 3182-26-1	
14	Pentachlorotrifluoropropane	CFC-213
	Reference CAS No 134237-31-3	
15	Tetrachlorotetrafluoropropane	CFC-214
	Reference CAS No 29255-31-0	

No.	Substance Name	Synonym
16	Trichloropentafluoropropane	CFC-215
	Reference CAS No 1599-41-3	
17	Dichlorohexafluoropropane	CFC-216
	Reference CAS No 661-97-2,42560-98-5	
18	Monochloroheptafluoropropane	CFC-217
	Reference CAS No 76-18-6,422-86-6	
19	Carbon tetrachloride	Tetrachloromethane
	Reference CAS No 56-23-5	
20	1,1,1-trichloroethane	
	Reference CAS No 71-55-6	
21	Dibromofluoromethane	
	Reference CAS No 1868-53-7	
22	Bromodifluoromethane	HBFC-22B1
	Reference CAS No 1511-62-2	
23	Bromofluoromethane	
	Reference CAS No 373-52-4	
24	Tetrabromofluoroethane	
25	Tribromodifluoroethane	
26	Dibromotrifluoroethane	
27	Bromotetrafluoroethane	
	Reference CAS No 124-72-1	
28	Tribromofluoroethane	
29	Dibromodifluoroethane	
30	Bromotrifluoroethane	
	Reference CAS No 421-06-7	
31	Dibromofluoroethane	
	Reference CAS No 358-97-4	
32	Bromodifluoroethane	
	Reference CAS No 359-07-9	
33	Bromofluoroethane	
	Reference CAS No 762-49-2	
34	Hexabromofluoropropane	
35	Pentabromodifluoropropane	
36	Tetrabromotrifluoropropane	
37	Tribromotetrafluoropropane	
38	Dibromopentafluoropropane	
39	Bromohexafluoropropane	
	Reference CAS No 2252-78-0	
40	Pentabromofluoropropane	
41	Tetrabromodifluoropropane	
42	Tribromotrifluoropropane	
43	Dibromotetrafluoropropane	
44	Bromopentafluoropropane	
45	Tetrabromofluoropropane	
46	Tribromodifluoropropane	
47	Dibromotrifluoropropane	
48	Bromotetrafluoropropane	
49	Tribromofluoropropane	
50	Dibromodifluoropropane	
51	Bromotrifluoropropane	
52	Dibromofluoropropane	
53	Bromodifluoropropane	
54	Bromofluoropropane	
55	Bromochloromethane	
	Reference CAS No 74-97-5	
56	Methyl bromide	Bromomethane
	Reference CAS No 74-83-9	

Table 1 : Substances to be Prohibited

Following substances should not be contained in the products nor used in the production process. The content as impurities should be less than 0.1 percent by weight per homogeneous material.

Table1-5. Stockholm Convention on persistent organic pollutants Annex A,B and EU Regulation- on persistent organic pollutants (EC) Annex Ⅰ, Ⅱ

No.	Substance Name	CAS No.
1	Tetrabromodiphenyl ether	40088-47-9 and others
	Example substances	
	1,2-dibromo-4-(2,6-dibromophenoxy)benzene	189084-62-6
	1,3,5-tribromo-2-(4-bromophenoxy)benzene	189084-63-7
	Diphenyl ether, tetrabromo derivative	40088-47-9
	1,2-dibromo-4-(3,4-dibromophenoxy)benzene	93703-48-1
	1,2-dibromo-4-(2,4-dibromophenoxy)benzene	189084-61-5
2	Pentabromodiphenyl ether	32534-81-9 and others
	Example substances	
	Diphenyl ether, pentabromo derivative	32534-81-9
	1,3,5-tribromo-2-(3,4-dibromophenoxy)benzene	189084-66-0
	1,2,3-tribromo-4-(2,4-dibromophenoxy)benzene	182346-21-0
3	Hexabromodiphenyl ether	36483-60-0 and others
	Example substances	
	Diphenyl ether, hexabromo derivative	36483-60-0
	1,2,3-tribromo-4-(2,4,5-tribromophenoxy)benzene	182677-30-1
4	Heptabromodiphenyl ether	68928-80-3 and others
5	Bis(pentabromophenyl) ether (decabromodiphenyl ether; decaBDE)	1163-19-5
6	Perfluorooctane sulfonic acid and its derivatives (PFOS)	1763-23-1 2795-39-3 29457-72-5 29081-56-9 70225-14-8 56773-42-3 251099-16-8 4151-50-2 31506-32-8 1691-99-2 24448-09-7 307-35-7 andothers
	Example substances	
	Heptadecafluorooctane-1-sulphonic acid	1763-23-1
	Potassium heptadecafluorooctane-1-sulphonate	2795-39-3
	Lithium heptadecafluorooctanesulphonate	29457-72-5
	Ammonium heptadecafluorooctanesulphonate	29081-56-9
	Heptadecafluorooctanesulphonic acid, compound with 2,2'-iminodiethanol (1:1)	70225-14-8
	Tetraethylammonium heptadecafluorooctanesulphonate	56773-42-3
	1-Decanaminium, N-decyl-N,N-dimethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonic acid (1:1;1-Decanaminium, N-decyl-N,N-dimethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonic acid (1:1)	251099-16-8
	N-ethylheptadecafluorooctanesulphonamide	4151-50-2

	Heptadecafluoro-N-methyloctanesulphonamide	31506-32-8
	N-ethylheptadecafluoro-N-(2-hydroxyethyl)octanesulphonamide	1691-99-2
	Heptadecafluoro-N-(2-hydroxyethyl)-N-methyloctanesulphonamide	24448-09-7
	Heptadecafluorooctanesulphonyl fluoride	307-35-7
7	DDT (1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane)	50-29-3
8	Chlordane	57-74-9
9	Hexachlorocyclohexanes, including lindane	58-89-9 319-84-6 319-85-7 608-73-1
	Example substances	
	(1α,2α,3β,4α,5β,6β)-1,2,3,4,5,6-hexachlorocyclohexane	319-84-6
	BHC or HCH	608-73-1
	γ-HCH or γ-BHC	58-89-9
	(1α,2β,3α,4β,5α,6β)-1,2,3,4,5,6-hexachlorocyclohexane	319-85-7
10	Dieldrin	60-57-1
11	Endrin	72-20-8
12	Heptachlor	76-44-8
13	Endosulfan	115-29-7 959-98-8 33213-65-9
	Example substances	
	alpha-Endosulfan	959-98-8
	Endosulfan	115-29-7
	beta-Endosulfan	33213-65-9
14	Hexachlorobenzene	118-74-1
15	Chlordecone	143-50-0
16	Aldrin	309-00-2
17	Pentachlorobenzene	608-93-5
18	Polychlorinated Biphenyls (PCB)	1336-36-3 and others
	Example substances	
	1,1'-Biphenyl, chloro derivs.	1336-36-3
	2,4-PCB	34883-43-7
	Decachloro-1,1'-biphenyl	2051-24-3
	2-chlorobiphenyl	2051-60-7
	3-chlorobiphenyl	2051-61-8
	4-chlorobiphenyl	2051-62-9
	2,2',4,4'-tetrachlorobiphenyl	2437-79-8
	2,4,4'-trichlorobiphenyl	7012-37-5
	3,3'-dichlorobiphenyl	2050-67-1
	2,4',5-trichlorobiphenyl	16606-02-3
	2,3',4,4',5-pentachlorobiphenyl	31508-00-6
	2,2',3,4,4',5'-hexachlorobiphenyl	35065-28-2
	2,2',3,4,4',5,5'-heptachlorobiphenyl	35065-29-3
	2,2',4,5,5'-pentachlorobiphenyl	37680-73-2
	2,4,6-Trichlorobiphenyl	35693-92-6
	2,2',5,5'-tetrachlorobiphenyl	35693-99-3
	2,4,5-trichloro-1,1'-biphenyl	15862-07-4
	3,3',4,4'-tetrachloro-1,1'-biphenyl	32598-13-3
	2,2',3,3',4,4',5-heptachlorobiphenyl	35065-30-6
	Pentachloro[1,1'-biphenyl]	25429-29-2

	Dichlorobiphenyl	25512-42-9
	Chloro-1,1'-biphenyl	27323-18-8
	Heptachloro-1,1'-biphenyl	28655-71-2
	Tetrachloro(tetrachlorophenyl)benzene	31472-83-0
	Nonachloro-1,1'-biphenyl	53742-07-7
	2,2',4,4',6,6'-hexachlorobiphenyl	33979-03-2
	4,4'-dichlorobiphenyl	2050-68-2
19	Mirex	2385-85-5
20	Toxaphene	8001-35-2
21	Hexabromobiphenyl	36355-01-8
22	Hexabromocyclododecane	25637-99-4, 3194-55-6, 134237-50-6, 134237-51-7, 134237-52-8
	Example substances	
	Hexabromo-1,1'-biphenyl	36355-01-8
	1,2,5,6,9,10-hexabromocyclodecane	3194-55-6
	Hexabromocyclododecane	25637-99-4
	alpha-hexabromocyclododecane	134237-50-6
	beta-hexabromocyclododecane	134237-51-7
	gamma-hexabromocyclododecane	134237-52-8
23	Hexachlorobutadiene	87-68-3
24	Pentachlorophenol and its salts and esters	87-86-5 and others
	Example substances	
	Acetic acid, 2,2-dichloro-, 2,3,4,5,6-pentachlorophenyl ester	19745-69-8
	Carbonic acid, 1,1-dimethylethyl pentachlorophenyl ester	18942-25-1
	Acetic acid, 2,2,2-trichloro-, 2,3,4,5,6-pentachlorophenyl ester	2879-60-9
	Zinc bis(pentachlorophenolate)	2917-32-0
	Pentachlorophenyl laurate	3772-94-9
	Potassium pentachlorophenolate	7778-73-6
	N2-benzyl pentachlorophenyl N2-carboxy-L-(2-aminoglutaramate)	13673-51-3
	Perchlorophenyl N-(benzyloxycarbonyl)-L-isoleucinate	13673-53-5
	Perchlorophenyl S-benzyl-N-(benzyloxycarbonyl)-L-cysteinate	13673-54-6
	Pentachlorophenol esters	-
	Pentachlorophenol salts	-
	Pentachlorophenol	87-86-5
	Sodium pentachlorophenolate	131-52-2
	Pentachlorophenyl N-[[(4-methoxyphenyl)methoxy]carbonyl]-L-serinate	23234-97-1
	Perchlorophenyl 5-oxo-L-prolinate	28990-85-4
25	Polychlorinated naphthalenes	70776-03-3 and others
26	Alkanes C10-C13, chloro (short-chain chlorinated paraffins) (SCCPs)	85535-84-8 and others
27	Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds	335-67-1 and others
	Example substances	
	Butanoic acid, 3,3,4,4,4-pentafluoro-2-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-2-(trifluoromethyl)-;Butanoic acid, 3,3,4,4,4-pentafluoro-2-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-2-(trifluoromethyl)-	1882109-59-2

	Hexanoic acid, 2,2,4,4,5,5,6,6,6-nonafluoro-3,3-bis(trifluoromethyl)-;Hexanoic acid, 2,2,4,4,5,5,6,6,6-nonafluoro-3,3-bis(trifluoromethyl)-	1812247-20-3
	Hexanoic acid, 2,3,4,4,5,5,6,6,6-nonafluoro-2,3-bis(trifluoromethyl)-;Hexanoic acid, 2,3,4,4,5,5,6,6,6-nonafluoro-2,3-bis(trifluoromethyl)-	1812247-18-9
	Hexanoic acid, 2,2,3,3,4,5,6,6,6-nonafluoro-4,5-bis(trifluoromethyl)-;Hexanoic acid, 2,2,3,3,4,5,6,6,6-nonafluoro-4,5-bis(trifluoromethyl)-	1144512-36-6
	Hexanoic acid, 2,2,3,3,4,4,6,6,6-nonafluoro-5,5-bis(trifluoromethyl)-;Hexanoic acid, 2,2,3,3,4,4,6,6,6-nonafluoro-5,5-bis(trifluoromethyl)-	1144512-34-4
	Heptanoic acid, 2,2,3,3,4,4,5,6,6,7,7,7-dodecafluoro-5-(trifluoromethyl)-;Heptanoic acid, 2,2,3,3,4,4,5,6,6,7,7,7-dodecafluoro-5-(trifluoromethyl)-	909009-42-3
	Heptanoic acid, 2,3,3,4,4,5,5,6,6,7,7,7-dodecafluoro-2-(trifluoromethyl)-;Heptanoic acid, 2,3,3,4,4,5,5,6,6,7,7,7-dodecafluoro-2-(trifluoromethyl)-	207678-51-1
	Hexanoic acid, 2,3,3,4,4,5,5,6,6,6-decafluoro-2-(1,1,2,2,2-pentafluoroethyl)-;Hexanoic acid, 2,3,3,4,4,5,5,6,6,6-decafluoro-2-(1,1,2,2,2-pentafluoroethyl)-	35605-76-6
	Ethanaminium, N,N,N-triethyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanoate (1:1);Ethanaminium, N,N,N-triethyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanoate (1:1)	98241-25-9
	Decanoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-;Decanoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-	27854-31-5
	2-Decenoic acid, 3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-hexadecafluoro-;2-Decenoic acid, 3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-hexadecafluoro-	70887-84-2
	2-Propenoic acid, 2-methyl-, C10-16-alkyl esters, polymers with 2-hydroxyethyl methacrylate, Me methacrylate and γ-ω-perfluoro-C8-14-alkyl acrylate;2-Propenoic acid, 2-methyl-, C10-16-alkyl esters, polymers with 2-hydroxyethyl methacrylate, Me methacrylate and γ-ω-perfluoro-C8-14-alkyl acrylate	129783-45-5
	2-Propenoic acid, dodecyl ester, polymers with Bu (1-oxo-2-propenyl)carbamate and γ-ω-perfluoro-C8-14-alkyl acrylate;2-Propenoic acid, dodecyl ester, polymers with Bu (1-oxo-2-propenyl)carbamate and γ-ω-perfluoro-C8-14-alkyl acrylate	144031-01-6
	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl ester, homopolymer;2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl ester, homopolymer;2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl ester, homopolymer;2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl ester, homopolymer	74049-08-4
	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9, 10,10,10-heptadecafluorodecyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecyl 2-methyl-2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-methyl-2-propenoate;2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9, 10,10,10-heptadecafluorodecyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecyl 2-methyl-2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-methyl-2-propenoate	65104-45-2

	2-Propenoic acid, 2-methyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctyl ester, polymer with 2-propenoic acid;2-Propenoic acid, 2-methyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctyl ester, polymer with 2-propenoic acid	53515-73-4
	Hexanoic acid, 2,2,3,4,5,5,6,6,6-nonafluoro-3,4-bis(trifluoromethyl)-;Hexanoic acid, 2,2,3,4,5,5,6,6,6-nonafluoro-3,4-bis(trifluoromethyl)-	1882109-81-0
	Hexanoic acid, 2,2,3,3,4,5,5,6,6,6-decafluoro-4-(1,1,2,2,2-pentafluoroethyl)-;Hexanoic acid, 2,2,3,3,4,5,5,6,6,6-decafluoro-4-(1,1,2,2,2-pentafluoroethyl)-	1882109-79-6
	Hexanoic acid, 2,2,3,4,4,5,5,6,6,6-decafluoro-3-(1,1,2,2,2-pentafluoroethyl)-;Hexanoic acid, 2,2,3,4,4,5,5,6,6,6-decafluoro-3-(1,1,2,2,2-pentafluoroethyl)-	1882109-78-5
	Pentanoic acid, 2,3,3,4,4,5,5,5-octafluoro-2-(1,1,2,2,3,3,3-heptafluoropropyl)-;Pentanoic acid, 2,3,3,4,4,5,5,5-octafluoro-2-(1,1,2,2,3,3,3-heptafluoropropyl)-	1882109-77-4
	Pentanoic acid, 2,3,3,4,4,5,5,5-octafluoro-2-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-;Pentanoic acid, 2,3,3,4,4,5,5,5-octafluoro-2-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-	1882109-76-3
	Pentanoic acid, 2,2,3,5,5,5-hexafluoro-3,4,4-tris(trifluoromethyl)-;Pentanoic acid, 2,2,3,5,5,5-hexafluoro-3,4,4-tris(trifluoromethyl)-	1882109-75-2
	Pentanoic acid, 2,2,4,5,5,5-hexafluoro-3,3,4-tris(trifluoromethyl)-;Pentanoic acid, 2,2,4,5,5,5-hexafluoro-3,3,4-tris(trifluoromethyl)-	1882109-74-1
	Pentanoic acid, 2,3,3,5,5,5-hexafluoro-2,4,4-tris(trifluoromethyl)-;Pentanoic acid, 2,3,3,5,5,5-hexafluoro-2,4,4-tris(trifluoromethyl)-	1882109-73-0
	Pentanoic acid, 2,3,4,5,5,5-hexafluoro-2,3,4-tris(trifluoromethyl)-;Pentanoic acid, 2,3,4,5,5,5-hexafluoro-2,3,4-tris(trifluoromethyl)-	1882109-72-9
	Pentanoic acid, 2,4,4,5,5,5-hexafluoro-2,3,3-tris(trifluoromethyl)-;Pentanoic acid, 2,4,4,5,5,5-hexafluoro-2,3,3-tris(trifluoromethyl)-	1882109-71-8
	Pentanoic acid, 3,3,4,5,5,5-hexafluoro-2,2,4-tris(trifluoromethyl)-;Pentanoic acid, 3,3,4,5,5,5-hexafluoro-2,2,4-tris(trifluoromethyl)-	1882109-70-7
	Pentanoic acid, 2,2,3,4,5,5,5-heptafluoro-3-(1,1,2,2,2-pentafluoroethyl)-4-(trifluoromethyl)-;Pentanoic acid, 2,2,3,4,5,5,5-heptafluoro-3-(1,1,2,2,2-pentafluoroethyl)-4-(trifluoromethyl)-	1882109-68-3
	Pentanoic acid, 2,2,4,4,5,5,5-heptafluoro-3-(1,1,2,2,2-pentafluoroethyl)-3-(trifluoromethyl)-;Pentanoic acid, 2,2,4,4,5,5,5-heptafluoro-3-(1,1,2,2,2-pentafluoroethyl)-3-(trifluoromethyl)-	1882109-67-2
	Pentanoic acid, 2,3,4,4,5,5,5-heptafluoro-3-(1,1,2,2,2-pentafluoroethyl)-2-(trifluoromethyl)-;Pentanoic acid, 2,3,4,4,5,5,5-heptafluoro-3-(1,1,2,2,2-pentafluoroethyl)-2-(trifluoromethyl)-	1882109-66-1
	Pentanoic acid, 2,3,3,4,5,5,5-heptafluoro-2-(1,1,2,2,2-pentafluoroethyl)-4-(trifluoromethyl)-;Pentanoic acid, 2,3,3,4,5,5,5-heptafluoro-2-(1,1,2,2,2-pentafluoroethyl)-4-(trifluoromethyl)-	1882109-65-0
	Pentanoic acid, 2,3,4,4,5,5,5-heptafluoro-2-(1,1,2,2,2-pentafluoroethyl)-3-(trifluoromethyl)-;Pentanoic acid, 2,3,4,4,5,5,5-heptafluoro-2-(1,1,2,2,2-pentafluoroethyl)-3-(trifluoromethyl)-	1882109-64-9
	Pentanoic acid, 3,3,4,4,5,5,5-heptafluoro-2-(1,1,2,2,2-pentafluoroethyl)-2-(trifluoromethyl)-;Pentanoic acid, 3,3,4,4,5,5,5-heptafluoro-2-(1,1,2,2,2-pentafluoroethyl)-2-(trifluoromethyl)-	1882109-63-8
	Pentanoic acid, 3,4,4,5,5,5-hexafluoro-2,2,3-(trifluoromethyl)-;Pentanoic acid, 3,4,4,5,5,5-hexafluoro-2,2,3-(trifluoromethyl)-	1882109-69-4

	Butanoic acid, 4,4,4-trifluoro-2,2,3,3-tetrakis(trifluoromethyl)-;Butanoic acid, 4,4,4-trifluoro-2,2,3,3-tetrakis(trifluoromethyl)-	1882109-62-7
	Butanoic acid, 2,3,4,4,4-pentafluoro-2-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-3-(trifluoromethyl)-;Butanoic acid, 2,3,4,4,4-pentafluoro-2-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-3-(trifluoromethyl)-	1882109-61-6
	Butanoic acid, 2,3,3,4,4,4-hexafluoro-2-[2,2,2-trifluoro-1,1-bis(trifluoromethyl)ethyl]-;Butanoic acid, 2,3,3,4,4,4-hexafluoro-2-[2,2,2-trifluoro-1,1-bis(trifluoromethyl)ethyl]-	1882109-60-5
	Hexanoic acid, 2,3,3,4,4,5,5,6,6,6-decafluoro-2-(1,1,2,2,2- pentafluoroethyl)-, ammonium salt (1:1);Hexanoic acid, 2,3,3,4,4,5,5,6,6,6-decafluoro-2-(1,1,2,2,2-pentafluoroethyl)-, ammonium salt (1:1)	13058-06-5
	Hexanoic acid, 2,3,3,4,4,5,5,6,6,6-decafluoro-2-(1,1,2,2,2-pentafluoroethyl)-, sodium salt (1:1);Hexanoic acid, 2,3,3,4,4,5,5,6,6,6-decafluoro-2-(1,1,2,2,2-pentafluoroethyl)-, sodium salt (1:1)	1195164-59-0
	Heptanoic acid, 2,2,3,3,4,4,5,5,6,7,7,7-dodecafluoro-6-(trifluoromethyl)-, ammonium salt (1:1);Heptanoic acid, 2,2,3,3,4,4,5,5,6,7,7,7-dodecafluoro-6-(trifluoromethyl)-, ammonium salt (1:1)	19742-57-5
	Heptanoic acid, 2,2,3,3,4,4,5,5,6,7,7,7-dodecafluoro-6-(trifluoromethyl)-, iron salt (1:x);Heptanoic acid, 2,2,3,3,4,4,5,5,6,7,7,7-dodecafluoro-6-(trifluoromethyl)-, iron salt (1:x)	61436-04-2
	Heptanoic acid, 2,2,3,3,4,4,5,5,6,7,7,7-dodecafluoro-6-(trifluoromethyl)-, potassium salt (1:1);Heptanoic acid, 2,2,3,3,4,4,5,5,6,7,7,7-dodecafluoro-6-(trifluoromethyl)-, potassium salt (1:1)	29457-73-6
	Heptanoic acid, 2,2,3,3,4,4,5,5,6,7,7,7-dodecafluoro-6-(trifluoromethyl)- , sodium salt (1:1);Heptanoic acid, 2,2,3,3,4,4,5,5,6,7,7,7-dodecafluoro-6-(trifluoromethyl)- , sodium salt (1:1)	18017-22-6
	Heptanoic acid, 2,2,3,3,4,4,5,5,6,7,7,7-dodecafluoro-6-(trifluoromethyl)-, chromium salt (1:x);Heptanoic acid, 2,2,3,3,4,4,5,5,6,7,7,7-dodecafluoro-6-(trifluoromethyl)-, chromium salt (1:x)	15739-82-9
	Heptanoic acid, 2,2,3,3,4,4,5,5,6,7,7,7-dodecafluoro-6-(trifluoromethyl)-, aluminum salt (3:1);Heptanoic acid, 2,2,3,3,4,4,5,5,6,7,7,7-dodecafluoro-6-(trifluoromethyl)-, aluminum salt (3:1)	15715-47-6
	Bis(perfluorooctyl)phosphinic acid;Bis(perfluorooctyl)phosphinic acid	40143-79-1
	Perfluorohexylperfluorooctyl phosphinate;Perfluorohexylperfluorooctyl phosphinate	610800-34-5
	Undecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-tricosafluoro-11-iodo-	307-50-6
	Pentadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15-hentriacontafluoro-15-iodo-	335-79-5
	Tridecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13-heptacosafluoro-13-iodo-;Tridecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13-heptacosafluoro-13-iodo-	376-04-5
	Alkyl iodides, C10-12, γ-ω-perfluoro;Alkyl iodides, C10-12, γ-ω-perfluoro	68390-33-0

	2-Dodecenoic acid, 3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-eicosafluoro-;2-Dodecenoic acid, 3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-eicosafluoro-	70887-94-4
	Dodecanoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-;Dodecanoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-	53826-13-4
	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, hexadecyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, octadecyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-propenoate	115592-83-1
	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9, 10,10,10-heptadecafluorodecyl 2-propenoate, α-(2-methyl-1-oxo-2-propenyl)-ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl), 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluorohexadecyl 2-propenoate, octadecyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18,18-tritriacontafluorooctadecyl 2-propenoate	116984-14-6
	2-Propenoic acid, 2-methyl-, C10-16-alkyl esters, polymers with 2-hydroxyethyl methacrylate, Me methacrylate and perfluoro-C8-14-alkyl acrylate	125328-29-2
	1-Decanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-, 1-(dihydrogen phosphate);1-Decanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-, 1-(dihydrogen phosphate)	57678-03-2
	Hexanoic acid, 2,3,3,4,4,5,6,6,6-nonafluoro-2,5-bis(trifluoromethyl)-;Hexanoic acid, 2,3,3,4,4,5,6,6,6-nonafluoro-2,5-bis(trifluoromethyl)-	1882109-80-9
	1-Propanaminium,N,N,N-trimethyl-3- [(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl) amino]-, chloride (1:1);1-Propanaminium,N,N,N-trimethyl-3- [(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl) amino]-, chloride (1:1)	53517-98-9
	1-Propanesulfonic acid,3-[ethyl (2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino]-,sodium salt (1:1);1-Propanesulfonic acid,3-[ethyl (2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino]-,sodium salt (1:1)	89685-61-0
	Phosphine, tris[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]-;Phosphine, tris[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]-	325459-92-5
	Palladium, dichlorobis[tris[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]phosphine-κP]-;Palladium, dichlorobis[tris[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]phosphine-κP]-	326475-46-1
	Butanoic acid, 3,3,4,4,4-pentafluoro-2,2-bis(1,1,2,2,2-pentafluoroethyl)-;Butanoic acid, 3,3,4,4,4-pentafluoro-2,2-bis(1,1,2,2,2-pentafluoroethyl)-	1882109-58-1
	Hexanoic acid, 2,3,3,4,5,5,6,6,6-nonafluoro-2,4-bis(trifluoromethyl)-;Hexanoic acid, 2,3,3,4,5,5,6,6,6-nonafluoro-2,4-bis(trifluoromethyl)-	1812247-19-0

	Hexanoic acid, 3,3,4,4,5,5,6,6,6-nonafluoro-2,2-bis(trifluoromethyl)-;Hexanoic acid, 3,3,4,4,5,5,6,6,6-nonafluoro-2,2-bis(trifluoromethyl)-	1812247-17-8
	Hexanoic acid, 2,2,3,3,5,5,6,6,6-nonafluoro-4,4-bis(trifluoromethyl)-;Hexanoic acid, 2,2,3,3,5,5,6,6,6-nonafluoro-4,4-bis(trifluoromethyl)-	1192593-79-5
	Hexanoic acid, 2,2,3,4,4,5,6,6,6-nonafluoro-3,5-bis(trifluoromethyl)-;Hexanoic acid, 2,2,3,4,4,5,6,6,6-nonafluoro-3,5-bis(trifluoromethyl)-	1144512-35-5
	Heptanoic acid, 2,2,3,3,4,5,5,6,6,7,7,7-dodecafluoro-4-(trifluoromethyl)-;Heptanoic acid, 2,2,3,3,4,5,5,6,6,7,7,7-dodecafluoro-4-(trifluoromethyl)-	1144512-18-4
	Heptanoic acid, 2,2,3,4,4,5,5,6,6,7,7,7-dodecafluoro-3-(trifluoromethyl)-;Heptanoic acid, 2,2,3,4,4,5,5,6,6,7,7,7-dodecafluoro-3-(trifluoromethyl)-	705240-04-6
	Isooctanoic acid, pentadecafluoro-;Isooctanoic acid, pentadecafluoro-	123116-17-6
	Heptanoic acid, 2,2,3,3,4,4,5,5,6,7,7,7-dodecafluoro-6-(trifluoromethyl)-;Heptanoic acid, 2,2,3,3,4,4,5,5,6,7,7,7-dodecafluoro-6-(trifluoromethyl)-	15166-06-0
	Octadecanoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl ester;Octadecanoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl ester	99955-83-6
	Pentanedioic acid, 3-[2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)oxy]-2-oxoethyl]-3-hydroxy-, 1,5-bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl) ester;Pentanedioic acid, 3-[2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)oxy]-2-oxoethyl]-3-hydroxy-, 1,5-bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl) ester	302911-86-0
	1,3-Propanediol, 2,2-bis[[(γ-ω-perfluoro-C4-10-alkyl)thio]methyl] derivatives, phosphates, ammonium salts	148240-85-1
	1,3-Propanediol, 2,2-bis[[(γ-ω-perfluoro-C6-12-alkyl)thio]methyl] derivatives, phosphates, ammonium salts	148240-87-3
	1,3-Propanediol, 2,2-bis[[(γ-ω-perfluoro-C10-20-alkyl)thio]methyl] derivs., phosphates, ammonium salts;1,3-Propanediol, 2,2-bis[[(γ-ω-perfluoro-C10-20-alkyl)thio]methyl] derivs., phosphates, ammonium salts	148240-89-5
	Oxirane, methyl-, polymer with oxirane, mono[2-hydroxy-3-[(γ-ω-perfluoro-C8-20-alkyl)thio]propyl] ethers	183146-60-3
	Pentanoic acid, 4,4-bis[(γ-ω-perfluoro-C8-20-alkyl)thio]derivs., compds. with diethanolamine	71608-61-2
	1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-10-iododecane	2043-53-0
	1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosafluoro-12-iododododecane	2043-54-1
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-henicosafluorododecyl methacrylate	2144-54-9
	Potassium perfluorooctanoate	2395-00-8
	Ethyl perfluorooctanoate	3108-24-5
	1,1,1,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-tetracosafluoro-12-iodo-2-(trifluoromethyl)dodecane	3248-61-1
	Octacosafluoro-14-iodo-2-(trifluoromethyl)tetradecane	3248-63-3
	Nonadecafluoro-9-iodononane	558-97-4
	Icosafluoro-10-iodo-2-(trifluoromethyl)decane	677-93-0
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecan-1-ol	678-39-7

	Bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl) hydrogen phosphate	678-41-1
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-henicosafluorododecanol	865-86-1
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluorohexadecyl methacrylate	4980-53-4
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecyl methacrylate	6014-75-1
	Ammonium pentadecafluorooctanoate	3825-26-1
	N-ethylheptadecafluorooctanesulphonamide	4151-50-2
	4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,17,17,17-octacosafluoro-2-hydroxy-16-(trifluoromethyl)heptadecyl acrylate	16083-78-6
	4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-2-hydroxy-14-(trifluoromethyl)pentadecyl acrylate	16083-87-7
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-henicosafluorododecyl acrylate	17741-60-5
	Methyl perfluorooctanoate	376-27-2
	Henicosafluoro-10-iododecane	423-62-1
	Heptadecafluoro-1-iodooctane	507-63-1
	1-bromohenicosafluorodecane	307-43-7
	1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-pentacosafluoro-12-iododododecane	307-60-8
	Nonacosafluoro-1-iodotetradecane	307-63-1
	Pentadecafluorooctyl fluoride	335-66-0
	Pentadecafluorooctanoic acid	335-67-1
	Silver(1+) perfluorooctanoate	335-93-3
	Sodium pentadecafluorooctanoate	335-95-5
	Bis[3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-henicosafluorododecyl] hydrogen phosphate	1895-26-7
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl methacrylate	1996-88-9
	Triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)silane	101947-16-4
	Perfluorooctylethyltrichlorosilane;Perfluorooctylethyltrichlorosilane	78560-44-8
	Perfluorooctylethyltrimethoxysilane;Perfluorooctylethyltrimethoxysilane	83048-65-1
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecane-1-thiol	34143-74-3
	Perfluorooctylethyldimethylchlorosilane;Perfluorooctylethyldimethylchlorosilane	74612-30-9
	1-(carboxylatomethyl)-1-(2-hydroxyethyl)-4-(2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-nonadecafluoro-1-oxodecyl)piperazinium	71356-38-2
	Carboxylic acids, C7-13, perfluoro, ammonium salts	72968-38-8
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12,12-icosafluoro-11-(trifluoromethyl)dodecyl methacrylate	74256-14-7
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,14,14,14-tetracosafluoro-13-(trifluoromethyl)tetradecyl methacrylate	74256-15-8
	Heptadecafluoro-1-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctyl)oxy]nonene	84029-60-7

	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-henicosafluorododecyl dihydrogen phosphate	57678-05-4
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluorohexadecanol	60699-51-6
	4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,13,13,13-icosafluoro-2-hydroxy-12-(trifluoromethyl)tridecyl dihydrogen phosphate	63295-27-2
	4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-2-hydroxy-14-(trifluoromethyl)pentadecyl dihydrogen phosphate	63295-28-3
	4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,17,17,17-octacosafluoro-2-hydroxy-16-(trifluoromethyl)heptadecyl dihydrogen phosphate	63295-29-4
	1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14-nonacosafluoro-16-iodohexadecane	65510-55-6
	1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-nonadecafluoro-11-iodoundecane	65510-56-7
	Chromium(3+) perfluorooctanoate	68141-02-6
	Propanamide, 3-[(γ-ω-perfluoro-C4-10-alkyl)thio] derivs.	68187-42-8
	Alkyl iodides, C4-20, γ-ω-perfluoro	68188-12-5
	Fatty acids, C7-13, perfluoro	68333-92-6
	Phosphinic acid, bis(perfluoro-C6-12-alkyl) derivs.	68412-69-1
	N-(3-aminopropyl)-2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanamide	85938-56-3
	Carbamic acid, [2-(sulfothio)ethyl]-, C-(γ-ω-perfluoro-C6-9-alkyl) esters, monosodium salts	95370-51-7
	Octanoic acid, pentadecafluoro-, branched	90480-55-0
	Octanoic acid, pentadecafluoro-, branched, ammonium salt	90480-56-1
	Alkyl iodides, C6-18, perfluoro	90622-71-2
	Amides, C7-19, α-ω-perfluoro-N,N-bis(hydroxyethyl)	90622-99-4
	Fatty acids, C7-19, perfluoro	91032-01-8
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,16,16,16-octacosafluoro-15-(trifluoromethyl)hexadecyl acrylate	91615-22-4
	Phosphinic acid, bis(perfluoro-C6-12-alkyl) derivs., aluminum salts	93062-53-4
	1,1'-[oxybis[(1-methylethylene)oxy]]bis[4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoropentadecan-2-ol]	93776-00-2
	(2-carboxylatoethyl)(dimethyl)[3-[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoro-2-hydroxypentadecyl)amino]propyl]ammonium	93776-12-6
	(2-carboxylatoethyl)[3-[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-henicosafluoro-2-hydroxytridecyl)amino]propyl]dimethylammonium	93776-13-7
	(2-carboxylatoethyl)(dimethyl)[[[4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-2-hydroxy-14-(trifluoromethyl)pentadecyl]amino]propyl]mmonium	93776-15-9
	Diammonium 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl phosphate	93857-44-4
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,18,18,18-dotriacontafluoro-17-(trifluoromethyl)octadecyl acrylate	94158-63-1

	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,16,16,16-octacosafluoro-15-(trifluoromethyl)hexadecyl methacrylate	94158-64-2
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,18,18,18-dotriacontafluoro-17-(trifluoromethyl)octadecyl methacrylate	94158-65-3
	4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-henicosafluoro-2-hydroxytridecyl dihydrogen phosphate	94158-70-0
	1-[[3-(dimethylamino)propyl]amino]-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoropentadecan-2-ol	94159-79-2
	1-[[3-(dimethylamino)propyl]amino]-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-henicosafluorotridecan-2-ol	94159-80-5
	1-[[3-(dimethylamino)propyl]amino]-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-14-(trifluoromethyl)pentadecan-2-ol	94159-82-7
	1-[[3-(dimethylamino)propyl]amino]-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,13,13,13-icosafluoro-12-(trifluoromethyl)tridecan-1-ol	94159-83-8
	Diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoro-2-hydroxyundecyl phosphate	94200-45-0
	Diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-henicosafluoro-2-hydroxytridecyl phosphate	94200-46-1
	Diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoro-2-hydroxypentadecyl phosphate	94200-47-2
	Diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,17-nonacosafluoro-2-hydroxyheptadecyl phosphate	94200-48-3
	Diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,13,13,13-icosafluoro-2-hydroxy-12-(trifluoromethyl)tridecyl phosphate	94200-50-7
	Diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-2-hydroxy-14-(trifluoromethyl)pentadecyl phosphate	94200-51-8
	Diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,17,17,17-octacosafluoro-2-hydroxy-16-(trifluoromethyl)heptadecyl phosphate	94200-52-9
	2-Propenoic acid, γ-ω-perfluoro-C8-14-alkyl esters	85631-54-5
	2-Propenoic acid, perfluoro-C8-16-alkyl esters	85681-64-7
	Perfluorooctylethyldichloromethyl silane;Perfluorooctylethyldichloromethyl silane	3102-79-2
	Thiols, C8-20, .gamma.-.omega.-perfluoro, telomers with acrylamide	70969-47-0
	3,4-bis[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino]benzenesulphonyl chloride	24216-05-5
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,14,14,14-tetracosafluoro-13-(trifluoromethyl)tetradecyl acrylate	52956-82-8
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl acrylate	27905-45-9

	1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-pentacosafluoro-14-iodotetradecane	30046-31-2
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-henicosafluorododecene	30389-25-4
	Perfluorooctanoic anhydride	33496-48-9
	2-carboxyethylbis(2-hydroxyethyl)-3-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino]propylammonium hydroxide	39186-68-0
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecanol	39239-77-5
	N-[3-[bis(2-hydroxyethyl)amino]propyl]-2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanamide	41358-63-8
	4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecanoic acid	34598-33-9
28	Dicofol	115-32-2
29	Perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds	355-46-4, 423-50-7, 68259-08-5, 67584-53-6 and others
	Example substances	
	Sulfonium, (thiodi-4,1-phenylene)bis[diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:2)	421555-73-9
	Potassium perfluorohexane-1-sulphonate	3871-99-6
	Sulfonium, tris[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	425670-70-8
	Methanaminium, N,N,N-trimethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1)	189274-31-5
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd.with 2-methyl-2-propanamine (1:1)	202189-84-2
	Iodonium, bis[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	213740-81-9
	Tridecafluorohexanesulphonic acid, compound with 2,2'-iminodiethanol (1:1)	70225-16-0
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. with N,N-diethylethanamine (1:1)	72033-41-1
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, sodium salt	82382-12-5
	Iodonium, bis[(1,1-dimethylethyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1) (9CI)	866621-50-3
	Sulfonium, (4-methylphenyl)diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	910606-39-2
	Sulfonium, [4-[(2-methyl-1-oxo-2-propen-1-yl)oxy]phenyl]diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	911027-68-4
	Sulfonium, [4-[(2-methyl-1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1), polymer with 2-ethyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate, 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate	911027-69-5

	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, cesium salt (1:1)	92011-17-1
	Dibenzo[k,n][1,4,7,10,13]tetraoxathiacyclopentadecinium, 19-[4-(1,1-dimethylethyl)phenyl]-6,7,9,10,12,13-hexahydro-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	928049-42-7
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, gallium salt (9CI)	341035-71-0
	Sulfonium, bis(4-methylphenyl)phenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	341548-85-4
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, scandium(3+) salt (3:1)	350836-93-0
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, neodymium(3+) salt (3:1)	41184-65-0
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, yttrium(3+) salt (3:1)	41242-12-0
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, lithium salt (1:1)	55120-77-9
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, zinc salt	70136-72-0
	Phosphonium, triphenyl(phenylmethyl)-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1000597-52-3
	N,N,N-tributylbutan-1-aminium tridecafluorohexane-1-sulfonate	108427-54-9
	N,N,N-triethylethanaminium tridecafluorohexane-1-sulfonate	108427-55-0
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. With pyrrolidine (1:1)	1187817-57-7
	Ethanaminium, N-[4-[[4-(diethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1310480-24-0
	Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1310480-27-3
	Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(phenylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1310480-28-4
	Beta-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid ion(1-)(1:1)	1329995-45-0
	Gamma-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid ion(1-)(1:1)	1329995-69-8
	Sulfonium, triphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	144116-10-9
	Quinolinium, 1-(carboxymethyl)-4-[2-[4-[4-(2,2-diphenylethenyl)phenyl]-1,2,3,3a,4,8b-hexahydrocyclopent[b]indol-7-yl]ethenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1462414-59-0

	Iodonium, diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	153443-35-7
	Ammonium perfluorohexane-1-sulphonate	68259-08-5
	Iodonium, bis[4-(1,1-dimethylpropyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic	421555-74-0
	Perfluorohexane-1-sulphonic acid	355-46-4
30	Dechlorane Plus	13560-89-9 and others
	Example substances	
	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.1*6,9*.0*2,13*.0*5,10*]octadeca-7,15-diene	13560-89-9
	Dechlorane Plus Anti	135821-74-8
	Dechlorane Plus Syn	135821-03-3
31	Methoxychlor	72-43-5 and others
	Example substances	
	Methoxychlor	72-43-5
	Methoxychlor	30667-99-3
	Methoxychlor	76733-77-2
	Methoxychlor	255065-25-9
	Methoxychlor	255065-26-0
	Methoxychlor	59424-81-6
	Methoxychlor	1348358-72-4
32	UV-328	25973-55-1
	Example substances	
	2-(2H-Benzotriazol-2-yl)-4,6-di-tert-pentylphenol	25973-55-1

Table1-6. Other substances specified independently by KUBOTA Group

No.	Substance Name	CAS No.
1	Carbon nanotube	308068-56-6 and others

Table 2 : Substances to be Restricted
Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-1. RoHS/ Annex II

No.	Substance Name		Specified Conditions or Applications
1	Lead		・Should not be contained intentionally or as impurities in concentrations greater than 0.1% by weight per homogeneous material. ・However, the uses specified in the RoHS Annex are excluded. (see Attached Table I-A)
	Example substances	**CAS No.**	
	Lead	7439-92-1	
	Lead (II) sulfate	7446-14-2	
	Lead (II) carbonate	598-63-0	
	Trilead bis(carbonate) dihydroxide	1319-46-6	
	Lead (II) acetate, trihydrate	6080-56-4	
	Lead selenide	12069-00-0	
	Lead (IV) oxide	1309-60-0	
	Lead (II,IV) oxide	1314-41-6	
	Lead (II) sulfide	1314-87-0	
	Lead (II) phosphate	7446-27-7	
	Lead (II) titanate	12060-00-3	
	Lead sulfate, sulphuric acid, lead salt	15739-80-7	
	Lead sulphate, tribasic	12202-17-4	
	Lead stearate	1072-35-1	
	Lead (II) chromate	7758-97-6	
	Lead chromate molybdate sulphate red	12656-85-8	
	Lead sulfochromate yellow	1344-37-2	
	Lead-monoxide	1317-36-8	
	Lead hydroxide carbonate	1344-36-1	
	Lead dibasic acetate	301-04-2	
2	Mercury		・Should not be contained intentionally or as impurities in concentrations greater than 0.1% by weight per homogeneous material. ・However, the uses specified in the RoHS Annex are excluded. (see Attached Table I-A) ・Import and export prohibitions of specified products with mercury due to Foreign Exchange and Foreign Trade Control Law Batteries (alkaline manganese button cells): from Dec 31, 2020 onwards, switches and relays: from Dec 31, 2020 onwards, electronic displays: from Jan 1, 2018 onwards, etc.
	Example substances	**CAS No.**	
	Mercury	7439-97-6	
	Mercury, chloro(cyclohexylmethyl)-	33631-63-9	
	Mercury (II) chloride	7487-94-7	
	Mercuric sulfate	7783-35-9	
	Mercuric nitrate	10045-94-0	
	Mercuric (II) oxide	21908-53-2	
	Mercuric sulfide	1344-48-5	
3	Cadmium		・Should not be contained intentionally or as impurities in concentrations greater than 0.01% by weight per homogeneous material. ・However, the uses specified in the RoHS Annex are excluded. (see Attached Table I-A)
	Example substances	**CAS No.**	
	Cadmium	7440-43-9	
	Cadmium oxide	1306-19-0	
	Cadmium sulfide	1306-23-6	
	Cadmium chloride	10108-64-2	
	Cadmium sulphate	10124-36-4	
4	Hexavalent chromium		・Should not be contained intentionally or as impurities in concentrations greater than 0.1% by weight per homogeneous material. ・However, the uses specified in the RoHS Annex are excluded. (see Attached Table I-A)
	Example substances	**CAS No.**	
	Barium chromate	10294-40-3	
	Calcium chromate	13765-19-0	
	Strontium chromate	7789-06-2	
	Zinc chromate	13530-65-9	
	Sodium bichromate	10588-01-9	
	Chromium trioxide	1333-82-0	
	Chromium, ion (Cr 6+)	18540-29-9	
	Sodium-chromate	7775-11-3	
	Potassium-dichromate	7778-50-9	
	Potassium-chromate	7789-00-6	
5	Polybrominated biphenyls (PBB)		
	Example substances	**CAS No.**	
	Polybrominated Biphenyls	59536-65-1	
	Dibromobiphenyl	92-86-4	
	2-Bromobiphenyl	2052-07-5	
	3-Bromobiphenyl	2113-57-7	
	4-Bromobiphenyl	92-66-0	
	Tribromobiphenyl	59080-34-1	
	Tetrabromobiphenyl	40088-45-7	
	Pentabrphenyl	56307-79-0	
	Hexabromobiphenyl	59080-40-9	
	hexabromo-1,1-biphenyl	36355-01-8	
	Firemaster FF-1	67774-32-7	
	Heptabromobiphenyl	35194-78-6	
	Octabromobiphenyl	61288-13-9	
	Nonabromobiphenyl	27753-52-2	
	Decabromobiphenyl	13654-09-6	

6	Polybrominated diphenyl ethers (PBDE)	
	Example substances / **CAS No.**	
	Bromodiphenyl ether / 101-55-3	
	Dibromodiphenyl ethers / 2050-47-7	
	Tribromodiphenyl ether / 49690-94-0	
	Tetrabromodiphenyl ethers / 40088-47-9	
	Hexabromodiphenyl ether / 36483-60-0	
	Heptabromodiphenylether / 68928-80-3	
	Nonabromodiphenylether / 63936-56-1	
	Decabromodiphenyl ether / 1163-19-5	
	Pentabromodiphenyl ether / 32534-81-9	
	Octabromodiphenyl ether / 32536-52-0	
7	Bis(2-ethylhexyl) phthalate (DEHP)	
	Example substances / **CAS No.**	
	Bis (2-ethylhexyl)phthalate (DEHP) / 117-81-7	
8	Butyl benzyl phthalate (BBP)	
	Example substances / **CAS No.**	
	Benzyl butyl phthalate (BBP) / 85-68-7	
9	Dibutyl phthalate (DBP)	
	Example substances / **CAS No.**	
	Dibutyl phthalate (DBP) / 84-74-2	
10	Diisobutyl phthalate (DIBP)	
	Example substances / **CAS No.**	
	Diisobutyl phthalate (DIBP) / 84-69-5	

Table2-2. Montreal Protocol/ Annex C Group I

No.	Substance Name	Synonym
1	Dichlorofluoromethane	HCFC-21
	Reference CAS No. 75-43-4	
2	Chlorodifluoromethane	HCFC-22
	Reference CAS No. 75-45-6	
3	Chlorofluoromethane	HCFC-31
	Reference CAS No. 593-70-4	
4	Tetrachlorofluoroethane	HCFC-121
	Reference CAS No. 354-11-0,354-14-3,134237-32-4	
5	Trichlorodifluoroethane	HCFC-122
	Reference CAS No. 354-15-4,134237-33-5	
6	Dichlorotrifluoroethane	HCFC-123
	Reference CAS No. 354-23-4,34077-87-7	
7	2,2-Dichloro-1,1,1-trifluroethane	HCFC-123
	Reference CAS No. 306-83-2	
8	Chlorotetrafluoroethane	HCFC-124
	Reference CAS No. 354-25-6,63938-10-3	
9	2-Chloro-1,1,1,2-tetrafluoroethane	HCFC-124
	Reference CAS No. 2837-89-0	
10	Trichlorofluoroethane	HCFC-131
	Reference CAS No. 811-95-0,27154-33-2,134237-34-6	
11	Dichlorodifluoroethane	HCFC-132
	Reference CAS No. 25915-78-0	
12	Chlorotrifluoroethane	HCFC-133
	Reference CAS No. 75-88-7,421-04-5,431-07-2,1330-45-6	
13	Dichlorofluoroethane	HCFC-141
	Reference CAS No. 430-57-9,25167-88-8	
14	1,1-Dichloro-1-fluoroethane	HCFC-141b
	Reference CAS No. 1717-00-6	
15	Chlorodifluoroethane	HCFC-142
	Reference CAS No. 338-64-7,25497-29-4	
16	1-Chloro-1,1-difluoroethane	HCFC-142b
	Reference CAS No. 75-68-3	
17	Chlorofluoroethane	HCFC-151
	Reference CAS No. 762-50-5,1615-75-4,110587-14-9	
18	Hexachlorofluoropropane	HCFC-221
	Reference CAS No. 134237-35-7	
19	Pentachlorodifluoropropane	HCFC-222
	Reference CAS No. 134237-36-8	
20	Tetrachlorotrifluropropane	HCFC-223
	Reference CAS No. 134237-37-9	
21	Trichlorotetrafluropropane	HCFC-224
	Reference CAS No. 127564-91-4,134237-38-0	
22	Dichloropentafluoropropane	HCFC-225
	Reference CAS No. 422-44-6,422-48-0,431-86-7,13474-88-9,111512-56-2,127564-92-5,128903-21-9,136013-79-1	
23	3,3-Dichloro-1,1,1,2,2-pentafluoropropane	HCFC-225ca
	Reference CAS No. 422-56-0	
24	1,3-Dichloro-1,1,2,2,3-pentafluoropropane	HCFC-225cb
	Reference CAS No. 507-55-1	
25	Chlorohexafluoropropane	HCFC-226
	Reference CAS No. 422-55-9,422-57-1,134308-72-8	
26	Pentachlorofluoropropane	HCFC-231
	Reference CAS No. 134190-48-0	
27	Tetrachlorodifluoropropane	HCFC-232
	Reference CAS No. 127564-82-3,134237-39-1	

No.	Substance Name	Synonym
28	Trichlorotrifluoropropane	HCFC-233
	Reference CAS No. 134237-40-4	
29	Dichlorotetrafluoropropane	HCFC-234
	Reference CAS No. 127564-83-4	
30	Chloropentafluoropropane	HCFC-235
	Reference CAS No. 134237-41-5	
31	Tetrachlorofluoropropane	HCFC-241
	Reference CAS No. 134190-49-1	
32	Trichlorodifluoropropane	HCFC-242
	Reference CAS No. 127564-90-3,134237-42-6	
33	Dichlorotrifluoropropane	HCFC-243
	Reference CAS No. 134237-43-7	
34	Chlorotetrafluoropropane	HCFC-244
	Reference CAS No. 134190-50-4	
35	Trichlorofluoropropane	HCFC-251
	Reference CAS No. 818-99-5,134190-51-5	
36	Dichlorodifluoropropane	HCFC-252
	Reference CAS No. 134190-52-6	
37	Chlorotrifluoropropane	HCFC-253
	Reference CAS No. 134237-44-8	
38	Dichlorofluoropropane	HCFC-261
	Reference CAS No. 7799-56-6,134237-45-9	
39	Chlorodifluoropropane	HCFC-262
	Reference CAS No. 102738-79-4,134190-53-7	
40	Chlorofluoropropane	HCFC-271
	Reference CAS No. 134190-54-8	

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
1	Polychlorinated terphenyls (PCTs) CAS No. 61788-33-8	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).	1
2	Polybromobiphenyls; Polybrominatedbiphenyls (PBB) CAS No. 59536-65-1	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
	Example substances	CAS No.	
	3-bromobiphenyl	2113-57-7	
	Decabromo-1,1'-biphenyl	13654-09-6	
	4-bromobiphenyl	92-66-0	
	4,4'-dibromobiphenyl	92-86-4	
	Hexabromo-1,1'-biphenyl	36355-01-8	
	Polybrominated biphenyls (PBB) except hexabromo-biphenyl	-	
	Nonabromo-1,1'-biphenyl	27753-52-2	
	Tetrabromo(tetrabromophenyl)benzene	27858-07-7	
	Polybromobiphenyls, Polybrominatedbiphenyls (PBB)	59536-65-1	
3	Lead carbonates: (a) Neutral anhydrous carbonate (PbCO3) CAS No. 598-63-0 (b) Trilead-bis(carbonate)-dihydroxide 2Pb CO3-Pb(OH)2 CAS No. 1319-46-6	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.	16
4	Lead sulphates: (a)PbSO4 CAS No. 7446-14-2 (b)PbXSO4 CAS No. 15739-80-7	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
5	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.	18
6	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. (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: (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. (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 — outdoor rainwater pipes, gutters and fittings, as well as covering material for roofing and faç	20

Table 2 : Substances to be Restricted
Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
		(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) compound: (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). (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.	
7	Cadmium and its compounds CAS No. 7440-43-9 and its compounds	For the purpose of this entry, the codes and chapters indicated in square brackets are the codes and chapters of the tariff and statistical nomenclature of Common Customs Tariff as established by Council Regulation (EEC) No 2658/87 (1). 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) [3904 10] [3904 21] — polyurethane (PUR) [3909 50] — low-density polyethylene (LDPE), with the exception of low-density polyethylene used for the production of coloured masterbatch [3901 10] — cellulose acetate (CA) [3912 11] — cellulose acetate butyrate (CAB) [3912 11] — epoxy resins [3907 30] — melamine-formaldehyde (MF) resins [3909 20] — urea-formaldehyde (UF) resins [3909 10] — unsaturated polyesters (UP) [3907 91] — polyethylene terephthalate (PET) [3907 60] — polybutylene terephthalate (PBT) — transparent/general-purpose polystyrene [3903 11] — acrylonitrile methylmethacrylate (AMMA) — cross-linked polyethylene (VPE) — high-impact polystyrene — polypropylene (PP) [3902 10] 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. By way of derogation, the second subparagraph shall not apply to articles placed on the market before 10 December 2011. The first and second subparagraphs apply without prejudice to Council Directive 94/62/EC (13) and acts adopted on its basis. By 19 November 2012, in accordance with Article 69, the Commission shall ask the European Chemicals Agency to prepare a dossier conforming to the requirements of Annex XV in order to assess whether the use of cadmium and its compounds in plastic material, other than that listed in subparagraph 1, should be restricted. 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. ◄ 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 subparagraph 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.	23

Table 2 : Substances to be Restricted
Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
		Suppliers shall ensure, before the placing on the market of mixtures and articles containing recovered PVC for the first time, that these are visibly, legibly and indelibly marked as follows: 'Contains recovered PVC' or with the following pictogram:  In accordance with Article 69 of this Regulation, the derogation granted in paragraph 4 will be reviewed, in particular with a view to reducing the limit value for cadmium and to reassess the derogation for the applications listed in points (a) to (e), by 31 December 2017. 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 [8210] [8417 20] [8419 81] [8421 11] [8421 22] [8422] [8435] [8437] [8438] [8476 11] — agriculture [8419 31] [8424 81] [8432] [8433] [8434] [8436] — cooling and freezing [8418] — printing and book-binding [8440] [8442] [8443] (b) equipment and machinery for the production of: — household goods [7321] [8421 12] [8450] [8509] [8516] — furniture [8465] [8466] [9401] [9402] [9403] [9404] — sanitary ware [7324] — central heating and air conditioning plant [7322] [8403] [8404] [8415] 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 [8419 32] [8439] [8441] textiles and clothing [8444] [8445] [8447] [8448] [8449] [8451] [8452] (b) equipment and machinery for the production of: — industrial handling equipment and machinery [8425] [8426] [8427] [8428] [8429] [8430] [8431] — road and agricultural vehicles [chapter 87] — rolling stock [chapter 86] — vessels [chapter 89] 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. 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. 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. 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. 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.	
	Example substances	CAS No.	
	Cadmium dipalmitate	6427-86-7	
	Cadmium dianthranilate	7058-55-1	
	Cadmium	7440-43-9	
	Cadmium bromide	7789-42-6	
	Cadmium fluoride	7790-79-6	
	Cadmium iodide	7790-80-9	
	Cadmium iodate	7790-81-0	
	Cadmium dinitrite	7790-83-2	

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
	Cadmium wolframate	7790-85-4	
	Cadmium sulfoselenide orange	12656-57-4	
	Disodium tetrakis(cyano-C)cadmate(2-)	15682-87-8	
	Dipotassium [[N,N'-ethylenebis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,ON']cadmate(2-)	15708-29-9	
	Cadmium acrylate	15743-19-8	
	Cadmium tellurium trioxide	15851-44-2	
	Cadmium tellurium tetraoxide	15852-14-9	
	Cadmium dilactate	16039-55-7	
	Cadmium divanadium hexoxide	16056-72-7	
	5-oxo-L-proline, cadmium salt	16105-06-9	
	Cadmium propionate	16986-83-7	
	Cadmium hexafluorosilicate(2-)	17010-21-8	
	Bis(ethylenediamine)cadmium(2+) bis[dicyanoaurate(1-)]	18974-20-4	
	Cadmium diphenolate	18991-05-4	
	Cadmium bis(dipentyldithiocarbamate)	19010-65-2	
	Cadmium disalicylate	19010-79-8	
	Tricadmium bis(phosphate)	13477-17-3	
	Cadmium silicate	13477-19-5	
	Cadmium sulphite	13477-23-1	
	Diboron tricadmium hexaoxide	13701-66-1	
	Dicadmium hexakis(cyano-C)ferrate(4-)	13755-33-4	
	Cadmium selenite	13814-59-0	
	Cadmium selenate	13814-62-5	
	Cadmium diricinoleate	13832-25-2	
	Cadmium orthophosphate	13847-17-1	
	Cadmium molybdenum tetroxide	13972-68-4	
	Cadmium disulphamate	14017-36-8	
	Cadmium hydrogen phosphate	14067-62-0	
	Cadmium bis(diethyldithiocarbamate)	14239-68-0	
	Cadmium chromate	14312-00-6	
	Cadmium dipotassium tetracyanide	14402-75-6	
	Cadmium tetrafluoroborate	14486-19-2	
	Bis(dibutyldithiocarbamato-S,S')cadmium	14566-86-0	
	Bis(pentane-2,4-dionato-O,O')cadmium	14689-45-3	
	Tris(ethylenediamine)cadmium dihydroxide	14874-24-9	
	Cadmium diicosanoate	14923-81-0	
	Cadmium bis(piperidine-1-carbodithioate)	14949-59-8	
	Bis(dimethyldithiocarbamato-S,S')cadmium	14949-60-1	
	Lauric acid, barium cadmium salt	15337-60-7	
	Tricadmium diphosphide	12014-28-7	
	Antimony, compound with cadmium (2:3)	12014-29-8	
	Cadmium zirconium trioxide	12139-23-0	
	Pentacadmium chloridetriphosphate	12185-64-7	
	Dicadmium niobate	12187-14-3	
	Dicadmium selenide sulphide	12214-12-9	
	Cadmium ditantalum hexaoxide	12292-07-8	
	Dimethylcadmium	506-82-1	
	Cadmium carbonate	513-78-0	
	Cadmium succinate	141-00-4	
	Cadmium oxalate	814-88-0	
	Cadmium dithiocyanate	865-38-3	
	Cadmium di(octanoate)	2191-10-8	
	Cadmium distearate	2223-93-0	
	Cadmium p-toluate	2420-97-5	
	Cadmium bis(2-ethylhexanoate)	2420-98-6	
	Cadmium dilaurate	2605-44-9	
	Cadmium didecanoate	2847-16-7	
	Cadmium bis[benzoate]	3026-22-0	
	Barium cadmium tetrastearate	1191-79-3	
	Cadmium oxide	1306-19-0	
	Cadmium sulphide	1306-23-6	
	Cadmium selenide	1306-24-7	
	Cadmium telluride	1306-25-8	
	Cadmium cyanide	542-83-6	
	Cadmium di(acetate)	543-90-8	
	Cadmium zinc sulfide yellow	8048-07-5	
	Cadmium chloride	10108-64-2	
	Cadmium sulphate	10124-36-4	
	Cadmium myristate	10196-67-5	
	Cadmium nitrate	10325-94-7	
	Cadmium dioleate	10468-30-1	
	Cadmium selenide sulphide	11112-63-3	
	Tricadmium diarsenide	12006-15-4	
	Cadmium titanium trioxide	12014-14-1	
	Cadmium 4-(1,1-dimethylethyl)benzoate	4167-05-9	
	Cadmium cinnamate	4390-97-0	
	Cadmium diformate	4464-23-7	

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
	Cadmium sebacate	4476-04-4	
	Cadmium nonan-1-oate	5112-16-3	
	cadmium zinc telluride	303114-50-3	
	Cadmium isooctyl phthalate (1:2:2)	94247-16-2	
	Cadmium (1-ethylhexyl) phthalate (1:2:2)	94275-93-1	
	Cadmium octyl phthalate (1:2:2)	94275-94-2	
	Cadmium isooctadecanoate	84878-36-4	
	Cadmium tert-decanoate	84878-37-5	
	Cadmium bis(nonylphenolate)	84878-48-8	
	Cadmium bis(octylphenolate)	84878-51-3	
	Flue dust, lead-manufg., cadmium-rich	85117-02-8	
	Waste solids, cadmium-electrolysis, thallium-rich	85117-20-0	
	Fatty acids, C9-11-branched, cadmium salts	85586-15-8	
	Bis(5-oxo-L-prolinato-N1,O2)cadmium	85958-86-7	
	Bis(5-oxo-DL-prolinato-N1,O2)cadmium	85994-31-6	
	Benzenesulfonic acid, mono-C10-13-alkyl derivs., cadmium salts	90194-35-7	
	Benzoic acid, cadmium salt, basic	90218-85-2	
	Decanoic acid, branched, cadmium salts	90342-19-1	
	Hexanoic acid, 2-ethyl-, cadmium salt, basic	90411-62-4	
	Propanoic acid, cadmium salt, basic	90529-78-5	
	Cadmium zinc lithopone yellow	90604-89-0	
	Cadmium lithopone yellow	90604-90-3	
	Leach residues, cadmium cake	91053-44-0	
	Leach residues, zinc ore-calcine, cadmium-copper ppt.	91053-46-2	
	Fatty acids, castor-oil, hydrogenated, cadmium salts	91697-35-7	
	Fatty acids, C8-10-branched, cadmium salts	92257-06-2	
	Leach residues, zinc refining flue dust, cadmium-thallium ppt.	92257-11-9	
	Fatty acids, C9-13-neo-, cadmium salts	92704-12-6	
	Fatty acids, olive-oil, cadmium salts	92704-15-9	
	Fatty acids, peanut-oil, cadmium salts	92704-19-3	
	Fatty acids, rape-oil, cadmium salts	92704-24-0	
	Fatty acids, C14-18 and C18-unsatd., branched and linear, hydrogenated, cadmium salts	92797-28-9	
	Nonanoic acid, branched, cadmium salt	93686-40-9	
	Carbonic acid, cadmium salt	93820-02-1	
	Bis(2-ethylhexyl mercaptoacetato -O',S)cadmium	93858-50-5	
	Cadmium bis(o-nonylphenolate)	93894-07-6	
	Cadmium bis(p-nonylphenolate)	93894-08-7	
	Cadmium bis[p-(1,1,3,3-tetramethylbutyl)phenolate]	93894-09-8	
	Cadmium (Z)-hexadec-9-enoate	93894-10-1	
	Cadmium di(acetate), dihydrate	5743-04-4	
	Sulfuric acid, cadmium salt, hydrate (3:3:8)	7790-84-3	
	Cadmium compounds	-	
	Cadmium (II) chloride monohydrate	35658-65-2	
	Sulfuric acid, cadmium salt (1:1), hydrate	15244-35-6	
	Cadmium perchlorate hexahydrate	10326-28-0	
	Cadmium chloride hydrate	654054-66-7	
	Cadmium bromide tetrahydrate	13464-92-1	
	cadmium nitrate tetrahydrate	10022-68-1	
	cadmium chloride (CdCl2), hydrate (2:5)	7790-78-5	
	Cadmium zinc sulphide	12442-27-2	
	Cadmium selenide sulfide	12626-36-7	
	Cadmium(2+) (R)-12-hydroxyoctadecanoate	38517-19-0	
	Potassium [N,N-bis(carboxymethyl)glycinato(3-)-N,O,O',O'']cadmate(1-)	49784-42-1	
	Bis[N,N-bis(carboxymethyl)glycinato(3-)]tricadmium	50648-02-7	
	Boric acid, cadmium salt	51222-60-7	
	Cadmium o-toluate	52337-78-7	
	Cadmium hydroxide	21041-95-2	
	Cadmium methacrylate	24345-60-6	
	Cadmium epoxyoctadecanoate	26264-48-2	
	Cadmium toluate	27476-27-3	
	[[N,N'-ethylenebis[glycinato]](2-)-N,N',O,O']cadmium	29977-13-7	
	Cadmium isooctanoate	30304-32-6	
	Cadmium dodecylbenzenesulphonate	31017-44-4	
	Cadmium (1,1-dimethylethyl)benzoate	31215-94-8	
	Cadmium [R-(R*,R*)]-tartrate	34100-40-8	
	Cadmium didocosanoate	34303-23-6	
	Disodium [[N,N'-ethylenebis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,ON']cadmate(2-)	35803-35-1	
	Cadmium 3,5,5-trimethylhexanoate	36211-44-6	
	Bis(propane-1,2-diyldiamine-N,N')cadmium(2+) bis[bis(cyano-C)aurate(1-)]	67906-19-8	

Table 2 : Substances to be Restricted
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Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
	Cadmium dilinoleate	67939-62-2	
	Tetrapotassium [[[nitrilotris(methylene)]tris[phosphonato]](6-)-N,O,O'',O''']cadmate(6-)	67989-93-9	
	Cadmium m-toluate	68092-45-5	
	Fatty acids, C10-18, cadmium salts	68131-58-8	
	Fatty acids, C12-18, cadmium salts	68131-59-9	
	Cadmium selenide (CdSe), solid soln. with cadmium sulfide	71243-75-9	
	(R)-12-hydroxyoleic acid, barium cadmium salt	71411-66-0	
	Tetra-μ-chlorodichlorobis[2-[[(2,3-dihydroxypropoxy)hydroxyphosphinyl]oxy]triethylmethylammoniumato]tricadmium, stereoisomer	71861-27-3	
	Fatty acids, coco, cadmium salts	72869-63-7	
	Zircon, cadmium yellow	72968-34-4	
	Cadmium isononanoate	84696-56-0	
	Benzyltriphenylphosphonium tetrachlorocadmate	68214-25-5	
	Pentapotassium hydrogen [[[ethylenebis[nitrilobis(methylene)]]tetrakis[phosphonato]](8-)]cadmate(6-)	68309-98-8	
	Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper and lead-doped	68332-81-0	
	Fatty acids, C14-18, cadmium salts	68409-82-5	
	Cadmium, benzoate p-tert-butylbenzoate complexes	68478-53-5	
	Pyrochlore, bismuth cadmium ruthenium	68479-13-0	
	Cadmium sulfide (CdS), solid soln. with zinc sulfide, aluminum and cobalt and copper and silver-doped	68784-10-1	
	Barium cadmium calcium chloride fluoride phosphate, antimony and manganese-doped	68784-55-4	
	Fatty acids, tall-oil, cadmium salts	68855-80-1	
	Fatty acids, C8-18 and C18-unsatd., cadmium salts	68876-84-6	
	Cadmium sulfide (CdS), aluminum and copper-doped	68876-98-2	
	Cadmium sulfide (CdS), aluminum and silver-doped	68876-99-3	
	Cadmium sulfide (CdS), copper chloride-doped	68877-00-9	
	Cadmium sulfide (CdS), silver chloride-doped	68877-01-0	
	Cadmium sulfide (CdS), copper and lead-doped	68891-87-2	
	Fatty acids, tallow, hydrogenated, cadmium salts	68953-39-9	
	Resin acids and Rosin acids, cadmium salts	68956-81-0	
	Hydrogen [4-[(5-chloro-4-methyl-2-sulphophenyl)azo]-3-hydroxynaphthalene-2-carboxylato(3-)]cadmate(1-)	68966-97-2	
	Cadmium, dross	69011-69-4	
	Wastewater, cadmium sulfate electrolytic, acid	69012-21-1	
	Flue dust, cadmium-refining	69012-57-3	
	Calcines, cadmium residue	69029-63-6	
	Leach residues, cadmium-refining	69029-70-5	
	Residues, cadmium-refining	69029-77-2	
	Slimes and Sludges, cadmium-refining, oxidized	69029-90-9	
	Slimes and Sludges, cadmium sump tank	69029-91-0	
	Cadmium(2+) 12-hydroxyoctadecanoate	69121-20-6	
	Cadmium potassium 1-(hydroxyethylidene)bisphosphonate(1:2:1)	69190-99-4	
	Fatty acids, C12-18, barium cadmium salts	70084-75-2	
	Cadmium bis(4-cyclohexylbutyrate)	55700-14-6	
	Cadmium divalerate	56982-42-4	
	Cadmium sulfoselenide red	58339-34-7	
	Naphthenic acids, cadmium salts	61789-34-2	
	Cadmium neodecanoate	61951-96-0	
	Cadmium bis(heptadecanoate)	62149-56-8	
	Cadmium pentadecanoate	63400-09-9	
	(S)-dichloro[2-[[(2,3-dihydroxypropoxy)hydroxyphosphinyl]oxy]triethylmethylammoniumato]cadmium	64681-08-9	
	Cadmium isodecanoate	93965-24-3	
	Cadmium bis(isoundecanoate)	93965-30-1	
	Cadmium dimethylhexanoate	93983-65-4	
	Cadmium tetrapentyl bis(phosphate)	94232-49-2	
	Leach residues, cadmium-contg. flue dust	94551-70-9	
	Cadmium isohexadecanoate	95892-12-9	
	Cadmium diisobutyl dimaleate	97259-82-0	
	Zircon, cadmium orange	99749-34-5	
	Cadmium chloride phosphate (Cd5Cl(PO4)3), manganese-doped	100402-53-7	
	Flue dust, copper-lead blast furnace, cadmium-indium-enriched	100656-55-1	

Table 2 : Substances to be Restricted
Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
	Dodecanoic acid, cadmium salt, basic	101012-89-9	
	Octadecanoic acid, cadmium salt, basic	101012-93-5	
	Octadecanoic acid, 12-hydroxy-, cadmium salt, basic	101012-94-6	
	Cadmium oxide (CdO), solid soln. with calcium oxide and titanium oxide (TiO2), praseodymium-doped	101356-99-4	
	Cadmium selenide (CdSe), solid soln. with cadmium sulfide, zinc selenide and zinc sulfide, aluminum and copper-doped	101357-00-0	
	Cadmium selenide (CdSe), solid soln. with cadmium sulfide, zinc selenide and zinc sulfide, copper and manganese-doped	101357-01-1	
	Cadmium selenide (CdSe), solid soln. with cadmium sulfide, zinc selenide and zinc sulfide, europium-doped	101357-02-2	
	Cadmium selenide (CdSe), solid soln. with cadmium sulfide, zinc selenide and zinc sulfide, gold and manganese-doped	101357-03-3	
	Cadmium selenide (CdSe), solid soln. with cadmium sulfide, zinc selenide and zinc sulfide, manganese and silver-doped	101357-04-4	
	Cadmium oxide (CdO), solid soln. with magnesium oxide, tungsten oxide (WO3) and zinc	102110-30-5	
	Silicic acid, zirconium salt, cadmium pigment-encapsulated	102184-95-2	
	Cadmate(1-), triiodo-, potassium	14429-88-0	
	Cadmium mercury sulfide	1345-09-1	
	Cadmium zinc sulfide ((Cd,Zn)S), cobalt and copper-doped	72869-26-2	
	Selenic acid, cadmium salt (1:1), dihydrate	10060-09-0	
	Tetraiodide diammonium cadmium	105034-60-4	
	Cadmium trichloride monopotassium	14429-85-7	
	Cadmium potassium hexachloride	15276-40-1	
	Cadmium bromide rubidium	16593-57-0	
	Cadmium chloride rubidium	18532-58-6	
	Cadmium sodium tetrachloride	21360-94-1	
	Cesium sulfate cadmium	28041-77-2	
	Cadmium chloride potassium hydrate	28302-54-7	
	Potassium sulfate cadmium hexahydrate	30623-04-2	
	Cadmium trichloride 1 sodium	55425-74-6	
	Cadmium sulfate sodium	28038-18-8	
	Potassium sulfate cadmium	28038-25-7	
	Monoammonium cadmium triiodide	32593-99-0	
	Cadmium sulfate caesium hexahydrate	34345-39-6	
	Potassium sulfate cadmium dihydrate	38386-25-3	
	Cadmium chloride magnesium dodecahydrate	77289-75-9	
	Zircon, cadmium red	72828-62-7	
	Cadmium, diethyl-	592-02-9	
	Cadmium acetate hydrate	89759-80-8	
	Hydrogen [N,N-bis(carboxymethyl)glycinato(3-)-N,O,O',O"]cadmate	49784-44-3	
	Dipotassium tetrachlorocadmate(2-)	20648-91-3	
	Cadmium mercury telluride	29870-72-2	
	Dihydrogen bis[hydroxysuccinato(2-)-O1,O2,O4]cadmate(2-)	71436-99-2	
	Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper chloride-doped	68512-49-2	
	Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper and manganese-doped	68512-50-5	
	Cadmium sulfide (CdS), solid soln. with zinc sulfide, aluminum and copper-doped	68512-51-6	
	Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper and silver-doped	68583-43-7	
	Cadmium sulfide (CdS), solid soln. with zinc sulfide, nickel and silver-doped	68583-44-8	
	Cadmium sulfide (CdS), solid soln. with zinc sulfide, silver chloride-doped	68583-45-9	
	Cadmium sulfide (CdS), solid soln. with zinc sulfide, aluminum and silver-doped	68584-41-8	
	Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper and nickel-doped	68584-42-9	
	Barium di-μ-chlorotetrachlorodicadmate(2-)	61129-40-6	
	Cadmium peroxide	12139-22-9	
	Cadmium selenide sulfide, (Cd2SeS)	12213-70-6	
	Cadmium sulfate, tetrahydrate	13477-21-9	
	Phosphoric acid, ammonium cadmium salt (1:1:1)	14520-70-8	
	Octadecanoic acid, barium cadmium salt	17033-07-7	
	Ammonium cadmium chloride (Ammonium cadmium trichloride)	18532-52-0	
	Cadmium pyrophosphate	19262-93-2	
	Cadmium sulfate octahydrate	22465-18-5	

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
	Cadmium, chloro(1,10-phenanthroline-2-carboxylato)-, polymers	25685-75-0	
	Disodium ethylenediaminetetraacetate cadmium	30363-28-1	
	Barium tetrachlorocadmate(2-)	99587-10-7	
	Benzenediazonium, 4-(phenylamino)-, sulfate (1:1), polymer with formaldehyde, cadmium chloride complexes	68441-39-4	
	Cadmium borate oxide (Cd3(BO2)4O), manganese-doped	68784-58-7	
	Barium cadmium zinc sulfide (Ba2(Cd,Zn)S3), manganese-doped	68876-90-4	
	Cadmium laurate, palmitate, stearate	68954-18-7	
	Cadmium sponge	69011-70-7	
	Slimes and Sludges, cadmium electrolytic	69029-89-6	
	Cadmium, dichlorotetrakis(1H-imidazole-kappaN3)-	72275-93-5	
	Cadmium zinc sulfide	11129-14-9	
8	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.	43
	Example substances	CAS No.	
	A mixture of: disodium (6-(4-anisidino)-3-sulfonato-2-(3,5-dinitro-2-oxidophenylazo)-1-naphtholato)(1-(5-chloro-2-oxidophenylazo)-2-naphtholato)chromate(1-); trisodium bis(6-(4-anisidino)-3-sulfonato-2-(3,5-dinitro-2-oxidophenylazo)-1-naphtholato)chromate(1-)	118685-33-9	
	4-o-tolylazo-o-toluidine	97-56-3	
9	Diphenylether, octabromo derivative	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.	45
	Example substances	CAS No.	
	Diphenyl ether, octabromo derivative	32536-52-0	
10	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. 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. 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. 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.	47

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
11	Polycyclic-aromatic hydrocarbons (PAH) (a) Benzo[a]pyrene (BaP) CAS No. 50-32-8 (b) Benzo[e]pyrene (BeP) CAS No. 192-97-2 (c) Benzo[a]anthracene (BaA) CAS No. 56-55-3 (d) Chrysen (CHR) CAS No. 218-01-9 (e) Benzo[b]fluoranthene (BbFA) CAS No. 205-99-2 (f) Benzo[j]fluoranthene (BjFA) CAS No. 205-82-3 (g) Benzo[k]fluoranthene (BkFA) CAS No. 207-08-9 (h) Dibenzo[a,h]anthracene (DBAhA) CAS No. 53-70-3	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. The standard EN 16143:2013 (Petroleum products — Determination of content of Benzo(a)pyrene (BaP) and selected polycyclic aromatic hydrocarbons (PAH) in extender oils — Procedure using double LC cleaning and GC/MS analysis) shall be used as the test method for demonstrating conformity with the limits referred to in the first subparagraph. Until 23 September 2016, the limits referred to in the first subparagraph may be regarded as kept, if the polycyclic aromatics (PCA) extract is less than 3 % by weight as measured by the Institute of Petroleum standard IP 346:1998 (Determination of PCA in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method), provided that compliance with the limits of BaP and of the listed PAHs, as well as the correlation of the measured values with the PCA extract, is measured by the manufacturer or importer every six months or after each major operational change, whichever is earlier. 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. These limits shall be regarded as kept, if the vulcanised rubber compounds do not exceed the limit of 0,35 % Bay protons as measured and calculated by ISO 21461 (Rubber vulcanised — Determination of aromaticity of oil in vulcanised rubber compounds). 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. 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 . ▸M24 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. Such articles include amongst others: — sport equipment such as bicycles, golf clubs, racquets — household utensils, trolleys, walking frames — tools for domestic use — clothing, footwear, gloves and sportswear — watch-straps, wrist-bands, masks, head-bands 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. 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. 8. By 27 December 2017, the Commission shall review the limit values in paragraphs 5 and 6 in the light of new scientific information, including migration of PAHs from the articles referred to therein, and information on alternative raw materials and, if appropriate, modify these paragraphs accordingly.	50
12	Following phthalates (a) Bis(2-ethylhexyl) phthalate (DEHP) CAS No. 117-81-7 (b) Dibutyl phthalate (DBP) CAS No. 84-74-2 (c) Benzyl butyl phthalate (BBP) CAS No.: 85-68-7 (d) Diisobutyl phthalate (DIBP) CAS No. 84-69-5	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. 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;	51

Table 2 : Substances to be Restricted
Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
		(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 10/2011 (21); (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. 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), — 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.	
13	Dimethylfumarate (DMF) CAS No. 624-49-7	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.	61
14	Phenylmercury compound (a) Phenylmercury acetate CAS No. 62-38-4 (b) Phenylmercury propionate CAS No. 103-27-5 (c) Phenylmercury 2-ethylhexanoate CAS No. 13302-00-6 (d) Phenylmercury octanoate CAS No. 13864-38-5 (e) Phenylmercury neodecanoate CAS No. 26545-49-3	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.	62
15	Lead CAS No. 7439-92-1 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. 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 sub- stances; (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.	63

Table 2 : Substances to be Restricted
Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
		6. By 9 October 2017, the Commission shall re-evaluate paragraphs 1 to 5 of this entry in the light of new scientific information, including the availability of alternatives and the migration of lead from the articles referred to in paragraph 1 and, if appropriate, modify this entry accordingly. 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 foresee- able conditions of use, be placed in the mouth by children. That limit shall not apply where it can be demonstrated that the rate of lead release from such an article or any such accessible part of an article, whether coated or un- coated, does not exceed 0,05 µg/cm2 per hour (equivalent to 0,05 µg/g/h), and, for coated articles, that the coating is sufficient to ensure that this release rate is not exceeded for a period of at least two years of normal or reasonably foreseeable conditions of use of the article. For the purposes of this paragraph, it is considered that an article or accessible part of an article may be placed in the mouth by children if it is smaller than 5 cm in one dimension or has a detachable or protruding part of that size. 8. By way of derogation, paragraph 7 shall not apply to: (a) jewellery articles covered by paragraph 1; (b) crystal glass as defined in Annex I (categories 1, 2, 3 and 4) to Directive 69/493/EEC; (c) non-synthetic or reconstructed precious and semi-precious 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 mineral melted at a temperature of at least 500 °C; (e) keys and locks, including padlocks; (f) musical instruments; (g) articles and parts of articles comprising brass alloys, if the concentration of lead (expressed as metal) in the brass alloy does not exceed 0,5 % by weight; (h) the tips of writing instruments; (i) religious articles; (j) portable zinc-carbon batteries and button cell batteries; (k) articles within the scope of: (i) Directive 94/62/EC; (ii) Regulation (EC) No 1935/2004; (iii) Directive 2009/48/EC of the European Parliament and of the Council (**); (iv) Directive 2011/65/EU of the European Parliament and of the Council (***) 9. By 1 July 2019, the Commission shall re-evaluate paragraphs 7 and 8(e), (f), (i) and (j) of this entry in the light of new scientific information, including the availability of alternatives and the migration of lead from the articles referred to in paragraph 7, including the requirement on coating integrity, and, if appropriate, modify this entry accordingly. 10. By way of derogation paragraph 7 shall not apply to articles placed on the market for the first time before 1 June 2016. 15.Shall not be placed on the market or used in articles produced from polymers or copolymers of vinyl chloride (‘PVC’), if the concentration of lead is equal to or greater than 0,1 % by weight of the PVC material. 16.Paragraph 15 shall apply with effect from 29 November 2024. 17.By way of derogation, paragraph 15 shall not apply to PVC articles containing recovered flexible PVC until 28 May 2025. 18.By way of derogation, paragraph 15 shall not apply to the following PVC articles containing recovered rigid PVC until 28 May 2033, if the concentration of lead is lower than 1,5 % by weight of the recovered rigid PVC: (a)profiles and sheets for exterior applications in buildings and civil engineering works, excluding decks and terraces; (b)profiles and sheets for decks and terraces, provided that the recovered PVC is used in a middle layer and is entirely covered with a layer of PVC or other material for which the concentration of lead is lower than 0,1 % by weight; (c)profiles and sheets for use in concealed spaces or voids in buildings and civil engineering works (where they are inaccessible during normal use, excluding maintenance, for example, cable ducts); (d)profiles and sheets for interior building applications, provided that the entire surface of the profile or sheet facing the occupied areas of a building after installation is produced using PVC or other material for which the concentration of lead is lower than 0,1 % by weight; (e)multi-layer pipes (excluding pipes for drinking water), provided that the recovered PVC is used in a middle layer and is entirely covered with a layer of PVC or other material for which the concentration of lead is lower than 0,1 % by weight; (f)fittings, excluding fittings for pipes for drinking water. 19.By way of derogation, paragraph 15 shall not apply to: (a)PVC-silica separators in lead acid batteries, until 28 May 2033; (b)articles covered by paragraph 1, in accordance with paragraphs 2 to 5, and by paragraph 7 in accordance with paragraphs 8 and 10; (c)articles within the scope of: (i)Regulation (EC) No 1935/2004; (ii)Directive 2011/65/EU; (iii)Directive 94/62/EC; (iv)Directive 2009/48/EC. 20.By way of derogation, paragraph 15 shall not apply to PVC articles placed on the market until 28 November 2024.	
	Example substances	CAS No.	
	Lead	7439-92-1	
	Lead compounds	-	

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
	Lead di(acetate)	301-04-2	
	Lead bis(2-ethylhexanoate)	301-08-6	
	Trilead dicitrate	512-26-5	
	Tetramethyllead	75-74-1	
	Tetraethyllead	78-00-2	
	Ethyltrimethylplumbane	1762-26-1	
	Diethyldimethylplumbane	1762-27-2	
	Triethylmethylplumbane	1762-28-3	
	Tetrabutylplumbane	1920-90-7	
	Diphenyllead dichloride	2117-69-3	
	Hexaethyldiplumbane	2388-00-3	
	Acetoxytributylplumbane	2587-82-8	
	Hexaphenyldiplumbane	3124-01-4	
	Docosanoic acid, lead salt	3249-61-4	
	Lead tetraacetate	546-67-8	
	Lead dicyanide	592-05-2	
	Lead dithiocyanate	592-87-0	
	Tetraphenyllead	595-89-1	
	Lead diformate	811-54-1	
	Lead dipropionate	814-70-0	
	Lead oxalate	814-93-7	
	Lead tartrate	815-84-9	
	Lead malate	816-68-2	
	Lead dibutyrate	819-73-8	
	Lead(2+) acrylate	867-47-0	
	Lead dibenzoate	873-54-1	
	Chlorotriethylplumbane	1067-14-7	
	Lead(2+) methacrylate	1068-61-7	
	Lead distearate	1072-35-1	
	Lead dioleate	1120-46-3	
	Chlorotriphenylplumbane	1153-06-6	
	Acetoxytriphenylplumbane	1162-06-7	
	Lead succinate	1191-18-0	
	Lead dioxide	1309-60-0	
	Orange lead	1314-41-6	
	Lead sulphide	1314-87-0	
	Lead telluride	1314-91-6	
	Lead monoxide	1317-36-8	
	Trilead-bis(carbonate)-dihydroxide 2PbCO3-Pb(OH)2	1319-46-6	
	2-(2,4,5,7-tetrabromo-3,6-dihydroxyxanthen-9-yl)benzoic acid, lead salt	1326-05-2	
	Lead, bis(acetato-O)tetrahydroxytri-	1335-32-6	
	Lead sulfochromate yellow	1344-37-2	
	Basic lead chromate orange	1344-38-3	
	Chlorotrimethylplumbane	1520-78-1	
	Pyrochlore, antimony lead yellow	8012-00-8	
	Resin acids and Rosin acids, lead salts	9008-26-8	
	Lead arsenite	10031-13-7	
	Lead dibromide	10031-22-8	
	Lead dinitrate	10099-74-8	
	Lead(2+) silicate	10099-76-0	
	Lead divanadium hexaoxide	10099-79-3	
	Lead diiodide	10101-63-0	
	Lead molybdate	10190-55-3	
	Lead diphosphinate	10294-58-3	
	Silicic acid, chromium lead salt	11113-70-5	
	Dibismuth dilead tetraruthenium tridecaoxide	11116-83-9	
	Silicic acid, lead salt	11120-22-2	
	Dicalcium lead tetraoxide	12013-69-3	
	Trilead diarsenate	3687-31-8	
	Lead diundec-10-enoate	94232-40-3	
	(isononanoato-O)(isooctanoato-O)lead	94246-84-1	
	(isodecanoato-O)(isooctanoato-O)lead	94246-85-2	
	(isodecanoato-O)(isononanoato-O)lead	94246-86-3	
	(isodecanoato-O)(neodecanoato-O)lead	94246-87-4	
	(2-ethylhexanoato-O)(isooctanoato-O)lead	94246-90-9	
	(2-ethylhexanoato-O)(isononanoato-O)lead	94246-91-0	
	(2-ethylhexanoato-O)(isodecanoato-O)lead	94246-92-1	
	(2-ethylhexanoato-O)(neodecanoato-O)lead	94246-93-2	
	Lead icosanoate (1:2)	94266-31-6	
	Lead icosanoate	94266-32-7	
	Fatty acids, tallow, reaction products with lead oxide	94349-78-7	
	(isononanoato-O)(neodecanoato-O)lead	94481-58-0	
	Lead, zinc dross	94551-60-7	
	Fatty acids, C8-12, lead salts	84776-53-4	
	Fatty acids, C18-24, lead salts	84776-54-5	
	[μ-(4,6-dinitroresorcinolato(2-)-O1,O3)]dihydroxydilead	84837-22-9	

Table 2 : Substances to be Restricted
Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
	Lead(II) isodecanoate	84852-34-6	
	Lead, isononanoate isooctanoate complexes, basic	84929-94-2	
	Lead, isooctanoate neodecanoate complexes, basic	84929-95-3	
	Lead, naphthenate neodecanoate complexes, basic	84929-96-4	
	Lead, isononanoate naphthenate complexes	84929-97-5	
	Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., lead(2+) salts	84961-75-1	
	Fatty acids, C8-10-branched, lead salts	85049-42-9	
	Flue dust, lead-manufg., cadmium-rich	85117-02-8	
	Lead(2+) 4-(1,1-dimethylethyl)benzoate	85292-77-9	
	Lead bis(5-oxo-L-prolinate)	85392-77-4	
	Lead bis(5-oxo-DL-prolinate)	85392-78-5	
	Lead uranate pigment	85536-79-4	
	Lead bis(tetracosylbenzenesulphonate)	85865-91-4	
	Lead bis[didodecylbenzenesulphonate]	85865-92-5	
	1,2-Benzenedicarboxylic acid, lead(2+) salt, basic	90193-83-2	
	2-Butenedioic acid (E)-, lead(2+) salt, basic	90268-59-0	
	2-Butenedioic acid (Z)-, lead(2+) salt, basic	90268-66-9	
	Decanoic acid, branched, lead salts	90342-24-8	
	Dodecanoic acid, lead salt, basic	90342-56-6	
	Hexadecanoic acid, lead salt, basic	90388-09-3	
	Hexadecanoic acid, lead(2+) salt, basic	90388-10-6	
	9-Hexadecenoic acid, lead(2+) salt, (Z)-, basic	90388-15-1	
	Isodecanoic acid, lead salt, basic	90431-14-4	
	Isononanoic acid, lead salt, basic	90431-21-3	
	Isooctanoic acid, lead salt, basic	90431-26-8	
	Lead, C8-10-branched fatty acids C9-11-neofatty acids naphthenate complexes, overbased	90431-27-9	
	Lead, C8-10-branched fatty acids C9-11-neofatty acids naphthenate complexes	90431-28-0	
	Lead, 2-ethylhexanoate isodecanoate complexes, basic	90431-30-4	
	Lead, 2-ethylhexanoate isononanoate complexes, basic	90431-31-5	
	Lead, 2-ethylhexanoate isooctanoate complexes, basic	90431-32-6	
	Lead, 2-ethylhexanoate naphthenate complexes	90431-33-7	
	Lead, 2-ethylhexanoate naphthenate complexes, basic	90431-34-8	
	Lead, 2-ethylhexanoate neodecanoate complexes, basic	90431-35-9	
	Lead, isodecanoate isononanoate complexes, basic	90431-36-0	
	Lead, isodecanoate isooctanoate complexes, basic	90431-37-1	
	Lead, isodecanoate naphthenate complexes	90431-38-2	
	Lead, isodecanoate neodecanoate complexes, basic	90431-39-3	
	Lead, isononanoate naphthenate complexes, basic	90431-40-6	
	Lead, isononanoate neodecanoate complexes, basic	90431-41-7	
	Lead, isooctanoate naphthenate complexes, basic	90431-42-8	
	Lead, naphthenate neodecanoate complexes	90431-43-9	
	Lead, neononanoate neoundecanoate complexes, basic	90431-44-0	
	Neodecanoic acid, lead salt, basic	90459-25-9	
	Neononanoic acid, lead salt, basic	90459-26-0	
	Neoundecanoic acid, lead salt, basic	90459-28-2	
	Octadecanoic acid, lead salt, basic	90459-51-1	
	Octadecanoic acid, lead(2+) salt, basic	90459-52-2	
	9-Octadecenoic acid (Z)-, lead salt, basic	90459-88-4	
	2-Propenoic acid, 2-methyl-, lead salt, basic	90552-19-5	
	Sulfuric acid, lead(2+) salt, basic	90583-07-6	
	Sulfurous acid, lead(2+) salt, basic	90583-37-2	
	Tetradecanoic acid, lead salt, basic	90583-65-6	
	Fatty acids, C6-19-branched, lead salts	91002-20-9	
	Fatty acids, C8-9, lead salts	91031-60-6	
	Fatty acids, C8-10, lead salts	91031-61-7	
	Fatty acids, C16-18, lead salts	91031-62-8	
	Leach residues, zinc ore, lead-contg.	91053-49-5	
	Naphthenic acids, lead (2+) salts	91078-81-8	
	Isodecanoic acid, lead(2+) salt, basic	91671-82-8	
	Isooctanoic acid, lead(2+) salt, basic	91671-83-9	
	Isoundecanoic acid, lead(2+) salt, basic	91671-84-0	
	Fatty acids, castor-oil, hydrogenated, lead salts	91697-36-8	
	Phosphorodithioic acid, mixed O,O-bis(Bu and pentyl) esters, lead(2+) salt	91783-10-7	

Table 2 : Substances to be Restricted
Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
	Fatty acids, coco, lead salts	92044-89-8	
	Naphthenic acids, lead salts, basic	92045-67-5	
	Lead, C4-10-fatty acid octanoate complexes	92200-92-5	
	Fatty acids, C14-26, lead salts	93165-26-5	
	Slags, lead-zinc smelting	93763-87-2	
	Flue gases, lead-zinc blast furnace	93821-47-7	
	Slimes and Sludges, lead-zinc blast furnace, offgas wet cleaning	93821-70-6	
	Speiss, lead-zinc	93821-72-8	
	Lead 3-(acetamido)phthalate	93839-98-6	
	Lead bis(2-ethylhexanolate)	93840-04-1	
	Lead(2+) 4,4'-isopropylidenebisphenolate	93858-23-2	
	Lead(2+) (Z)-hexadec-9-enoate	93858-24-3	
	Lead(2+) ethylphenyldithiocarbamate	93892-65-0	
	Lead(2+) neononanoate	93894-48-5	
	Lead(2+) neoundecanoate	93894-49-6	
	(neononanoato-O)(neoundecanoato-O)lead	93894-64-5	
	Phosphoric acid, mixed Bu and hexyl diesters, lead(2+) salts	93925-27-0	
	Lead, triphenyl(phenylthio)- (7CI)	15590-77-9	
	Plumbane, acetoxytripropyl-	13266-07-4	
	triethylplumbanecarbonitrile	13732-17-7	
	Lead hexafluoro-silicate	1310-03-8	
	Boric acid (HBO2), lead(2+) salt, monohydrate	10214-39-8	
	Lead picrate (dry)	25721-38-4	
	1,3-Benzenediol, 2-nitro-, lead salt, basic	68411-33-6	
	Calcines, lead-zinc ore conc.	94551-62-9	
	Fumes, lead	94551-66-3	
	Leach residues, copper-lead	94551-72-1	
	Matte, copper-lead	94551-74-3	
	Residues, lead smelting wastewater treatment	94551-78-7	
	Residues, lead-zinc smelting wastewater treatment	94551-79-8	
	Wastes, lead battery reprocessing	94551-99-2	
	Waste solids, lead silver anode	94552-05-3	
	Lead(2+) isohexadecanoate	95892-13-0	
	Slimes and Sludges, lead acetate manuf.	96690-46-9	
	Ferrite substances, magnetoplumbite-type, barium-cobalt-titanium	97488-85-2	
	Magnetoplumbite, barium titanium zinc brown	97675-41-7	
	Lead, bullion	97808-88-3	
	Lead fluoride hydroxide	97889-90-2	
	7-methyloctanoic acid, lead salt	97952-39-1	
	Nitric acid, lead(2+) salt, reaction products with sodium tin oxide	97953-08-7	
	Matte, precious metal	98072-52-7	
	Slimes and Sludges, precious metal refining	98072-61-8	
	Speiss, lead, nickel-contg.	98246-91-4	
	Sulfuric acid, barium salt (1:1), lead-doped	99328-54-8	
	Perchloric acid, reaction products with lead oxide (PbO) and triethanolamine	99749-31-2	
	Silicic acid (H2SiO3), calcium salt (1:1), lead and manganese-doped	100402-96-8	
	Lead, dross, vanadium-zinc-contg.	100656-49-3	
	Matte, copper-lead, tellurium-contg.	100656-53-9	
	Flue dust, copper-lead blast furnace, cadmium-indium-enriched	100656-55-1	
	Lead, isodecanoate naphthenate complexes, basic	101012-92-4	
	Lead, isooctanoate neodecanoate complexes	101013-06-3	
	Phosphoric acid, calcium salt (1:1), solid soln. with calcium chloride, calcium fluoride, calcium oxide, phosphorus oxide (P2O5) and strontium oxide, lead and manganese-doped	102047-25-6	
	Barium oxide (BaO), solid soln. with calcium oxide, strontium oxide and tungsten oxide (WO3), lead-doped	102110-24-7	
	Boric acid (H3BO3), solid soln. with barium oxide, calcium oxide and strontium oxide, lead and manganese-doped	102110-26-9	
	Silicic acid, calcium salt, lead and manganese-doped	102110-36-1	
	Lead ores, concs., leached	102110-48-5	
	Residues, copper-iron-lead-nickel matte, sulfuric acid-insol.	102110-49-6	
	Residues, precious metal refining cementation	102110-50-9	
	Slimes and Sludges, battery scrap, antimony- and lead-rich	102110-60-1	
	Slimes and Sludges, copper conc. roasting off gas scrubbing, lead-mercury-selenium-contg.	102110-61-2	
	Slimes and Sludges, copper-lead ore roasting off gas scrubbing, arsenic-contg.	102110-62-3	
	Citric acid, lead salt	14450-60-3	

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
	Lead acrylate	14466-01-4	
	Lead bis(dipentyldithiocarbamate)	36501-84-5	
	Dilead diruthenium hexaoxide	37194-88-0	
	Dilead dirhodium heptaoxide	37240-96-3	
	Lead isophthalate	38787-87-0	
	Lead chloride silicate	39390-00-6	
	Lead bis(2,4-dihydroxybenzoate)	41453-50-3	
	Lead bis(piperidine-1-carbodithioate)	41556-46-1	
	Lead propionate	42558-73-6	
	Sulphuric acid, barium lead salt	42579-89-5	
	Lead naphthenate	50825-29-1	
	3-(triphenylplumbyl)-1H-pyrazole	51105-45-4	
	Nitroresorcinol, lead salt	51317-24-9	
	Trinitrophloroglucinol, lead salt	51325-28-1	
	Acetic acid, lead salt, basic	51404-69-4	
	Octadecanoic acid, lead(2+) salt, tribasic	52080-60-1	
	Sulfurous acid, lead salt, basic	52231-92-2	
	Lead methacrylate	52609-46-8	
	Sulfuric acid, lead salt, tetrabasic	52732-72-6	
	Lead bis(isononanoate)	52847-85-5	
	Phosphonic acid, lead salt, basic	53807-64-0	
	1,3,5-triazine-2,4,6(1H,3H,5H)-trione, lead salt	54554-36-8	
	Lead maleate	19136-34-6	
	Lead palmitate	19528-55-3	
	5,5,13,13-tetradehydro-4,5-dihydro-4,8,10,15-tetranitro-7,11-metheno-11H,13H-tetrazolo[1,5-c][1,7,3,5,2,6]dioxadiazadiplumbacyclododecine	19651-80-0	
	Lead hydroxide	19783-14-3	
	Phosphorodithioate O,O-bis(1,3-dimethylbutyl), lead salt	20383-42-0	
	Myristic acid, lead salt	20403-41-2	
	Decanoic acid, lead salt	20403-42-3	
	Lead cyanamidate	20890-10-2	
	Lead 2,4-dihydroxybenzoate	20936-32-7	
	Lead silicate	22569-74-0	
	Disodium lead N,N'-ethylenebis[N-(carboxylatomethyl)aminoacetate]	22904-40-1	
	3,5,5-trimethylhexanoic acid, lead salt	23621-79-6	
	Lead carbonate	25510-11-6	
	Lead diiodate	25659-31-8	
	Lead hexafluorosilicate	25808-74-6	
	Thiosulphuric acid, lead salt	26265-65-6	
	Neodecanoic acid, lead salt	27253-28-7	
	Isononanoic acid, lead salt	27253-41-4	
	Lead(2+) sebacate	29473-77-6	
	Lead didocosanoate	29597-84-0	
	Lead dimyristate	32112-52-0	
	Lead dilinoleate	33627-12-2	
	Lead dibromate	34018-28-5	
	Lead(II) methylthiolate	35029-96-0	
	Lead cyanamide	35112-70-0	
	Orthoboric acid, lead(2+) salt	35498-15-8	
	Lead bis(3,5,5-trimethylhexanoate)	35837-70-8	
	[phthalato(2-)]dioxotrilead	69011-06-9	
	Trilead chromate silicate	69011-07-0	
	Lead alloy, base, dross	69011-59-2	
	Lead alloy, base, Pb,Sn, dross	69011-60-5	
	Flue dust, lead-tin alloy-manufg.	69012-60-8	
	Flue dust, zinc-refining	69012-63-1	
	Leach residues, zinc ore-calcine, zinc cobalt	69012-72-2	
	Lead, dross, antimony-rich	69029-45-4	
	Lead, dross, bismuth-rich	69029-46-5	
	Dore	69029-47-6	
	Lead, antimonial, dross	69029-51-2	
	Lead, dross	69029-52-3	
	Lead oxide (PbO), retort	69029-53-4	
	Slags, lead reverbatory smelting	69029-58-9	
	Zinc, desilverizing skims	69029-60-3	
	Bismuth, refinery lead chloride residues	69029-61-4	
	Flue dust, lead-refining	69029-67-0	
	Leach residues, lead slag	69029-71-6	
	Leach residues, precious metal recovery lead refining	69029-72-7	
	Calcines, lead ore conc.	69029-74-9	
	Residues, lead roaster	69029-78-3	
	Residues, lead smelting	69029-79-4	
	Residues, precious metal recovery lead refining	69029-80-7	
	Slags, lead smelting	69029-84-1	
	Slags, precious metal recovery lead refining	69029-85-2	

Table 2 : Substances to be Restricted
Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
	Slags, tellurium	69029-86-3	
	Slimes and Sludges, lead refining	69029-93-2	
	Lead, dross, copper-rich	69227-11-8	
	Lead, C6-19-branched carboxylate naphthenate complexes	70084-67-2	
	Lead(2+) nitroresorcinolate	70268-38-1	
	Lead, decanoate octanoate complexes	70321-55-0	
	Lead, alkyls, manufg. wastes	70513-89-2	
	Flue dust, lead blast furnace	70514-05-5	
	Slimes and Sludges, lead sinter dust scrubber	70514-37-3	
	Lead(2+) isooctadecanoate	70727-02-5	
	Lead(2+) neodecanoate	71684-29-2	
	Lead(II) fumarate	71686-03-8	
	Hydroxy(neodecanoato-O)lead	71753-04-3	
	Lead bis(nonylphenolate)	72586-00-6	
	Fatty acids, C9-11-branched, lead salts	81412-57-9	
	Lead, C5-23-branched carboxylate C4-10-fatty acid naphthenate complexes	83711-45-9	
	Lead, C5-23-branched carboxylate naphthenate complexes	83711-46-0	
	Lead, C5-23-branched carboxylate naphthenate octanoate complexes	83711-47-1	
	Lead, C5-23-branched carboxylate C4-10-fatty acid complexes	84066-98-8	
	Lead, C5-23-branched carboxylate octanoate complexes	84066-99-9	
	Lead, C4-10-fatty acid naphthenate complexes	84067-00-5	
	Matte, lead	84195-51-7	
	Slimes and Sludges, lead, electrolytic	84195-60-8	
	Speiss, lead	84195-61-9	
	Lead bis(p-octylphenolate)	84394-98-9	
	Fatty acids, C8-18 and C18-unsatd., lead salts	84776-36-3	
	Dioxobis(stearato)dilead	56189-09-4	
	[phthalato(2-)]oxodilead	57142-78-6	
	Lead bis(12-hydroxystearate)	58405-97-3	
	Lead 5-nitroterephthalate	60580-60-1	
	Naphthenic acids, lead manganese salts	61788-52-1	
	Fatty acids, tall-oil, lead manganese salts	61788-53-2	
	Fatty acids, tall-oil, lead salts	61788-54-3	
	Naphthenic acids, lead salts	61790-14-5	
	Sulfurous acid, lead salt, dibasic	62229-08-7	
	Bis(o-acetoxybenzoato)lead	62451-77-8	
	Lead bis(4-cyclohexylbutyrate)	62637-99-4	
	Lead(2+) heptadecanoate	63399-94-0	
	Lead bis(diisononylnaphthalenesulphonate)	63568-30-9	
	Isooctanoic acid, lead salt	64504-12-7	
	Lead dibutanolate	65119-94-0	
	Lead(2+) 4,6-dinitro-o-cresolate	65121-76-8	
	Lead 12-hydroxyoctadecanoate	65127-78-8	
	Bismuth lead ruthenium oxide	65229-22-3	
	Frits, chemicals	65997-18-4	
	Petrolatum (petroleum), oxidized, lead salt	67674-14-0	
	Dilead silicate sulphate	67711-86-8	
	Fatty acids, C12-18, lead salts	68131-60-2	
	Lead, 2-ethylhexanoate tall-oil fatty acids complexes	68187-37-1	
	Cadmium sulfide (CdS), solid soln. with zinc sulfide, copper and lead-doped	68332-81-0	
	Fatty acids, C8-10-branched, lead salts, basic	68409-79-0	
	Lead oxide (PbO), lead-contg.	68411-78-9	
	Oils, menhaden, lead salts	68424-76-0	
	Hexanoic acid, dimethyl-, lead(2+) salt, basic	68442-95-5	
	Hexanoic acid, 2-ethyl-, lead(2+) salt, basic	68515-76-4	
	Hexanoic acid, 3,5,5-trimethyl-, lead(2+) salt, basic	68515-77-5	
	Lead, isooctanoate naphthenate complexes	68515-80-0	
	Linseed oil, lead manganese salt	68553-17-3	
	Oils, fish, lead salts	68553-63-9	
	Spinels, boron calcium lead silicon white	68555-05-5	
	Spinels, lead silicon tin zinc white	68555-07-7	
	Zinc sulfide (ZnS), copper and lead-doped	68585-90-0	
	Lead(2+) dodecylphenolate	68586-21-0	
	Fatty acids, C6-19-branched, lead salts, basic	68603-83-8	
	Octanoic acid, branched, lead salts, basic	68604-56-8	
	Fatty acids, tallow, hydrogenated, lead salts	68605-98-1	
	Plumbane, ethyl methyl derivs.	68610-17-3	
	Tungstate (WO42-), calcium (1:1), (T-4)-, lead-doped	68784-53-2	
	Silicic acid (H6Si2O7), barium magnesium strontium salt, lead-doped	68784-74-7	
	Silicic acid (H2Si2O5), barium salt (1:1), lead-doped	68784-75-8	

Table 2 : Substances to be Restricted
Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
	Cadmium sulfide (CdS), copper and lead-doped	68891-87-2	
	(R)-3,5,6-trihydroxy-4,6-bis(3-methylbut-2-enyl)-2-(3-methyl-2-oxobutyl)cyclohexa-2,4-dien-1-one, lead salt	68901-11-1	
	α-d-Glucopyranose, 1-(dihydrogen phosphate), lead salt	68901-12-2	
	Acetic acid, reaction products with lead oxide (PbO), silica and sulfuric acid	68937-05-3	
	Lead bis(isoundecanoate)	93965-29-8	
	Lead bis(tricosanoate)	93966-37-1	
	Lead tetracosanoate	93966-38-2	
	Lead pentadecanoate	93966-74-6	
	Lead(II) isooctanoate	93981-67-0	
	Hexacosanoic acid, lead salt	94006-20-9	
	[μ-[[5,5'-azobis[1H-tetrazolato]](2-)]]dihydroxydilead	94015-57-3	
	barium calcium cesium lead samarium strontium bromide chloride fluoride iodide europium doped	199876-46-5	
	Lead C3-13-alkanecarboxylate naphthenate complexes	79803-79-5	
	Acetic acid, oleic acid, candelilla wax, tallow, calcium-lead complex salt	69103-03-3	
	lead(2+) phosphonate	13453-65-1	
	silicic acid, lead nickel salt	68130-19-8	
	Plumbane dichlorodiethyl-	13231-90-8	
	Triethyllead acetate	2587-81-7	
	Lead phthalocyanine	15187-16-3	
	2-hydroxypropane-1,2,3-tricarboxylate;lead(2+);trihydrate	6107-83-1	
	lead(II) perchlorate trihydrate	13453-62-8	
	Lead, bis(2-hydroxybenzoato-O1,O2)-, monohydrate, (T-4)-	6107-93-3	
	Naphthalenesulfonic acid, dinonyl-, lead(2+) salt	61867-68-3	
	Plumbane, tetrakis(1-methylpropyl)-	65151-08-8	
	Resin acids and Rosin acids, calcium salts, polymers with lead resinates and sapond. linseed oil	68139-27-5	
	Grounding oil	68152-99-8	
	2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, lead(2+) 2-methyl-2-propenoate (1:2) and alpha-(2-methyl-1-oxo-2-propen-1-yl)-omega-((2-methyl-1-oxo-2-propen-1-yl)oxy)poly(oxy-1,2-ethanediyl)	68155-47-5	
	Carboxylic acids, tall-oil, lead salts, basic	68603-93-0	
	Castor oil, dehydrated, polymer with rosin, calcium lead zinc salt	68604-05-7	
	Acetic acid, reaction products with capric acid, carpylic acid, coconut oil, and hydrogenated tallow fatty acids, calcium, lead salts	68784-59-8	
	Silicic acid (H4SiO4), magnesium manganese(2+) zinc salt, arsenic and lead-doped	68784-76-9	
	Gum rosin, litharge polymer	68952-91-0	
	Basic lead beta-resorcylate	68954-05-2	
	Gilsonite, polymer with cyclopentadiene, dicyclopentadiene and linseed oil, lead salts	68956-49-0	
	Gilsonite, linseed oil polymer, lead salt	68989-89-9	
	Linseed oil, polymer with tung oil, lead salt	68990-75-0	
	Antimonial lead	69029-50-1	
	Acetic acid, capric acid, caprylic acid, coconut oil, hydrogenated tallow fatty acids, calcium-lead complex salt	69103-04-4	
	Dehydrated castor oil fatty acids, glycerine, C36 fatty acid dimers, litharge polymer	70879-91-3	
	Silicic acid (H6Si2O7), barium zinc salt (1:1:2), lead-doped	71799-66-1	
	Octadecanoic acid, barium lead salt	73105-55-2	
	Carbamodithioic acid, phenylethyl-, lead salt	75790-73-7	
	Bismuth alloy, Bi 50,Pb 25,Cd 12,Sn 12 (L-pbbi50Sn12.5Cd12.5)	76093-98-6	
	Pigment Lightfast Lead-Molybdate Orange OS (9CI)	78690-68-3	
	2-[carboxylatomethyl(carboxymethyl)amino]acetate;lead(2+)	79849-02-8	
	Lead (II) hydroxide salicylate	87903-39-7	
	Carbamodithioic acid, dipentyl-, lead(2+) salt	109707-90-6	
	Chromium lead molybdenum oxide sulfate, silica-modified	116565-73-2	
	Chromium lead oxide sulfate, silica-modified	116565-74-3	

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
	Phenol, tetrapropylene-, lead(2+) salt	122332-23-4	
	Lead oxide sulfate (Pb4O3(SO4)), monohydrate	12397-06-7	
	Fatty acids, C4-20-branched, lead salts	125328-49-6	
	Lead, C9-28-neocarboxylate 2-ethylhexanoate complexes, basic	125494-56-6	
	Ferrate (2-), [N,N-bis[2-(bis(carboxymethyl)amino)ethyl]glycinato (5-)]-, disodium	12565-18-3	
	Chromic acid lead salt with lead molybdate	12709-98-7	
	Ethanedioic acid, lead(2+) salt (1:1), trihydrate	128226-81-3	
	Lead hydroxide oxide (Pb2(OH)2O)	1311-11-1	
	Carbonic acid, lead salt	13427-42-4	
	Lead hydroxide oxide phosphite (Pb3(OH)O(PO3)), hydrate (2:1)	1344-40-7	
	Chloric acid, lead(2+) salt, monohydrate	13510-96-8	
	Chromic acid (H2CrO4), lead(2+) potassium salt (2:1:2)	13845-31-3	
	Plumbane, tetrakis(1-methylethyl)-	14846-40-3	
	Lead and Lead compounds (as Pb)	14931-82-9	
	Acetic acid, lead(2+) salt, monohydrate	15773-48-5	
	Phosphoric acid, lead salt	16040-38-3	
	Phosphoric acid, lead(2+) salt (2:1)	16180-04-4	
	198Pb	16646-00-7	
	1,2-Benzenedicarboxylic acid, lead(2+) salt	18608-34-9	
	Acetic acid, lead(2+) salt, dihydrate	22723-52-0	
	Phosphonic acid, lead(2+) salt	24824-71-3	
	Lead, tetrapropyl-	3440-75-3	
	Sulfuric acid, lead(2+) lead(4+) salt (3:1:1)	35830-81-0	
	LEAD HYDROXIDE	39345-91-0	
	Tin alloy	39412-44-7	
	Lead chromate sulfate (Pb9(CrO4)5(SO4)4)	51899-02-6	
	Chromic acid (H2CrO4), lead(2+) sodium salt (2:1:2)	93215-61-3	
	Lead, di-mu-hydroxy(2-methyl-4,6-dinitrophenolato-kappaO)(nitrato-kappaO)di-	96471-22-6	
	Lanthanum lead titanium zirconium oxide	1227908-26-0	
	Lead, bis[bis(1-methylethyl)carbamodithioato-S,S']-, (T-4)-	30051-53-7	
	Lead, bis[bis(2-methylpropyl)carbamodithioato-S,S']-, (T-4)-	69090-73-9	
	Lead, bis(dipropylcarbamodithioato-S,S')-, (T-4)-	70995-63-0	
	Lead sulfite	25666-92-6	
	Hexafluorosilicate(2-), lead(2+) (1:1), tetrahydrate	83689-82-1	
	Lead dichlorite	13453-57-1	
	Lead chloride (PbCl)	13931-84-5	
	Dilead dioxide	35229-41-5	
	Plumbane, tributylchloro-	13302-14-2	
	Plumbane, chlorotripropyl-	1520-71-4	
	Lead, diacetoxydiethyl- (7CI)	15773-47-4	
	Plumbane, (4-bromobutyl)triphenyl-	16035-34-0	
	Plumbane, (4-azidobutyl)triphenyl-	16035-39-5	
	1H-Imidazole, 1-(tributylplumbyl)-	16128-42-0	
	Plumbane, bis(acetyloxy)dibutyl-	2587-84-0	
	Plumbane, tris(acetyloxy)phenyl-	3076-54-8	
	Plumbane, triethyl[[(4-methylphenyl)sulfonyl]oxy]-	43135-86-0	
	9H-Carbazole, 9-(triphenylplumbyl)-	56240-91-6	
	1H-Indole, 1-(triphenylplumbyl)-	56240-92-7	
	1H-Pyrrole, 1-(triphenylplumbyl)-	56240-93-8	
	Lead, triethyl-, oleate	63916-98-3	
	1H-Isoindole-1,3(2H)-dione, 4,5,6, 7-tetrachloro-2-(triethylplumbyl)-	73928-23-1	
	1H-1,2,3-Triazole-5-methanol, .alpha.,.alpha.-dimethyl-1-[4-(triphenylplumbyl)butyl]-	73826-06-9	
	Plumbane, [(4-aminobenzoyl)oxy]triethyl-	73928-17-3	
	Chromic acid (H2CrO4), lead(2) salt	15804-54-3	
	Plumbylium, trimethyl-	14570-16-2	
	Diethyllead	24952-65-6	
	Acetoxytrimethylplumbane	5711-19-3	
	Lead dipicrate	6477-64-1	
	Lead phthalate	6838-85-3	
	Diacetoxydiphenylplumbane	6928-68-3	
	Formic acid, lead salt	7056-83-9	
	Lead(2+) octanoate	7319-86-0	
	Stearic acid, lead salt	7428-48-0	
	Lead sulphite	7446-10-8	
	Lead sulphate PbSO4	7446-14-2	
	Lead selenate	7446-15-3	
	Trilead bis(orthophosphate)	7446-27-7	

Table 2 : Substances to be Restricted
Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
	Lead(2+) selenite	7488-51-9	
	Lead(4+) stearate	7717-46-6	
	Lead dichloride	7758-95-4	
	Lead chromate	7758-97-6	
	Lead tungsten tetraoxide	7759-01-5	
	Lead difluoride	7783-46-2	
	Lead(IV) fluoride	7783-59-7	
	Lead hydrogen arsenate	7784-40-9	
	Lead metaborate	14720-53-7	
	Lead 2,4,6-trinitro-m-phenylene dioxide	15245-44-0	
	Bis(pentane-2,4-dionato-O,O')lead	15282-88-9	
	Lauric acid, lead salt	15306-30-6	
	Lead oleate	15347-55-4	
	Lead acetate	15347-57-6	
	Octanoic acid, lead salt	15696-43-2	
	Sulphuric acid, lead salt Pbx SO4	15739-80-7	
	Lead disalicylate	15748-73-9	
	Lead(2+) decanoate	15773-52-1	
	Lead dihexanoate	15773-53-2	
	Lead dilaurate	15773-55-4	
	Lead dipalmitate	15773-56-5	
	Lead hydrogenorthophosphate	15845-52-0	
	Lead(2+) tellurium trioxide	15851-47-5	
	Lead silicate	15906-71-5	
	Lead benzoate	15907-04-7	
	Lead phosphite	16038-76-9	
	Lead phthalate	16183-12-3	
	Diantimony lead tetroxide	16450-50-3	
	2-ethylhexanoic acid, lead salt	16996-40-0	
	(9Z,12Z)-octadeca-9,12-dienoic acid, lead salt	16996-51-3	
	Lead(II) maleate	17406-54-1	
	Bis(diethyldithiocarbamato-S,S')lead	17549-30-3	
	Cyclo-di-μ-oxo(μ-phthalato)trilead	17976-43-1	
	Dilead chromate oxide	18454-12-1	
	Lead dilactate	18917-82-3	
	Lead bis(dimethyldithiocarbamate)	19010-66-3	
	Dilead chromate dihydroxide	12017-86-6	
	Dodecairon lead nonadecaoxide	12023-90-4	
	Hafnium lead trioxide	12029-23-1	
	Lead disodium dioxide	12034-30-9	
	Lead diniobium hexaoxide	12034-88-7	
	Lead tin trioxide	12036-31-6	
	Lead oxide sulfate	12036-76-9	
	Bismuth, compound with lead (1:1)	12048-28-1	
	Dilead oxide	12059-89-1	
	Lead titanium trioxide	12060-00-3	
	Lead zirconium trioxide	12060-01-4	
	Lead ditantalum hexaoxide	12065-68-8	
	Pentalead tetraoxide sulphate	12065-90-6	
	Lead selenide	12069-00-0	
	Lead disulphide	12137-74-5	
	Trilead dioxide phosphonate	12141-20-7	
	Tetralead trioxide sulphate	12202-17-4	
	Lead chloride oxide	12205-72-0	
	Antimony, compound with lead (1:1)	12266-38-5	
	Lead hydroxide nitrate	12268-84-7	
	(maleato)trioxotetralead	12275-07-9	
	Potassium pentadecaoxodiplumbatepentaniobate(1-)	12372-45-1	
	Dihydroxy[styphnato(2-)]dilead	12403-82-6	
	Lead germanate	12435-47-1	
	Dioxobis(stearato)trilead	12578-12-0	
	Lead titanium zirconium oxide	12626-81-2	
	Lead chromate molybdate sulfate red	12656-85-8	
	Lead tungsten oxide	12737-98-3	
	Lead oxide sulfate	12765-51-4	
	Lead(2+) (R)-12-hydroxyoleate	13094-04-7	
	Lead(2+) 2,4-dinitroresorcinolate	13406-89-8	
	Lead diazide	13424-46-9	
	Dilead pyrophosphate	13453-66-2	
	Lead thiosulphate	13478-50-7	
	Diantimony trilead octaoxide	13510-89-9	
	Lead diperchlorate	13637-76-8	
	Lead fumarate	13698-55-0	
	Lead disulphamidate	13767-78-7	
	Lead bis(tetrafluoroborate)	13814-96-5	
	Lead nitrite	13826-65-8	
	Lead(2+) tellurium tetraoxide	13845-35-7	

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
16	Inorganic ammonium salts	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) under the test conditions.	65
	Example substances	CAS No.	
	Triammonium iron(3+) trioxalate	2944-67-4	
	Diammonium tetracyanoplatinate	562-79-8	
	Ammonium potassium tartrate	1114-14-3	
	Ammonium iron(III) citrate	1185-57-5	
	Diammonium iron bis(sulphate)	10045-89-3	
	Ammonium iron phosphate	10101-60-7	
	Ammonium iron bis(sulphate)	10138-04-2	
	Diammonium dioxalato(oxo)titanate	10580-02-6	
	Ammonium wolframate	11120-25-5	
	Diammonium tetraborate	12007-58-8	
	Ammonium chromic sulfate dodecahydrate	10022-47-6	
	Nickel ammonium sulfate hexahydrate	7785-20-8	
	Ammonium pentafluorozirconate(1-)	13859-62-6	
	Ammonium sodium sulphate	13863-45-1	
	Triammonium trioxalatoferrate	14221-47-7	
	Triammonium hexacyanoferrate	14221-48-8	
	Chromic acid, ammonium salt	14445-91-1	
	Tetraammonium hexacyanoferrate	14481-29-9	
	Triammonium triiron tetracitrate	52336-55-7	
	Diammonium hexachloropalladate	19168-23-1	
	Diammonium hexakis(thiocyanato)platinate	19372-45-3	
	Diammonium oxobis[sulphato(2-)-O]titanate(2-)	19468-86-1	
	Sulphuric acid, ammonium magnesium salt	20861-69-2	
	Ammonium samarium(3+) disulphate	21995-29-9	
	Ammonium europium(3+) disulphate	21995-30-2	
	Ammonium gadolinium(3+) disulphate	21995-31-3	
	Ammonium lanthanum(3+) disulphate	21995-32-4	
	Ammonium praseodymium(3+) disulphate	21995-33-5	
	Ammonium neodymium(3+) disulphate	21995-34-6	
	Ammonium iron tetrachloride	24411-12-9	
	Diammonium hexabromoosmate(2-)	24598-62-7	
	Ammonium nickel trichloride	24640-21-9	
	Acetic acid, ammonium zinc salt	24846-92-2	
	Diammonium aquapentachlororuthenate	25461-53-4	
	Ammonium bismuth citrate	25530-63-6	
	Triammonium diaquaoctachloro-μ-nitridodiruthenate(3-)	27316-90-1	
	Ammonium bis(cyano-C)aurate	31096-40-9	
	Ammonium tetrachloroaurate	31113-23-2	
	Citric acid, ammonium bismuth salt	31886-41-6	
	Triammonium tris[carbonato(2-)-O]hydroxyzirconate(3-)	32535-84-5	
	Ethanedioic acid, ammonium iron(3+) salt (3:3:1), trihydrate	13268-42-3	
	Sulfuric acid, ammonium iron(3+) salt (2:1:1), dodecahydrate	7783-83-7	
	Titanate(2-), bis[ethanedioato(2-)-O,O']oxo-, diammonium, monohydrate, (SP-5-21)-	10580-03-7	
	Vanadate(3-), hexafluoro-, triammonium salt	13815-31-1	
	Ammonium tetrathiotungstate [(NH4)2WS4]	13862-78-7	
	Sulfuric acid, ammonium sodium salt, dihydrate	7783-10-0	
	Sulfuric acid, ammonium magnesium salt (2:2:1), hexahydrate	7785-18-4	
	Ammonium lanthanum nitrate	10169-00-3	
	Aluminate(2-), difluoro[phosphato(3-)-κO]-, ammonium hydrogen (1:1:1)	11095-65-1	
	Cryptohalite	1309-32-6	
	1,2,3-Propanetricarboxylic acid, 2-hydroxy-, ammonium iron salt, hydrate	1332-98-5	
	Phosphoric acid, ammonium cadmium salt (1:1:1)	14520-70-8	
	Selenious acid, ammonium salt (2:1)	25425-97-2	
	Sulfuric acid, ammonium magnesium salt (3:2:2)	27733-50-2	
	azanium;lanthanum(3+);tetranitrate	31178-09-3	
	Ammonium cerous sulfate tetrahydrate	10049-02-2	
	Chromate(1-), bis(benzenamine)tetrakis(thiocyanato-N)-, ammonium (9CI)	10380-20-8	
	Ammonium phosphotungstenate, trihydrate	12704-02-8	
	Ammonium 12-tungstophosphate	1311-90-6	
	Cobalt ammonium complex	14695-95-5	
	Nitric acid, ammonium cerium(3+) salt (5:2:1)	15318-60-2	

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
	Tungstate(2-), dioxodithioxo-, diammonium (9CI)	16150-61-1	
	Triammonium uranyl pentafluoride	12062-03-2	
	Ferrate(2-), [N,N-bis[2-[bis(carboxymethyl)amino]ethyl]glycinato(3-)]-, ammonium hydrogen	19529-40-9	
	Carbonic acid, ammoniumplutonium salt (8CI)	24917-46-2	
	Uranic acid, diammonium salt, hydrate	28347-83-3	
	Molybdate(2-),tetrafluorodioxo-, diammonium (8CI,9CI)	30291-63-5	
	Ammonium Tetrachloroaluminate, NH4AlCl4	7784-14-7	
	Ammonium ferric chromate	7789-08-4	
	Ammonium bismuth(3+) 2-hydroxypropane-1,2,3-tricarboxylate(2:1:1)	6591-52-2	
	Tetraammonium cerium tetrakis(sulphate)	7637-03-8	
	Ammonium selenite	7783-19-9	
	Ammonium selenate	7783-21-3	
	Diammonium diuranium heptaoxide	7783-22-4	
	Triammonium hexafluoroaluminate	7784-19-2	
	Aluminium ammonium bis(sulphate)	7784-25-0	
	Diammonium hydrogenarsenate	7784-44-3	
	Ammonium chromate	7788-98-9	
	Ammonium dichromate	7789-09-5	
	Ammonium trioxovanadate	7803-55-6	
	Ammonium cobalt phosphate	14590-13-7	
	Ammonium iron tartrate	14635-18-8	
	Diammonium cerium(4+) trisulphate	14638-69-8	
	Diammonium tetrachlorozincate(2-)	14639-97-5	
	Triammonium pentachlorozincate(3-)	14639-98-6	
	Diammonium magnesium bis(sulphate)	14727-95-8	
	Beryllium diammonium tetrafluoride	14874-86-3	
	Ammonium scandium(3+) disulphate	15091-94-8	
	Nitric acid, ammonium calcium salt	15245-12-2	
	Ammonium trifluorohydroxyborate(1-)	15283-48-4	
	Triammonium hexachlororhodate	15336-18-2	
	Diammonium yttrium pentanitrate	15552-06-4	
	Ammonium manganese phosphate	15609-81-1	
	Diammonium neodymium pentanitrate	15653-40-4	
	Diammonium tetrabromopalladate(2-)	15661-00-4	
	Diammonium nickel bis(sulphate)	15699-18-0	
	Triammonium hexachloroiridate	15752-05-3	
	Ammonium hexafluorosilicate	16919-19-0	
	Ammonium hexafluorozirconate	16919-31-6	
	Diammonium hexachloroplatinate	16919-58-7	
	Diammonium hexachlorostannate	16960-53-5	
	Ammonium hexafluorotitanate	16962-40-6	
	Ammonium hexafluorogermanate(4)	16962-47-3	
	Triammonium heptafluorozirconate(3-)	17250-81-6	
	Ammonium hexabromoplatinate	17363-02-9	
	Tetraammonium uranyl tricarbonate, of uranium depleted in uranium-235	18077-77-5	
	Citric acid , ammonium nickel salt	18283-82-4	
	Diammonium hexachlororuthenate	18746-63-9	
	Hexaammonium heptamolybdate	12027-67-7	
	Ammonium wolframate	12028-06-7	
	Tetramanganese nitride	12033-07-7	
	Diammonium hexachlororhenate	12051-87-5	
	Tetraammonium disodium vanadate	12055-09-3	
	Diammonium hexachloroosmate	12125-08-5	
	Ammonium trivanadium octaoxide	12207-63-5	
	Diammonium tetratungsten tridecaoxide	12398-61-7	
	Tetraammonium hexamolybdate	12411-64-2	
	Ammonium molybdate(VI)	13106-76-8	
	Diammonium tetraoxotellurate	13453-06-0	
	Ammonium dihydrogenarsenate	13462-93-6	
	Ammonium chromium bis(sulphate)	13548-43-1	
	Diammonium lanthanum pentanitrate	13566-21-7	
	Diammonium manganese bis(sulphate)	13566-22-8	
	Ammonium diamminetetrakis(thiocyanato-N)chromate(1-)	13573-16-5	
	Diammonium copper(2+) disulphate	13587-25-2	
	Diammonium cobalt bis(sulphate)	13596-46-8	
	Ammonium perrhenate	13598-65-7	
	Diammonium gadolinium pentanitrate	13628-49-4	
	Ammonium calcium trinitrate	13780-11-5	
	Diammonium zinc disulphate	13814-87-4	
	Diammonium tetrachloropalladate	13820-40-1	
	Diammonium tetrachloroplatinate	13820-41-2	
	Diammonium pentachloronitrosylruthenate	13820-58-1	
	Bis(acetato-O)diamminecopper	13822-80-5	

Table 2 : Substances to be Restricted
Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
	Ammonium tetrafluoroborate	13826-83-0	
	Sulphuric acid, ammonium cerium salt	13840-04-5	
17	Methanol CAS No. 67-56-1	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.	69
18	Formaldehyde CAS No. 50-00-0 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. The first subparagraph 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 Council; (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 be placed on the market in road vehicles after 6 August 2027if, under the test conditions specified in Appendix 14, the concentration of formaldehyde in the interior of those vehicles exceeds 0,062 mg/m3. The first subparagraph 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.	77
19	Synthetic polymer microparticles:	1.Shall not be placed on the market as substances ontheir own or, where the synthetic polymermicroparticles are present to confer a sought-aftercharacteristic, in mixtures in a concentration equal toor greater than 0,01 % by weight. 2.For the purposes of this entry, the followingdefinitions apply: (a)“particle” means a minute piece of matter, otherthan single molecules, with defined physicalboundaries; (b)“solid” means a substance or mixture other than aliquid or gas; (c)“gas” means a substance or mixture which at 50 °Chas a vapour pressure greater than 300 kPa(absolute), or is completely gaseous at 20 °C at astandard pressure of 101,3 kPa; (d)“liquid” means a substance or mixture that meetsany of the following conditions: (i)the substance or mixture at 50 °C has a vapourpressure of not more than 300 kPa, is notcompletely gaseous at 20 °C and at a standardpressure of 101,3 kPa, and has a melting point orinitial melting point of 20 °C or less at astandard pressure of 101,3 kPa; (ii)the substance or mixture fulfils the criteria inthe American Society for Testing and Materials(ASTM) D 4359-90 Standard Test Method for Determining Whether a Material Is a Liquid ora Solid; (iii)the substance or mixture passes the fluidity test(penetrometer test) described in chapter 2.3.4of Part 2 of Annex A to the EuropeanAgreement concerning the InternationalCarriage of Dangerous Goods by Road (ADR)concluded at Geneva on 30 September 1957; (e)“make-up product” means any substance ormixture intended to be placed in contact withspecific external parts of the human body, namelythe epidermis, eye brows and eye lashes, with aview to, exclusively or mainly, changing theirappearance; 3.Where the concentration of synthetic polymermicroparticles covered by this entry cannot bedetermined by available analytical methods oraccompanying documentation, in order to verify thecompliance with the concentration limit referred to inparagraph 1, only the particles of at least thefollowing size shall be taken into account: (a)0,1 µm for any dimension, for particles where alldimensions are equal to or smaller than 5 mm; (b)0,3 µm in length, for particles that have a lengththat is equal to or smaller than 15 mm and a lengthto diameter ratio greater than 3. 4.Paragraph 1 shall not apply to the placing on themarket of: (a)synthetic polymer microparticles, as substances ontheir own or in mixtures, for use at industrial sites; (b)medicinal products within the scope of Directive2001/83/EC and veterinary medicinal productswithin the scope of Regulation (EU) 2019/6 of theEuropean Parliament and of the Council (c)EU fertilising products within the scope ofRegulation (EU) 2019/1009 of the EuropeanParliament and of the Council (d)food additives within the scope of Regulation (EC)No 1333/2008 of the European Parliament and ofthe Council (e)in vitro diagnostic devices, including deviceswithin the scope of Regulation (EU) 2017/746 ofthe 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) ofthat Regulation.	78

Table 2 : Substances to be Restricted
Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
		5.Paragraph 1 shall not apply to the placing on themarket of the following synthetic polymermicroparticles, as substances on their own or inmixtures: (a)synthetic polymer microparticles which arecontained by technical means so that releases tothe environment are prevented when used inaccordance with the instructions for use during theintended end use; (b)synthetic polymer microparticles the physicalproperties of which are permanently modifiedduring intended end use in such a way that thepolymer no longer falls within the scope of thisentry; (c)synthetic polymer microparticles which arepermanently incorporated into a solid matrixduring intended end use. 6.Paragraph 1 shall apply as follows regarding thefollowing uses: (a)from 17 October 2029 to synthetic polymermicroparticles for use in the encapsulation offragrances; (b)from 17 October 2027 for “rinse-off products” asdefined in point (1)(a) of the Preamble to AnnexesII to VI to Regulation (EC) No 1223/2009 unlesssuch products are covered by point (a) of thisparagraph or contain synthetic polymermicroparticles for use as an abrasive, i.e. namely toexfoliate, polish or clean (“microbeads”); (c)from 17 October 2035 for lip products as definedin point (1)(e) of the Preamble to Annexes II to VIto Regulation (EC) No 1223/2009, nail products asdefined in point (1)(g) of the Preamble to AnnexesII to VI to that Regulation, and make-up productswithin the scope of that Regulation, unless suchproducts are covered by points (a) or (b) of thisparagraph or contain microbeads; (d)from 17 October 2029 for leave-on products, asdefined in point (1)(b) of the Preamble to AnnexesII to VI to Regulation (EC) No 1223/2009, unlesssuch products are covered by points (a) or (c) ofthis paragraph; (e)from 17 October 2028 for detergents, as defined inArticle 2(1) of Regulation (EC) No 648/2004,waxes, polishes and air care products, unless those products are covered by point (a) of this paragraphor contain microbeads; (f)from 17 October 2029 for “devices”, within thescope of Regulation (EU) 2017/745 of theEuropean Parliament and of the Council (g)from 17 October 2028 for “fertilising products”, asdefined in Article 2, point (1), of Regulation (EU)2019/1009, which do not fall within the scope ofthat Regulation; (h)from 17 October 2031 for plant protectionproducts within the meaning of Article 2(1) ofRegulation (EC) No 1107/2009 of the EuropeanParliament and of the Council and seedstreated with those products, and biocidal productsas defined in Article 3(1), point (a), of Regulation(EU) No 528/2012 of the European Parliament andof the Council (i)from 17 October 2028 for products for agriculturaland horticultural uses not covered by points (g) or(h); (j)from 17 October 2031 for granular infill for use onsynthetic sports surfaces. 7.From 17 October 2025 suppliers of synthetic polymermicroparticles referred to in paragraph 4, point (a),shall provide the following information: (a)instructions for use and disposal explaining toindustrial downstream users how to preventreleases of synthetic polymer microparticles to theenvironment; (b)the following statement: “The synthetic polymermicroparticles supplied is subject to conditionslaid down by entry 78 of Annex XVII toRegulation (EC) No 1907/2006 of the EuropeanParliament and of the Council”; (c)the information on quantity or, as applicable,concentration of synthetic polymer microparticlesin the substance or mixture; (d)generic information on the identity of the polymerscontained in the substance or mixture that enablesmanufacturers, industrial downstream users andother suppliers to comply with their obligationslaid down in paragraphs 11 and 12. 8.From 17 October 2026 suppliers of productscontaining synthetic polymer microparticles referredto in paragraph 4, point (e), and from 17 October2025 suppliers of products containing synthetic polymer microparticles referred to in paragraph 4,point (d), and paragraph 5, shall provide instructionsfor use and disposal explaining to professional usersand the general public how to prevent releases ofsynthetic polymer microparticles to the environment. 9.From 17 October 2031 until 16 October 2035suppliers of products referred to in paragraph 6, point(c), containing synthetic polymer microparticles shallprovide the following statement: “This productcontains microplastics.” However, products placed onthe market before 17 October 2031 are not required tobear that statement until 17 December 2031. 10.The information referred to in paragraphs 7, 8 and 9shall be provided in the form of clearly visible,legible and indelible text or, where appropriateregarding the information in paragraphs 7 and 8, inthe form of pictograms. The text or pictograms shallbe placed on the label, the packaging, or the packageleaflet of the products containing synthetic polymermicroparticles or, regarding the information inparagraph 7, on the safety data sheet. In addition tothe text or pictograms, suppliers may provide adigital tool that gives access to an electronic versionof that information. Where instructions for use and disposal are providedin accordance with paragraphs 7, 8 and 9 in the formof a text, they shall be in the official languages of theMember States where the substance or mixture isplaced on the market, unless the Member Statesconcerned provide otherwise.	

Table 2 : Substances to be Restricted
Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
		11.Starting from 2026 manufacturers and industrialdownstream users of synthetic polymermicroparticles in the form of pellets, flakes, andpowders used as feedstock in plastic manufacturingat industrial sites, and, starting from 2027, othermanufacturers of synthetic polymer microparticlesand other industrial downstream users usingsynthetic polymer microparticles at industrial sitesshall submit the following information to the Agencyby 31 May of each year: (a)a description of the uses of synthetic polymermicroparticles in the previous calendar year; (b)for each use of synthetic polymer microparticles,generic information on the identity of thepolymers used; (c)for each use of synthetic polymer microparticles,an estimate of the quantity of synthetic polymermicroparticles released to the environment in theprevious calendar year, which shall include also the quantity of synthetic polymer microparticlesreleased to the environment during transportation. (d)for each use of synthetic polymer microparticles,a reference to the derogation laid down inparagraph 4, point (a). 12.From 2027, suppliers of products containingsynthetic polymer microparticles referred to inparagraphs 4, points (b), (d) and (e), and paragraph5, placed on the market for the first time toprofessional users and the general public, shallsubmit the following information to the Agency by31 May of each year: (a)a description of the end uses for which thesynthetic polymer microparticles were placed onthe market in the previous calendar year; (b)for each end use for which the synthetic polymermicroparticles were placed on the market, genericinformation on the identity of the polymers placedon the market in the previous calendar year; (c)for each end use for which the synthetic polymermicroparticles were placed on the market, anestimate of the quantity of synthetic polymermicroparticles released to the environment in theprevious calendar year, which shall include alsothe quantity of synthetic polymer microparticlesreleased to the environment during transportation. (d)for each use of synthetic polymer microparticles,a reference to the applicable derogation orderogations laid down in paragraph 4, point (b),(d) or (e), or 5 point (a), (b) or (c). 13.The Agency shall make the information submittedunder paragraphs 11 and 12 available to the MemberStates. 14.Manufacturers, importers and industrial downstreamusers of products containing synthetic polymermicroparticles shall provide specific information onthe identity of polymers covered by this entrycontained in those products and the function of thosepolymers in the products to competent authoritiesupon their request. The specific information on thepolymer identity shall be sufficient to unequivocallyidentify polymers and shall at least include theinformation laid down in points 2.1 to 2.2.3 andpoints 2.3.5, 2.3.6 and 2.3.7 of Annex VI, whereapplicable. If the information is not available to industrialdownstream users, they shall request it from theirsupplier within 7 days from the receipt of the request from the competent authorities and shall inform theauthorities of the request made without delay. Having received the request referred to in the secondsubparagraph, the suppliers shall provide therequested information within 30 days to theindustrial downstream user or directly to thecompetent authority requesting it. Where the supplier provides the information to theindustrial downstream user, the industrialdownstream user shall forward that information tothe competent authorities without delay. Where the supplier provides the information directlyto the authority, it shall without delay inform theindustrial downstream user concerned to that effect. 15.Manufacturers, importers and industrial downstreamusers of products containing polymers claimed to beexcluded from the designation of synthetic polymermicroparticles on grounds of degradability orsolubility shall provide, without delay, informationproving that those polymers are degradable inaccordance with Appendix 15 or soluble inaccordance with Appendix 16, as applicable, tocompetent authorities upon their request. 16.Paragraph 1 shall not apply to placing on the marketof synthetic polymers microparticles, on their own orin mixtures, placed on the market before 17 October2023. However, the first subparagraph shall not apply tothe placing on the market of synthetic polymersmicroparticles for uses listed in paragraph 6.	

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-3. REACH Annex XVII, substances restricted to use in articles

No.	Substance Name	Specified Conditions or Applications	Entry numbers in the REACH Annex XVII
20	Undecafluorohexanoic acid (PFHxA), its salts and PFHxA-related substances: (a)having a linear or branched perfluoropentyl group with the formula C5F11- directly attached to another carbon atom as one of the structural elements; or (b)having a linear or branched perfluorohexyl group with the formula C6F13-. The following substances are excluded from this designation: (a)C6F14; (b)C6F13-C(=O)OH, C6F13-C(=O)O-X′ or C6F13-CF2-X′ (where X′ = any group, including salts); (c)any substance having a perfluoroalkyl group C6F13- directly attached to an oxygen atom at one of the non-terminal carbon atoms.	1.Shall not, from 10 October 2026 be placed on the market, or used, in a concentration equal to or greater than 25 ppb for the sum of PFHxA and its salts, or 1 000 ppb for the sum of PFHxA-related substances, measured in homogeneous material, in the following: (a)textiles, leather, furs and hides in clothing and related accessories for the general public; (b)footwear for the general public; (c)paper and cardboard used as food contact materials within the scope of Regulation (EC) No 1935/2004; (d)mixtures for the general public; (e)cosmetic products as defined in Article 2(1), point (a), of Regulation (EC) No 1223/2009. 2.Shall not, from 10 October 2027 be placed on the market, or used, in a concentration equal to or greater than 25 ppb for the sum of PFHxA and its salts, or 1 000 ppb for the sum of PFHxA-related substances, measured in homogeneous material, in textiles, leather, furs and hides, other than in clothing and related accessories referred to in paragraph 1, for the general public. 3.Paragraphs 1 and 2 shall not apply to the following: (a)personal protective equipment intended to protect users against risks within the scope of risk category III, points (a), (c) to (f), (h), and (l) of Annex I to Regulation (EU) 2016/425; (b)devices within the scope of Regulation (EU) 2017/745; (c)devices within the scope of Regulation (EU) 2017/746; (d)textiles used as construction textiles. 4.Shall not, from 10 April 2026 be placed on the market, or used, in a concentration equal to or greater than 25 ppb for the sum of PFHxA and its salts, or 1 000 ppb for the sum of PFHxA-related substances, in: (a)firefighting foams and firefighting foam concentrates for training and for testing, except functional testing of the firefighting systems provided that all releases are contained; (b)firefighting foams and firefighting foam concentrates for public fire services, except where those services intervene at industrial fires at establishments covered by Directive 2012/18/EU of the European Parliament and of the Council and they use the foams and the equipment for that purpose only. 5.Shall not, from 10 October 2029 be placed on the market, or used, in firefighting foams and firefighting foam concentrates for civil aviation (including in civilian airports) in a concentration equal to or greater than 25 ppb for the sum of PFHxA and its salts, or 1 000 ppb for the sum of PFHxA-related substances. 6.Paragraphs 1, 2, 4 and 5 shall not apply to substances having a perfluoroalkyl group C6F13- directly attached to a sulphur atom that are prohibited in Annex I to Regulation (EU) 2019/1021 of the European Parliament and of the Council. 7.By way of derogation from paragraph 1, that paragraph shall not apply to articles and mixtures which were placed on the market before 10 October 2026. 8.By way of derogation from paragraph 2, that paragraph shall not apply to articles which were placed on the market before 10 October 2027. 9.For the purposes of this entry, PFHxA-related substances are substances that, based on their molecular structure, are considered to have the potential to degrade or be transformed to PFHxA.	79
	Example substances	CAS No.	
	Sodium undecafluorohexanoate	2923-26-4	

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

Table2-4. TSCA PBT Chemicals (§751.405, §751.407, §751.409, §751.411, §751.413)

No.	Substance Name	Specified Conditions or Applications
1	decaBDE CAS No. 1163-19-5	(a) Prohibition (1) General. Except as provided in paragraphs (a)(2) and (b) of this section, all persons are prohibited from all manufacturing and processing of decaBDE or decaBDE-containing products or articles after March 8, 2021, and all persons are prohibited from all distribution in commerce of decaBDE or decaBDE-containing products or articles after January 6, 2022. (2) Phase-in of Prohibitions for Specific Uses of decaBDE and decaBDE-containing Products or Articles. (i) After July 6, 2022, all persons are prohibited from all manufacturing, processing, and distribution in commerce decaBDE for use in curtains in the hospitality industry, and the curtains to which decaBDE has been added. (ii) After January 6, 2023, all persons are prohibited from all processing and distribution in commerce of decaBDE for use in wire and cable insulation in nuclear power generation facilities, and decaBDE-containing wire and cable insulation. (iii) After January 8, 2024, all persons are prohibited from all manufacturing, processing, and distribution in commerce of decaBDE for use in parts installed in and distributed as part of new aerospace vehicles, and the parts to which decaBDE has been added for such vehicles. After the end of the aerospace vehicles service lives, all persons are prohibited from all importing, processing, and distribution in commerce of aerospace vehicles manufactured before January 8, 2024 that contain decaBDE in any part. After the end of the aerospace vehicles service lives, all persons are prohibited from all manufacture, processing and distribution in commerce of decaBDE for use in replacement parts for aerospace vehicles, and the replacement parts to which decaBDE has been added for such vehicles. (iv) After the end of the vehicles service lives or 2036, whichever is earlier, all persons are prohibited from all manufacture, processing and distribution in commerce of decaBDE for use in replacement parts for motor vehicles, and the replacement parts to which decaBDE has been added for such vehicles. (v) After the end of the pallets' service life, all persons are prohibited from all distribution in commerce of plastic shipping pallets that contain decaBDE and were manufactured prior March 8, 2021. (b) Exclusions to the Prohibition. Processing and distribution in commerce for recycling of decaBDE-containing plastic from products or articles and decaBDE-containing products or articles made from such recycled plastic, where no new decaBDE is added during the recycling or production processes is not subject to the prohibition in paragraph (a) of this section.
2	PIP (3:1) CAS No. 68937-41-7	(a) Prohibitions (1) General. Except as provided in paragraphs (a)(2) and (b) of this section, all persons are prohibited from all processing and distributing in commerce of PIP (3:1), including in PIP (3:1)-containing products or articles after March 8, 2021. (2) Phase-in Prohibitions for Specific uses of PIP (3:1) and PIP (3:1)-containing products and articles. (i) After January 6, 2025, all persons are prohibited from all processing and distributing in commerce of PIP (3:1) for use in adhesives and sealants, PIP (3:1)-containing products for use in adhesives and sealants, and PIP (3:1)-containing adhesives and sealants. (ii) After January 1, 2022, all persons are prohibited from all processing and distributing in commerce of PIP (3:1) for use in photographic printing articles and PIP (3:1)-containing photographic printing articles. (iii) After October 31, 2024, except as rovided in paragraphs (a)(2)(ii)and(b)of this section, all persons are prohibited from allprocessing and distribution in ommerce of PIP (3:1) for use in articles and PIP (3:1)-containing articles. (b) Exclusions. The following activities are not subject to the prohibitions in paragraph (a) of this section. (1) Processing and distribution in commerce of: (i) PIP (3:1) for use in hydraulic fluids either for the aviation industry or to meet military specifications for safety and performance where no alternative chemical is available that meets U.S. Department of Defense specification requirements, PIP (3:1)-containing products for use in such hydraulic fluids, and PIP (3:1)-containing hydraulic fluids either for the aviation industry or to meet military specifications for safety and performance where no alternative chemical is available that meets U.S. Department of Defense specification requirements. (ii) PIP (3:1) for use in lubricants and greases, PIP (3:1) containing products for use in lubricants and greases, and PIP (3:1)-containing lubricants and greases. (iii) PIP (3:1) and PIP (3:1)-containing products for use in new and replacement parts for motor and aerospace vehicles, the new and replacement parts to which PIP (3:1) has been added for such vehicles, and the motor and aerospace vehicles that contain new and replacement parts to which PIP (3:1) has been added; (iv) PIP (3:1) and PIP (3:1)-containing products for use as an intermediate in a closed system to produce cyanoacrylate adhesives; (v) PIP (3:1) for use in specialized engine air filters for locomotive and marine applications, PIP (3:1) containing products for use in specialized engine air filters for locomotive and marine applications, and PIP (3:1)-containing specialized engine air filters for locomotive and marine applications; (vi) Plastic for recycling from products or articles containing PIP (3:1), where no new PIP (3:1) is added during the recycling process; and (vii) Finished products or articles made of plastic recycled from products or articles containing PIP (3:1), where no new PIP (3:1) was added during the production of the products or articles made of recycled plastic.
3	2,4,6-TTBP CAS No. 732-26-3	(a) Prohibitions. (1) After January 6, 2026, all persons are prohibited from all distribution in commerce of 2,4,6-TTBP, at any concentration above 0.3 percent by weight, in containers with a volume less than 35 gallons. (2) After January 6, 2026, all persons are prohibited from all processing and distribution in commerce of 2,4,6-TTBP oil and lubricant additives at any concentration above 0.3 percent by weight.
4	PCTP CAS No. 133-49-3	(a) Prohibition. After March 8, 2021, all persons are prohibited from all manufacturing and processing of PCTP or PCTP-containing products or articles, unless PCTP concentrations are at or below 1% by weight. After January 6, 2022, all persons are prohibited from all distribution in commerce of PCTP or PCTP-containing products or articles, unless PCTP concentrations are at or below 1% by weight.
5	HCBD CAS No. 87-68-3	(a) Prohibition. After March 8, 2021, all persons are prohibited from all manufacturing, processing and distribution in commerce of HCBD and HCBD-containing products or articles, except for the following: (1) Unintentional production of HCBD as a byproduct in the production of chlorinated solvents; and (2) Processing and distribution in commerce of HCBD for burning as a waste fuel.

Attached Table I-A : RoHS Exemptions List Annex III

No.	Exemption	Scope and dates of applicability
1	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):	
1(a)	For general lighting purposes < 30 W: 5 mg	Expires on 24 February 2023
1(b)	For general lighting purposes ≥ 30 W and < 50 W: 5 mg	Expires on 24 February 2023
1(c)	For general lighting purposes ≥ 50 W and < 150 W: 5 mg	Expires on 24 February 2023
1(d)	For general lighting purposes ≥ 150 W: 15 mg	Expires on 24 February 2023
1(e)	For general lighting purposes with circular or square structural shape and tube diameter ≤ 17 mm	Expires on 24 February 2023
1(f)-1	For lamps designed to emit mainly light in the ultraviolet spectrum: 5 mg	Expires on 24 February 2027
1(f)-2	For special purposes: 5 mg	Expires on 24 February 2025
1(g)	For general lighting purposes < 30 W with a lifetime equal or above 20 000 h: 3,5 mg	Expires on 24 February 2023
2(a)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp):	
2(a)(1)	Tri-band phosphor with normal lifetime and a tube diameter < 9 mm (e.g. T2): 5 mg	Expires on 24 February 2023
2(a)(2)	Tri-band phosphor with normal lifetime and a tube diameter ≥ 9 mm and ≤ 17 mm (e.g. T5): 5 mg	Expires on 24 February 2023
2(a)(3)	Tri-band phosphor with normal lifetime and a tube diameter > 17 mm and ≤ 28 mm (e.g. T8): 5 mg	Expires on 24 February 2023
2(a)(4)	Tri-band phosphor with normal lifetime and a tube diameter > 28 mm (e.g. T12): 5 mg	Expires on 24 February 2023
2(a)(5)	Tri-band phosphor with long lifetime (≥ 25 000 h): 8 mg	Expires on 24 February 2023
2(b)	Mercury in other fluorescent lamps not exceeding (per lamp):	
2(b)(1)	Linear halophosphate lamps with tube > 28 mm (e.g. T10 and T12): 10 mg	Expires on 13 April 2012
2(b)(2)	Non-linear halophosphate lamps (all diameters): 15 mg	Expires on 13 April 2016
2(b)(3)	Non-linear tri-band phosphor lamps with tube diameter > 17 mm (e.g. T9)	Expires on 24 February 2023; 10 mg may be used per lamp from 25 February 2023 until 24 February 2025
2(b)(4)-I	Lamps for other general lighting and special purposes (e.g. induction lamps): 15 mg	Expires on 24 February 2025
2(b)(4)-II	Lamps emitting mainly lightin the ultraviolet spectrum: 15mg	Expires on 24 February 2027
2(b)(4)-III	Emergency lamps: 15 mg	Expires on 24 February 2027
3	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp):	
3(a)	Short length (≤ 500 mm)	Expires on 24 February 2025
3(b)	Medium length (> 500 mm and ≤ 1 500 mm)	Expires on 24 February 2025
3(c)	Long length (> 1 500 mm)	Expires on 24 February 2025
4(a)	Mercury in other low pressure discharge lamps (per lamp): 15 mg	Expires on 24 February 2023
4(a)-I	Mercury in low pressure non-phosphor coated discharge lamps,where the application requires themain range of the lamp-spectraloutput to be in the ultravioletspectrum: up to 15 mg mercurymay be used per lamp	Expires on 24 February 2027
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:	Expires on 24 February 2027
4(b)-I	P ≤ 155 W	Expires on 24 February 2023
4(b)-II	155 W < P ≤ 405 W	Expires on 24 February 2023
4(b)-III	P > 405 W	Expires on 24 February 2023
4(c)	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner):	
4(c)-I	P ≤ 155 W	Expires on 24 February 2027
4(c)-II	155 W < P ≤ 405 W	Expires on 24 February 2027
4(c)-III	P > 405 W	Expires on 24 February 2027
4(d)	Mercury in High Pressure Mercury (vapour) lamps (HPMV)	Expires on 13 April 2015
4(e)	Mercury in metal halide lamps (MH)	Expires on 24 February 2027
4(f)-I	Mercury in other discharge lamps for special purposes not specifically mentioned in this Annex	Expires on 24 February 2025
4(f) -II	Mercury in high pressuremercury vapour lamps used inprojectors where an output>=2000 lumen ANSI is required	Expires on 24 February 2027
4(f) -III	Mercury in high pressuresodium vapour lamps used forhorticulture lighting	Expires on 24 February 2027
4(f) -IV	Mercury in lamps emitting lightin the ultraviolet spectrum	Expires on 24 February 2027

Attached Table I-A : RoHS Exemptions List Annex III

No.	Exemption	Scope and dates of applicability
4(g)	Mercury in hand crafted luminous discharge tubes used for signs, decorative or architectural and specialist lighting and light-artwork, where the mercury content shall be limited as follows: (a) 20 mg per electrode pair + 0,3 mg per tube length in cm, but not more than 80 mg, for outdoor applications and indoor applications exposed to temperatures below 20 °C; (b) 15 mg per electrode pair + 0,24 mg per tube length in cm, but not more than 80 mg, for all other indoor applications.	Expires on 31 December 2018
5(a)	Lead in glass of cathode ray tubes	Expires on: 21 July 2016 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.
5(b)	Lead in glass of fluorescent tubes not exceeding 0,2 % by weight	Expires on: 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.
6(a)	Lead as an alloying element in steel for machining purposes and in galvanised steel containing up to 0,35 % lead by weight	
6(a)-I	Lead as an alloying element in steel for machining purposes containing up to 0,35 % lead by weight and in batch hot dip galvanised steel components containing up to 0,2 % lead by weight	
6(b)	Lead as an alloying element in aluminium containing up to 0,4 % lead by weight	
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	
6(b)-II	Lead as an alloying element in aluminium for machining purposes with a lead content up to 0,4 % by weight	
6(c)	Copper alloy containing up to 4 % lead by weight	
7(a)	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)	
7(b)	Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, and network management for telecommunications	
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	
7(c)-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher	
7(c)-III	Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC	
7(c)-IV	Lead in PZT based dielectric ceramic materials for capacitors which are part of integrated circuits or discrete semiconductors	Expires on: — 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.
8(a)	Cadmium and its compounds in one shot pellet type thermal cut-offs	Expires on 1 January 2012 and after that date may be used in spare parts for EEE placed on the market before 1 January 2012
8(b)	Cadmium and its compounds in electrical contacts	

Attached Table I-A : RoHS Exemptions List Annex III

No.	Exemption	Scope and dates of applicability
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.	
9	Hexavalent chromium as an anticorrosion agent of the carbon steel cooling system in absorption refrigerators up to 0,75 % by weight in the cooling solution	Applies to categories 8, 9 and 11 and expires on: —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.
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	Applies to categories 1-7 and 10 and expires on 5 March 2021.
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 (including minibars) designed to operate fully or partly with electrical heater, having an average utilised power input < 75 W at constant running conditions — 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.	
9(b)	Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications	Applies to categories 8, 9 and 11; 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 other subcategories of categories 8 and 9.
9(b)-(I)	Lead in bearing shells and bushes for refrigerant-containing hermetic scroll compressors with a stated electrical power input equal or below 9 kW for heating, ventilation, air conditioning and refrigeration (HVACR) applications	Applies to category 1; expires on 21 July 2019.
11(a)	Lead used in C-press compliant pin connector systems	May be used in spare parts for EEE placed on the market before 24 September 2010
11(b)	Lead used in other than C-press compliant pin connector systems	Expires on 1 January 2013 and after that date may be used in spare parts for EEE placed on the market before 1 January 2013
12	Lead as a coating material for the thermal conduction module C-ring	May be used in spare parts for EEE placed on the market before 24 September 2010
13(a)	Lead in white glasses used for optical applications	
13(b)	Cadmium and lead in filter glasses and glasses used for reflectance standards	
13(b)-(I)	Lead in ion coloured optical filter glass types	
13(b)-(II)	Cadmium in striking optical filter glass types; excluding applications falling under point 39 of this Annex	
13(b)-(III)	Cadmium and lead in glazes used for reflectance standards	
14	Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80 % and less than 85 % by weight	Expired on 1 January 2011 and after that date may be used in spare parts for EEE placed on the market before 1 January 2011
15	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	

Attached Table I-A : RoHS Exemptions List Annex III

No.	Exemption	Scope and dates of applicability
15(a)	Lead in solders to complete a viable electrical connection between the semiconductor die and carrier within integrated circuit flip chip packages where at least one of the following criteria applies: — a semiconductor technology node of 90 nm or larger; — a single die of 300 mm2 or larger in any semiconductor technology node; — stacked die packages with die of 300 mm2 or larger, or silicon interposers of 300 mm2 or larger.	
16	Lead in linear incandescent lamps with silicate coated tubes	Expires on 1 September 2013
17	Lead halide as radiant agent in high intensity discharge (HID) lamps used for professional reprography applications	Expires on: 21 July 2016 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.
18(a)	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as speciality lamps for diazoprinting reprography, lithography, insect traps, photochemical and curing processes containing phosphors such as SMS ($(Sr,Ba)_2MgSi_2O_7$:Pb)	Expired on 1 January 2011
18(b)	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as sun tanning lamps containing phosphors such as BSP ($BaSi_2O_5$:Pb)	
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	Excluding applications covered by entry 34 of Annex IV
19	Lead with PbBiSn-Hg and PbInSn-Hg in specific compositions as main amalgam and with PbSn-Hg as auxiliary amalgam in very compact energy saving lamps (ESL)	Expires on 1 June 2011
20	Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCDs)	Expires on 1 June 2011
21	Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	Applies to categories 8, 9 and 11 and expires on: — 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.
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	Applies to categories 1 to 7 and 10 except applications covered by entry 21(b) or entry 39 and expires on 21 July 2021.
21(b)	Cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	Applies to categories 1 to 7 and 10 except applications covered by entry 21(a) or 39 and expires on 21 July 2021.
21(c)	Lead in printing inks for the application of enamels on other than borosilicate glasses	Applies to categories 1 to 7 and 10 and expires on 21 July 2021.
23	Lead in finishes of fine pitch components other than connectors with a pitch of 0,65 mm and less	May be used in spare parts for EEE placed on the market before 24 September 2010
24	Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors	Expires on: 21 July 2024 for category 11.
25	Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring	Expires on: 21 July 2016 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.
26	Lead oxide in the glass envelope of black light blue lamps	Expires on 1 June 2011

Attached Table I-A : RoHS Exemptions List Annex III

No.	Exemption	Scope and dates of applicability
27	Lead alloys as solder for transducers used in high-powered (designated to operate for several hours at acoustic power levels of 125 dB SPL and above) loudspeakers	Expired on 24 September 2010
29	Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC (3)	Expires on: — 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and ontrol instruments; — 21 July 2023 for category 8 in vitro diagnostic medical devices; — 21 July 2024 for category 9 industrial monitoring and control instruments.
30	Cadmium alloys as electrical/mechanical solder joints to electrical conductors located directly on the voice coil in transducers used in high-powered loudspeakers with sound pressure levels of 100 dB (A) and more	Expires on: 21 July 2016 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.
31	Lead in soldering materials in mercury free flat fluorescent lamps (which, e.g. are used for liquid crystal displays, design or industrial lighting)	Expires on: 21 July 2016 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
32	Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes	Expires on: — 21 July 2023 for category 8 in vitro diagnostic medical devices, — 21 July 2024 for category 11.
33	Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers	Expires on: 21 July 2016 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.
34	Lead in cermet-based trimmer potentiometer elements	
36	Mercury used as a cathode sputtering inhibitor in DC plasma displays with a content up to 30 mg per display	Expired on 1 July 2010
37	Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body	Expires on: — 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.
38	Cadmium and cadmium oxide in thick film pastes used on aluminium bonded beryllium oxide	Expires on: 21 July 2016 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.
39(a)	Cadmium selenide in downshifting cadmium-based semiconductor nanocrystal quantum dots for use in display lighting applications (< 0,2 µg Cd per mm^2 of display screen area)	

No.	Exemption	Scope and dates of applicability
40	Cadmium in photoresistors for analogue optocouplers applied in professional audio equipment	Expires on 31 December 2013
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 (2))	Applies to all categories and expires on: —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.
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.	
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.	Applies to category 11 and expires on 21 July 2024.
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 (4), installed in equipment used at fixed positions while in operation which is designed for professionals, but also used by non-professional users	
45	Lead diazide, lead styphnate, lead dipicramate, orange lead (lead tetroxide), lead dioxide in electric and electronic initiators of explosives for civil (professional) use and barium chromate in long time pyrotechnic delay charges of electric initiators of explosives for civil (professional) use	Applies to category 11 and expires on 20 April 2026

([1]) OJ L 326, 29.12.1969, p. 36.

([2]) Directive 97/68/EC of the European Parliament and of the Council of 16 December 1997 on the approximation of the laws of

([3]) Council Directive 69/493/EEC of 15 December 1969 on the approximation of the laws of the Member States relating to crystal

([4]) Regulation (EU) 2016/1628 of the European Parliament and of the Council of 14 September 2016 on requirements relating

No.	Exemption	Scope and dates of applicability
Equipment utilising or detecting ionising radiation		
1	Lead, cadmium and mercury in detectors for ionising radiation.	
2	Lead bearings in X-ray tubes.	
3	Lead in electromagnetic radiation amplification devices: micro-channel plate and capillary plate.	
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.	
5	Lead in shielding for ionising radiation.	
6	Lead in X-ray test objects.	
7	Lead stearate X-ray diffraction crystals.	
8	Radioactive cadmium isotope source for portable X-ray fluorescence spectrometers.	
Sensors, detectors and electrodes		
1a	Lead and cadmium in ion selective electrodes including glass of pH electrodes.	
1b	Lead anodes in electrochemical oxygen sensors.	
1c	Lead, cadmium and mercury in infra-red light detectors.	
1d	Mercury in reference electrodes: low chloride mercury chloride, mercury sulphate and mercury oxide.	
Others		
9	Cadmium in helium-cadmium lasers.	
10	Lead and cadmium in atomic absorption spectroscopy lamps.	
11	Lead in alloys as a superconductor and thermal conductor in MRI.	
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.
13	Lead in counterweights.	
14	Lead in single crystal piezoelectric materials for ultrasonic transducers.	
15	Lead in solders for bonding to ultrasonic transducers.	
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.	
17	Lead in solders in portable emergency defibrillators.	
18	Lead in solders of high performance infrared imaging modules to detect in the range 8-14 μm.	
19	Lead in Liquid crystal on silicon (LCoS) displays.	
20	Cadmium in X-ray measurement filters.	
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.	Before 1 January 2020.

No.	Exemption	Scope and dates of applicability
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.
23	Lead as an alloying element for bearings and wear surfaces in medical equipment exposed to ionising radiation.	Expires on 30 June 2021.
24	Lead enabling vacuum tight connections between aluminium and steel in X-ray image intensifiers.	Expires on 31 December 2019.
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.
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.	
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.
28	Lead in solders for mounting cadmium telluride and cadmium zinc telluride digital array detectors to printed circuit boards.	Expires on 31 December 2017.
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.
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	Before 1 January 2020

No.	Exemption	Scope and dates of applicability
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.	
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.
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.	
34	Lead as an activator in the fluorescent powder of discharge lamps when used for extracorporeal photopheresis lamps containing BSP (BaSi2O5:Pb) phosphors.	Expires on 22 July 2021.
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.
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.
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.
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.

No.	Exemption	Scope and dates of applicability
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.	
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.
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.
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.
43	Cadmium anodes in HerschC19:C53+C49:C53 cells for oxygen sensors used in industrial monitoring and control instruments, where sensitivity below 10 ppm is required.	Expires on 15 July 2023.
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.

Table 3 : Substances to be Controlled
Substances specified by the regulatory control etc. of Table 3 except substances listed in Table 1 and Table 2 should be recognized their presence in the products or use in the production process.

No.	Name of the regulatory control etc.
3-1	PRTR Law: Specific Class I Designated Chemical Substance
3-2	PRTR Law: Class I Designated Chemical Substance
3-3	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. of Japan (Chemical Substances Control Law): Class II Specified Chemical Substances
3-4	Poisonous and Deleterious Substances Control Law of Japan: Poisonous Substances
3-5	EU REACH: Substances in the Candidate List for Authorization (SVHC)
3-6	EU REACH: Substances in the Authorization List (Annex XIV)
3-7	EU REACH: Restricted Substances (Annex XVII)
3-8	GADSL *1
3-9	chemSHERPA Declarable Substances List *2

*1 GADSL: Global Automotive Declarable Substance List
It is a declarable substance list which Global Automotive Stakeholder Group (GASG) provides as a standard for automobile industry to exchange information regarding the material and substance composition of automotive parts.

*2 chemSHERPA Declarable Substances List is a list which JAMP (Joint Article Management Promotion-consortium) provides as a cross-industrial standard to exchange chemical information.