

List of component prohibition substances of the delivery materials

2020.8.19
Revised edition

1. Tri-substituted organostannic compounds

Name of substance	CAS No.	Chemical Formula
Bis(tri-n-butyltin) oxide (TBTO)		
Application example: Preservative, inhibitor, etc. Major harmfulness: Injurious to eyes		
Bis(tri-n-butyltin) oxide (TBTO)	56-35-9	O(Sn(C ₄ H ₉) ₃) ₂

Tributyltin Compounds(TBTs)		
Application example: Antifouling paint, etc. Major harmfulness: Endocrine disruptor		
Trimethyltin sulphate	63869-87-4	C ₃ H ₁₀ O ₄ SSn
Tributyltin (and salts and esters)	688-73-3	C ₁₂ H ₂₈ Sn
Tributyltin hydroxide	1067-97-6	C ₁₂ H ₂₈ OSn
Tributyltin bromide	1461-23-0	C ₁₂ H ₂₇ BrSn
Tributyltin benzoate	4342-36-3	C ₁₉ H ₃₂ O ₂ Sn
Tributyltin iodide	7342-47-4	C ₁₂ H ₂₇ I Sn
2-Propenoic acid, ethyl ester, polymer with octyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]stannane OTHER CA INDEX NAMES: 2-Propenoic acid, octyl ester, polymer with ethyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-stannane Stannane, tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with ethyl 2-propenoate and octyl 2-propenoate	108189-00-0	-
2-Propenoic acid, butyl ester, polymer with ethyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]stannane OTHER CA INDEX NAMES: 2-Propenoic acid, ethyl ester, polymer with butyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-stannane Stannane, tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with butyl 2-propenoate and ethyl 2-propenoate	109298-02-4	-
2-Propenoic acid, butyl ester, polymer with ethyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]stannane OTHER CA INDEX NAMES: 2-Propenoic acid, ethyl ester, polymer with butyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-stannane Stannane, tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with butyl 2-propenoate and ethyl 2-propenoate	110586-22-6	-
2-Propenoic acid, butyl ester, polymer with ethyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]stannane OTHER CA INDEX NAMES: 2-Propenoic acid, ethyl ester, polymer with butyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-stannane Stannane, tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with butyl 2-propenoate and ethyl 2-propenoate	110586-23-7	-
2-Propenoic acid, butyl ester, polymer with ethyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]stannane OTHER CA INDEX NAMES: 2-Propenoic acid, ethyl ester, polymer with butyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-stannane Stannane, tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with butyl 2-propenoate and ethyl 2-propenoate	112492-63-4	-

2-Propenoic acid, butyl ester, polymer with ethyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]stannane OTHER CA INDEX NAMES: 2-Propenoic acid, ethyl ester, polymer with butyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-stannane Stannane, tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with butyl 2-propenoate and ethyl 2-propenoate	124873-62-7	-
2-Propenoic acid, butyl ester, polymer with ethyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]stannane OTHER CA INDEX NAMES: 2-Propenoic acid, ethyl ester, polymer with butyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-stannane Stannane, tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with butyl 2-propenoate and ethyl 2-propenoate	124873-63-8	-
2-Propenoic acid, butyl ester, polymer with tributyl[(2-methyl-1-oxo-2-propenyl)oxy]stannane OTHER CA INDEX NAMES: Stannane, tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with butyl 2-propenoate	74774-66-6	-
2-Propenoic acid, ethyl ester, polymer with octyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]stannane OTHER CA INDEX NAMES: 2-Propenoic acid, octyl ester, polymer with ethyl 2-propenoate and tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-stannane Stannane, tributyl[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with ethyl 2-propenoate and octyl 2-propenoate	98358-14-6	-
Tributyltin monopropylene glycol maleate	53466-85-6	C ₃₁ H ₆₅ O ₆ Sn ₂
Distannoxane, 1,1,1,3,3,3-hexakis(2-methylpropyl)-	6208-26-0	C ₂₄ H ₅₄ OSn ₂
Bis(tributyltin) maleate	14275-57-1	C ₂₈ H ₅₇ O ₄ Sn ₂
Bis(tributylstannyl)Fumarate	6454-35-9	C ₂₈ H ₅₆ O ₄ Sn ₂
Bis(tributyltin)phthalate	4782-29-0	C ₃₂ H ₅₈ O ₄ Sn ₂
Bis(tributyltin)oxide	56-35-9	C ₂₄ H ₅₄ OSn ₂
Bis(tributyltin)2,3-dibromosuccinate	31732-71-5	C ₂₈ H ₅₆ Br ₂ O ₄ Sn ₂
Bis(tributyletin) = 2,3- dibromosuccinate	56323-17-2	C ₂₈ H ₅₆ Br ₂ O ₄ Sn ₂
Tributyltin methoxide	1067-52-3	C ₁₃ H ₃₀ OSn
Trybutyletinfluoride (polymer)	27615-98-1	—
Stannane, tributyl(butylphenoxy)-	100835-88-9	-
Tributyltin naphthenate	36631-23-9	C ₂₂ H ₃₄ OSn
Tributyltin cinnamate	27147-18-8	C ₂₁ H ₃₄ O ₂ Sn
Trybutyletinethoxide	36253-76-6	C ₁₄ H ₃₂ OSn
Tributyl(lauroyloxy)stannane	3090-36-6	C ₂₄ H ₅₀ O ₂ Sn
Tributyltin methacrylate	2155-70-6	C ₁₆ H ₃₂ O ₂ Sn
Stannane, tributylfluoro-	1983-10-4	C ₁₂ H ₂₇ FSn
Tributyltin naphthenate	85409-17-2	-
Tributyltin sulfamate	6517-25-5	C ₁₂ H ₂₉ NO ₃ SSn
Tributyltin chloride	1461-22-9	C ₁₂ H ₂₇ ClSn
Tributyltin acetate	56-36-0	C ₁₄ H ₃₀ O ₂ Sn
[1R-(1.alpha.,4a.beta.,4b.alpha.,10a.alpha.)]-Tributyl[[[1,2,3,4,4a,4b,5,6,10,10a-decahydro-7-isopropyl-1,4a-dimethyl-1-phenanthryl]carbonyl]oxy]stannane	26239-64-5	C ₃₂ H ₅₆ O ₂ Sn
[(terephthaloylbis(oxy))bis(tributylstannane)	4756-53-0	C ₃₂ H ₅₈ O ₄ Sn ₂
Tributyltin isothiocyanate	681-99-2	C ₁₃ H ₂₇ NOSn
Tributyltin .alpha.-(2,4,5-trichlorophenoxy) propionate	73940-89-3	C ₂₁ H ₃₃ Cl ₃ O ₃ Sn
Tributyltin isoocetylthioacetate	73927-97-6	C ₂₂ H ₄₆ O ₂ SSn
Tributyl [[(dimethylamino) thioKiso methyl]thio] tin	67057-32-3	C ₁₅ H ₃₃ NS ₂ Sn
Tributyltin linoleate	24124-25-2	C ₃₀ H ₅₈ O ₂ Sn

Tributyltin iodoacetate	73927-91-0	C ₁₄ H ₂₉ I ₂ O ₂ Sn
Tributyltin methanesulphonate	13302-06-2	C ₁₃ H ₃₀ O ₃ SSn
Tributyl [(diethyl thiocarbamoyl)thio] tin	5847-53-0	C ₁₇ H ₃₇ NS ₂ Sn
Tributyltin p-iodobenzoate	73940-88-2	C ₁₉ H ₃₁ I ₂ O ₂ Sn
Tributyltin gamma-chlorobutyrate	33550-22-0	C ₁₆ H ₃₃ ClO ₂ Sn
Tributyltin .beta.-iodopropionate	73927-95-4	C ₁₅ H ₃₁ I ₂ O ₂ Sn
Tributyltin 2-ethylhexanoate	5035-67-6	C ₂₀ H ₄₂ O ₂ Sn
Tributyl(oleoyloxy)stannane	3090-35-5	C ₃₀ H ₆₀ O ₂ Sn
Tributyl (formyloxy) tin	5847-51-8	C ₁₃ H ₂₈ O ₂ Sn
Tributyl (pentachlorophenoxy) tin	3644-38-0	C ₁₈ H ₂₇ C ₅ OSn
Tributyltin chloroacetate	5847-52-9	C ₁₄ H ₂₉ Cl O ₂ Sn
Tributyltin undecylenate	69226-47-7	C ₂₃ H ₄₈ O ₂ Sn
Tributyl (this D-conspiracy yloxy) tin	75113-35-8	C ₁₈ H ₃₈ O ₇ Sn
P-nitrophenoxytributyltin	3644-32-4	C ₁₈ H ₃₁ NO ₃ Sn
Chloro(triisobutyl)stannane	7342-38-3	C ₁₂ H ₂₇ ClSn
Tributyltin dimethyldithiocarbamate	20369-63-5	C ₁₅ H ₃₃ NS ₂ Sn
Tributyltin cyanide	2179-92-2	C ₁₃ H ₂₇ NSn
Tributyltin cyanate	4027-17-2	C ₁₃ H ₂₇ NOSn
Tributyltin isopropylsuccinate	53404-82-3	C ₁₉ H ₃₈ O ₄ Sn
Bis(Tributyltin) itaconate	25711-26-6	C ₂₉ H ₅₈ O ₄ Sn ₂
Copolymer of alkyl(c=8) acrylate,methyl methacrylate and tributyltin methacrylate	67772-01-4	(C ₁₆ H ₃₂ O ₂ Sn.C ₁₁ H ₂₀ O ₂ C ₅ H ₈ O ₂) _x
Tributyltin Acrylate	13331-52-7	C ₁₅ H ₃₀ O ₂ Sn
2-butenic acid, 4-oxo-4-[(tributylstannyl)oxy]-	4027-18-3	C ₁₆ H ₃₀ O ₄ Sn
Tributyltin o-iodobenzoate	73927-93-2	C ₁₉ H ₃₁ I ₂ O ₂ Sn
Tri-n-butyl tin salicylate	4342-30-7	C ₁₉ H ₃₂ O ₃ Sn
1,3,5-tris(tributyltin)-s-triazine-2,4,6-trione	752-58-9	C ₃₉ H ₈₁ N ₃ O ₃ Sn ₃
[(1,4-dioxo-2-butene-1,4-diyl) bis(oxy)] Bis[tributyl - stannane]	24291-45-0	C ₂₈ H ₅₆ O ₄ Sn ₂
Tributyltin nonanoate	4027-14-9	C ₂₁ H ₄₄ O ₂ Sn
Tributyltin chloride complex	56573-85-4	C ₁₂ H ₂₈ Sn
(2-biphenyloxy)tributyltin	3644-37-9	C ₂₄ H ₃₇ OSn

Triphenyltin Compounds(TPTs)		
Application example: Anti-mold agent, antifouling agent, Agricultural germicide, etc.		
Major harmfulness: Endocrine Disruptor		
Triphenyltin	668-34-8	C ₁₈ H ₁₅ Sn
Triphenyltin nitrobenzoate	61057-41-8	C ₂₅ H ₁₉ NO ₄ Sn
Triphenyltin nitrobenzoate	83500-88-3	C ₂₅ H ₁₉ NO ₄ Sn
Triphenyltin nitrobenzoate	83514-66-3	C ₂₅ H ₁₉ NO ₄ Sn
Triphenyltin dimethyldithiocarbamate	1803-12-9	C ₂₁ H ₂₁ NS ₂ Sn
Stannane, acetoxytriphenyl-	900-95-8	C ₂₀ H ₁₈ O ₂ Sn
Triphenyl tin chloride	639-58-7	C ₁₈ H ₁₅ ClSn
(Chloroacetoxy)triphenylstannane	7094-94-2	C ₂₀ H ₁₇ ClO ₂ Sn
Stannane, fluorotriphenyl-	379-52-2	C ₁₈ H ₁₅ FSn
Triphenyltin nicotinic acid	7552-16-1	C ₂₄ H ₁₉ NO ₂ Sn
Triphenylstannyl decanoate	47672-31-1	C ₂₈ H ₃₄ O ₂ Sn
[(1-Oxoundecyl)oxy]triphenylstannane	94850-90-5	C ₂₉ H ₃₆ O ₂ Sn
Triphenyltin fatty acid salt (C=9)	18380-72-8	C ₂₇ H ₃₂ O ₂ Sn
Triphenyltin iodide	894-09-7	C ₁₈ H ₁₅ ISn
Distannoxane,1,1,1,3,3,3-hexaphenyl-	1262-21-1	C ₃₆ H ₃₀ OSn ₂
Bis(triphenyltin) dodecyl succinate	2591-32-4	-

Bis(triphenyltin) fumarate	16122-27-3	C ₄₀ H ₃₂ O ₄ Sn ₂
Triphenyltin hydroxide	76-87-9	C ₁₈ H ₁₆ OSn
Triphenyltin hydride	892-20-6	C ₁₈ H ₁₆ Sn
[1,4-Phenylenebis(carbonyloxy)]bis[triphenylstannane]	97922-83-3	C ₄₄ H ₃₄ O ₄ Sn ₂
Triphenyltin benzoate	910-06-5	C ₂₅ H ₂₀ O ₂ Sn
[(1-oxododecyl) oxy] triphenyltin	3644-29-9	C ₃₀ H ₃₈ O ₂ Sn
[(2-carboxybenzoyl) oxy] triphenyltin	7224-27-3	C ₂₆ H ₂₀ O ₄ Sn
N-Triphenyltin-p-toluenesulfonanilide	172777-09-2	-
Octyl acrylate-Methyl methacrylate-Triphenyltin itaconate copolymer	85424-96-0	—
Sulfamic acid triphenyltin	13362-00-0	-
Triphenyl [(2,2,4,4-tetramethyl-1-oxopentyl)oxy] stannane	18380-71-7	C ₂₇ H ₃₂ O ₂ Sn

The others		
Trimethyltin hydroxide	56-24-6	C ₃ H ₁₀ OSn
Triethyltin hydroxide	994-32-1	C ₆ H ₁₆ OSn
Bromotrimethylstannane	1066-44-0	C ₃ H ₉ BrSn
Bis(tris(2-methyl-2-phenylpropyl)tin) oxide	13356-08-6	C ₆₀ H ₇₈ OSn ₂
Trimethyltin chloride	1066-45-1	C ₃ H ₉ ClSn
Triethyltin chloride	994-31-0	C ₆ H ₁₅ ClSn
Tripropyltin iodide	7342-45-2	C ₉ H ₂₁ ISn
Tripropyltin methacrylate	4154-35-2	C ₁₃ H ₂₇ O ₂ Sn
Tripropyltin bromide	2767-61-5	C ₉ H ₂₁ BrSn
Fluorotris(2-methylpropyl) tin	7304-48-5	C ₁₂ H ₂₇ FSn
Trimethyltin iodide	811-73-4	C ₃ H ₉ ISn
Trimethyltin azide	1118-03-2	C ₃ H ₉ N ₃ Sn
Trimethyltin thiocyanate	4638-25-9	C ₄ H ₉ NSSn
Trimethyltin acetate	1118-14-5	C ₅ H ₁₂ O ₂ Sn
1-(Tricyclohexylstannyl)-1H-1,2,4-triazole	41083-11-8	C ₂₀ H ₃₅ N ₃ Sn
Triethyltin iodide	2943-86-4	C ₆ H ₁₅ ISn
Triethyltin phenoxide	1529-30-2	C ₁₂ H ₂₀ OSn
Tripropyltin chloride	2279-76-7	C ₉ H ₂₁ ClSn
Tripropyltin acetate	3267-78-5	C ₁₁ H ₂₄ O ₂ Sn
Triethyltin acetate	1907-13-7	C ₈ H ₁₈ O ₂ Sn
4,5-dibromo-3,6-dioxo-1,1,1,8,8,8-hexaphenyl-2,7-dioxo-1,8-JIS tannaim octane	56323-19-4	C ₄₀ H ₃₂ Br ₂ O ₄ Sn ₂
Tripropyltin iodoacetate	73927-92-1	C ₁₁ H ₂₃ IO ₂ Sn
Tripropyltin laurate	57808-37-4	C ₂₁ H ₄₄ O ₂ Sn
(4E)-3,6-Dioxo-1,1,1,8,8,8-hexaphenyl-2,7-dioxo-1,8-distannaoct-4-ene	7552-19-4	-

2. Polychlorinated biphenyls : Insulator

Application example: insulation oil, ink, paint, etc. Major harmfulness: Injurious to liver and skin

Name of substance	CAS No.	Chemical Formula
Polychlorinated biphenyls (PCB)	1336-36-3	C ₁₂ H _{10-x} Cl _x (1 ≤ x ≤ 10)
2-chlorobiphenyl	2051-60-7	C ₁₂ H ₉ Cl
3-chlorobiphenyl	2051-61-8	C ₁₂ H ₉ Cl
4-chlorobiphenyl	2051-62-9	C ₁₂ H ₉ Cl
Chlorobiphenyl	27323-18-8	C ₁₂ H ₉ Cl
2,2'-dichlorobiphenyl	13029-08-8	C ₁₂ H ₈ Cl ₂
4,4'-dichlorobiphenyl	2050-68-2	C ₁₂ H ₈ Cl ₂

Dichlorobiphenyl	25512-42-9	C ₁₂ H ₈ Cl ₂
2,3'-dichlorobiphenyl	25569-80-6	C ₁₂ H ₈ Cl ₂
3,4'-dichlorobiphenyl	2974-90-5	C ₁₂ H ₈ Cl ₂
3,4-dichlorobiphenyl	2974-92-7	C ₁₂ H ₈ Cl ₂
ar,ar'- dichlorobiphenyl	33039-81-5	C ₁₂ H ₈ Cl ₂
2,6-dichlorobiphenyl	33146-45-1	C ₁₂ H ₈ Cl ₂
2,4-dichlorobiphenyl	33284-50-3	C ₁₂ H ₈ Cl ₂
2,5-dichlorobiphenyl	34883-39-1	C ₁₂ H ₈ Cl ₂
3,5-dichlorobiphenyl	34883-41-5	C ₁₂ H ₈ Cl ₂
2,4'-dichlorobiphenyl	34883-43-7	C ₁₂ H ₈ Cl ₂
2,3-dichlorobiphenyl	16605-91-7	C ₁₂ H ₈ Cl ₂
3,3'-dichlorobiphenyl	2050-67-1	C ₁₂ H ₈ Cl ₂
2,?,?-Trichlorobiphenyl	111276-78-9	C ₁₂ H ₇ Cl ₃
Aroclor 1016	12674-11-2	C ₁₂ H ₇ Cl ₃
Trichlorobiphenyl	25323-68-6	C ₁₂ H ₇ Cl ₃
ar,ar,ar-Trichlorobiphenyl	30605-61-9	C ₁₂ H ₇ Cl ₃
2,4,6-trichlorobiphenyl	35693-92-6	C ₁₂ H ₇ Cl ₃
2,2',5-trichlorobiphenyl	37680-65-2	C ₁₂ H ₇ Cl ₃
2,2',4-trichlorobiphenyl	37680-66-3	C ₁₂ H ₇ Cl ₃
2,3',5'-trichlorobiphenyl	37680-68-5	C ₁₂ H ₇ Cl ₃
3,3',4-trichlorobiphenyl	37680-69-6	C ₁₂ H ₇ Cl ₃
2,2',6-trichlorobiphenyl	38444-73-4	C ₁₂ H ₇ Cl ₃
2,3',6-trichlorobiphenyl	38444-76-7	C ₁₂ H ₇ Cl ₃
2,4',6-trichlorobiphenyl	38444-77-8	C ₁₂ H ₇ Cl ₃
2,2',3-trichlorobiphenyl	38444-78-9	C ₁₂ H ₇ Cl ₃
2,3',5-trichlorobiphenyl	38444-81-4	C ₁₂ H ₇ Cl ₃
2,3,3'-trichlorobiphenyl	38444-84-7	C ₁₂ H ₇ Cl ₃
2,3,4'-trichlorobiphenyl	38444-85-8	C ₁₂ H ₇ Cl ₃
2',3,4-trichlorobiphenyl	38444-86-9	C ₁₂ H ₇ Cl ₃
3,3',5-trichlorobiphenyl	38444-87-0	C ₁₂ H ₇ Cl ₃
3,4',5-trichlorobiphenyl	38444-88-1	C ₁₂ H ₇ Cl ₃
3,4,4'-trichlorobiphenyl	38444-90-5	C ₁₂ H ₇ Cl ₃
3,4,5-trichlorobiphenyl	53555-66-1	C ₁₂ H ₇ Cl ₃
2,3,6-trichlorobiphenyl	55702-45-9	C ₁₂ H ₇ Cl ₃
2,3,4-trichlorobiphenyl	55702-46-0	C ₁₂ H ₇ Cl ₃
2,3',4-trichlorobiphenyl	55712-37-3	C ₁₂ H ₇ Cl ₃
2,3,5-trichlorobiphenyl	55720-44-0	C ₁₂ H ₇ Cl ₃
2,4,4' (or 3,4,4') -trichlorobiphenyl	62461-62-5	C ₁₂ H ₇ Cl ₃
2,4,4'-trichlorophenyl	7012-37-5	C ₁₂ H ₇ Cl ₃
2,4',? -trichlorobiphenyl	94487-00-0	C ₁₂ H ₇ Cl ₃
2,3,?' (or 3,4,?)-trichlorobiphenyl	97122-18-4	C ₁₂ H ₇ Cl ₃
2,4,?' (2,6,?' or 3,5,?')-trichlorobiphenyl	97122-20-8	C ₁₂ H ₇ Cl ₃
2,4,5-bird chlorobiphenyl	15862-07-4	C ₁₂ H ₇ Cl ₃
1,1'-Biphenyl, 2,4',5-trichloro-	16606-02-3	C ₁₂ H ₇ Cl ₃
Aroclor 1248	12672-29-6	C ₁₂ H ₆ Cl ₄
(+) -2,2',3,6-tetrachlorobiphenyl	151262-31-6	C ₁₂ H ₆ Cl ₄
(-) -2,2',3,6-tetrachlorobiphenyl	151262-32-7	C ₁₂ H ₆ Cl ₄
2,2',4,4'-Tetrachlorobiphenyl	2437-79-8	C ₁₂ H ₆ Cl ₄
Tetrachlorobiphenyl	26914-33-0	C ₁₂ H ₆ Cl ₄
2,3',4,4'-tetrachlorobiphenyl	32598-10-0	C ₁₂ H ₆ Cl ₄
2,3',4',5-tetrachlorobiphenyl	32598-11-1	C ₁₂ H ₆ Cl ₄

2,4,4',6-tetrachlorobiphenyl	32598-12-2	C ₁₂ H ₆ Cl ₄
3,3',4,4'-TETRACHLOROBIPHENYL	32598-13-3	C ₁₂ H ₆ Cl ₄
2,4,4',5-tetrachlorobiphenyl	32690-93-0	C ₁₂ H ₆ Cl ₄
2,3,4,4'-tetrachlorobiphenyl	33025-41-1	C ₁₂ H ₆ Cl ₄
3,3',5,5'-tetrachlorobiphenyl	33284-52-5	C ₁₂ H ₆ Cl ₄
2,3,4,5-tetrachlorobiphenyl	33284-53-6	C ₁₂ H ₆ Cl ₄
2,3,5,6-tetrachlorobiphenyl	33284-54-7	C ₁₂ H ₆ Cl ₄
2,2',5,5'-tetrachlorobiphenyl	35693-99-3	C ₁₂ H ₆ Cl ₄
2,2',3,4'-tetrachlorobiphenyl	36559-22-5	C ₁₂ H ₆ Cl ₄
2,2',3,3'-tetrachlorobiphenyl	38444-93-8	C ₁₂ H ₆ Cl ₄
2,2',3,5'-tetrachlorobiphenyl	41464-39-5	C ₁₂ H ₆ Cl ₄
2,2',4,5'-tetrachlorobiphenyl	41464-40-8	C ₁₂ H ₆ Cl ₄
2,2',5,6'-tetrachlorobiphenyl	41464-41-9	C ₁₂ H ₆ Cl ₄
2,3',5,5'-tetrachlorobiphenyl	41464-42-0	C ₁₂ H ₆ Cl ₄
2,3,3',4'-tetrachlorobiphenyl	41464-43-1	C ₁₂ H ₆ Cl ₄
2,3',4',6-tetrachlorobiphenyl	41464-46-4	C ₁₂ H ₆ Cl ₄
2,2',3,6'-tetrachlorobiphenyl	41464-47-5	C ₁₂ H ₆ Cl ₄
3,3',4,5'-tetrachlorobiphenyl	41464-48-6	C ₁₂ H ₆ Cl ₄
2,3,3',5'-tetrachlorobiphenyl	41464-49-7	C ₁₂ H ₆ Cl ₄
2,3,4',6-tetrachlorobiphenyl	52663-58-8	C ₁₂ H ₆ Cl ₄
2,2',3,4-tetrachlorobiphenyl	52663-59-9	C ₁₂ H ₆ Cl ₄
Aroclor 1242	53469-21-9	C ₁₂ H ₆ Cl ₄
2,3,4,6-tetrachlorobiphenyl	54230-22-7	C ₁₂ H ₆ Cl ₄
2,3',4,6-tetrachlorobiphenyl	60233-24-1	C ₁₂ H ₆ Cl ₄
2,2',4,6-tetrachlorobiphenyl	62796-65-0	C ₁₂ H ₆ Cl ₄
2,2',4,6'-tetrachloro biphenyl	68194-04-7	C ₁₂ H ₆ Cl ₄
2,2',3,6-tetrachlorobiphenyl	70362-45-7	C ₁₂ H ₆ Cl ₄
2,2',3,5-tetrachlorobiphenyl	70362-46-8	C ₁₂ H ₆ Cl ₄
2,2',4,5-tetrachlorobiphenyl	70362-47-9	C ₁₂ H ₆ Cl ₄
2,3',4',5'-tetrachlorobiphenyl	70362-48-0	C ₁₂ H ₆ Cl ₄
3,3',4,5-tetrachlorobiphenyl	70362-49-1	C ₁₂ H ₆ Cl ₄
3,4,4',5-tetrachlorobiphenyl	70362-50-4	C ₁₂ H ₆ Cl ₄
2,3,3',5-tetrachlorobiphenyl	70424-67-8	C ₁₂ H ₆ Cl ₄
2,3',4,5'-tetrachlorobiphenyl	73575-52-7	C ₁₂ H ₆ Cl ₄
2,3',4,5-tetrachlorobiphenyl	73575-53-8	C ₁₂ H ₆ Cl ₄
2,3',5,6-tetrachlorobiphenyl	74338-23-1	C ₁₂ H ₆ Cl ₄
2,3,3',4-tetrachlorobiphenyl	74338-24-2	C ₁₂ H ₆ Cl ₄
2,3,3',6-tetrachlorobiphenyl	74472-33-6	C ₁₂ H ₆ Cl ₄
2,3,4',5-tetrachlorobiphenyl	74472-34-7	C ₁₂ H ₆ Cl ₄
2,2',6,6'-tetrachlorobiphenyl	15968-05-5	C ₁₂ H ₆ Cl ₄
Aroclor 1254	11097-69-1	C ₁₂ H ₅ Cl ₅
2,4,4',?,? -Pentachlorobiphenyl	111276-75-6	C ₁₂ H ₅ Cl ₅
2,2',6',?,? -Pentachlorobiphenyl	111276-76-7	C ₁₂ H ₅ Cl ₅
4,4',?,?,? -Pentachlorobiphenyl	111276-81-4	C ₁₂ H ₅ Cl ₅
(+) -2,2',3,5',6-pentachlorobiphenyl	151262-34-9	C ₁₂ H ₅ Cl ₅
(-) -2,2',3,5',6-pentachlorobiphenyl	151262-35-0	C ₁₂ H ₅ Cl ₅
(S)-2,2',3,3',6-pentachlorobiphenyl	153153-43-6	C ₁₂ H ₅ Cl ₅
(R)-2,2',3,3',6-pentachlorobiphenyl	153153-44-7	C ₁₂ H ₅ Cl ₅
(S)-2,2',3,4',6-pentachlorobiphenyl	153153-45-8	C ₁₂ H ₅ Cl ₅
(R)-2,2',3,4',6-pentachlorobiphenyl	153153-46-9	C ₁₂ H ₅ Cl ₅
(+) -2,2',3,3',6-pentachlorobiphenyl	207004-27-1	C ₁₂ H ₅ Cl ₅

pentachloro[1,1'-biphenyl]	25429-29-2	C ₁₂ H ₅ Cl ₅
2,3',4,4',5-pentachlorobiphenyl	31508-00-6	C ₁₂ H ₅ Cl ₅
2,3,3',4,4'-pentachlorobiphenyl	32598-14-4	C ₁₂ H ₅ Cl ₅
2,2',4,5,5'-pentachlorobiphenyl	37680-73-2	C ₁₂ H ₅ Cl ₅
2,2',3,5',6-pentachlorobiphenyl	38379-99-6	C ₁₂ H ₅ Cl ₅
2,2',4,4',5-pentachlorobiphenyl	38380-01-7	C ₁₂ H ₅ Cl ₅
2,2',3,4,5'-pentachlorobiphenyl	38380-02-8	C ₁₂ H ₅ Cl ₅
2,3,3',4',6-pentachlorobiphenyl	38380-03-9	C ₁₂ H ₅ Cl ₅
2,2',4,4',6-pentachlorobiphenyl	39485-83-1	C ₁₂ H ₅ Cl ₅
2,3,3',5,5'-pentachlorobiphenyl	39635-32-0	C ₁₂ H ₅ Cl ₅
3,3',4,5,5'-pentachlorobiphenyl	39635-33-1	C ₁₂ H ₅ Cl ₅
2,2',3,4',5'-pentachlorobiphenyl	41464-51-1	C ₁₂ H ₅ Cl ₅
2,2',3,3',6-pentachlorobiphenyl	52663-60-2	C ₁₂ H ₅ Cl ₅
2,2',3,5,5'-pentachlorobiphenyl	52663-61-3	C ₁₂ H ₅ Cl ₅
2,2',3,3',4-pentachlorobiphenyl	52663-62-4	C ₁₂ H ₅ Cl ₅
(±)-2,2',3,4,6-pentachlorobiphenyl	55215-17-3	C ₁₂ H ₅ Cl ₅
2,2',3,4,5-pentachlorobiphenyl	55312-69-1	C ₁₂ H ₅ Cl ₅
2,2',4,6,6'-pentachlorobiphenyl	56558-16-8	C ₁₂ H ₅ Cl ₅
2,3',4,4',6-pentachlorobiphenyl	56558-17-9	C ₁₂ H ₅ Cl ₅
2,3',4,5',6-pentachlorobiphenyl	56558-18-0	C ₁₂ H ₅ Cl ₅
3,3',4,4',5-pentachlorobiphenyl	57465-28-8	C ₁₂ H ₅ Cl ₅
2,2',3,3',5-pentachlorobiphenyl	60145-20-2	C ₁₂ H ₅ Cl ₅
2,2',4,5',6-pentachlorobiphenyl	60145-21-3	C ₁₂ H ₅ Cl ₅
2,2',3,4',6'-pentachlorobiphenyl	60233-25-2	C ₁₂ H ₅ Cl ₅
2',3,4,4',5-pentachlorobiphenyl	65510-44-3	C ₁₂ H ₅ Cl ₅
2,2',3,4,4'-pentachlorobiphenyl	65510-45-4	C ₁₂ H ₅ Cl ₅
2,2',3,4',6-pentachlorobiphenyl	68194-05-8	C ₁₂ H ₅ Cl ₅
2,2',4,5,6'-pentachlorobiphenyl	68194-06-9	C ₁₂ H ₅ Cl ₅
2,2',3,4',5-pentachlorobiphenyl	68194-07-0	C ₁₂ H ₅ Cl ₅
2,3,3',5',6-pentachlorobiphenyl	68194-10-5	C ₁₂ H ₅ Cl ₅
2,3,4',5,6-pentachlorobiphenyl	68194-11-6	C ₁₂ H ₅ Cl ₅
2,3',4,5,5'-pentachlorobiphenyl	68194-12-7	C ₁₂ H ₅ Cl ₅
2,3,3',4,5'-pentachlorobiphenyl	70362-41-3	C ₁₂ H ₅ Cl ₅
2,3,3',4',5-pentachlorobiphenyl	70424-68-9	C ₁₂ H ₅ Cl ₅
2,3,3',4,5-pentachlorobiphenyl	70424-69-0	C ₁₂ H ₅ Cl ₅
2,3',4',5,5'-pentachlorobiphenyl	70424-70-3	C ₁₂ H ₅ Cl ₅
2,2',3,6,6'-pentachlorobiphenyl	73575-54-9	C ₁₂ H ₅ Cl ₅
2,2',3,5,6'-pentachlorobiphenyl	73575-55-0	C ₁₂ H ₅ Cl ₅
2,2',3,5,6-pentachlorobiphenyl	73575-56-1	C ₁₂ H ₅ Cl ₅
2,2',3,4,6'-pentachlorobiphenyl	73575-57-2	C ₁₂ H ₅ Cl ₅
2,3,3',4,6-pentachlorobiphenyl	74472-35-8	C ₁₂ H ₅ Cl ₅
2,3,3',5,6-pentachlorobiphenyl	74472-36-9	C ₁₂ H ₅ Cl ₅
2,3,4,4',5-pentachlorobiphenyl	74472-37-0	C ₁₂ H ₅ Cl ₅
2,3,4,4',6-pentachlorobiphenyl	74472-38-1	C ₁₂ H ₅ Cl ₅
2,3',4',5',6-pentachlorobiphenyl	74472-39-2	C ₁₂ H ₅ Cl ₅
2,3,3',4',5'-pentachlorobiphenyl	76842-07-4	C ₁₂ H ₅ Cl ₅
(±)-2,2',3,4,6-pentachlorobiphenyl	99554-08-2	C ₁₂ H ₅ Cl ₅
(+)-2,2',3,4,6-pentachlorobiphenyl	99554-10-6	C ₁₂ H ₅ Cl ₅
(-)-2,2',3,4,6-pentachlorobiphenyl	99554-11-7	C ₁₂ H ₅ Cl ₅
2,3,4,5,6-pentachlorobiphenyl	18259-05-7	C ₁₂ H ₅ Cl ₅
2,2',3,4,4',5 (or 2,2',3,4,4',5') -Hexachloro biphenyl	108145-39-7	C ₁₂ H ₄ Cl ₆

2,2',3,6,6',? -Hexachlorobiphenyl	111276-74-5	C ₁₂ H ₄ Cl ₆
2,2',5,6',?,? -Hexachlorobiphenyl	111276-77-8	C ₁₂ H ₄ Cl ₆
4,4',?,?,? -Hexachlorobiphenyl	111276-79-0	C ₁₂ H ₄ Cl ₆
(S)-2,2',3,3',4,6'-hexachlorobiphenyl	153153-47-0	C ₁₂ H ₄ Cl ₆
(R)-2,2',3,3',4,6'-hexachlorobiphenyl	153153-48-1	C ₁₂ H ₄ Cl ₆
(S)-2,2',3,3',6,6'-hexachlorobiphenyl	153153-49-2	C ₁₂ H ₄ Cl ₆
(R)-2,2',3,3',6,6'-hexachlorobiphenyl	153153-50-5	C ₁₂ H ₄ Cl ₆
(R)-2,2',3,4',5',6-hexachlorobiphenyl	159000-96-1	C ₁₂ H ₄ Cl ₆
(S)-2,2',3,4',5',6-hexachlorobiphenyl	159000-97-2	C ₁₂ H ₄ Cl ₆
(R)-2,2',3,3',4,6-hexachlorobiphenyl	179678-26-3	C ₁₂ H ₄ Cl ₆
(S)-2,2',3,3',4,6-hexachlorobiphenyl	179678-27-4	C ₁₂ H ₄ Cl ₆
(R)-2,2',3,3',5,6'-hexachlorobiphenyl	205991-67-9	C ₁₂ H ₄ Cl ₆
(S)-2,2',3,3',5,6'-hexachlorobiphenyl	205991-68-0	C ₁₂ H ₄ Cl ₆
(R)-2,2',3,4,5',6-hexachlorobiphenyl	205991-69-1	C ₁₂ H ₄ Cl ₆
(S)-2,2',3,4,5',6-hexachlorobiphenyl	205991-70-4	C ₁₂ H ₄ Cl ₆
(+) -2,2',3,3',4,6'-hexachlorobiphenyl	207004-28-2	C ₁₂ H ₄ Cl ₆
(-) -2,2',3,3',5,6'-hexachlorobiphenyl	207004-29-3	C ₁₂ H ₄ Cl ₆
(+) -2,2',3,3',6,6'-hexachlorobiphenyl	207004-30-6	C ₁₂ H ₄ Cl ₆
(+) -2,2',3,3',4,6-hexachloro biphenyl	207004-33-9	C ₁₂ H ₄ Cl ₆
(+) -2,2',3,4',5',6-hexachlorobiphenyl	207004-36-2	C ₁₂ H ₄ Cl ₆
(+) -2,2',3,4,5',6-hexachlorobiphenyl	228420-06-2	C ₁₂ H ₄ Cl ₆
Hexachlorobiphenyl	26601-64-9	C ₁₂ H ₄ Cl ₆
3,4,5,3',4',5'-Hexachlorobiphenyl	32774-16-6	C ₁₂ H ₄ Cl ₆
2,2',4,4',6,6'-hexachlorobiphenyl	33979-03-2	C ₁₂ H ₄ Cl ₆
2,4,5,2',4',5'-Hexachlorobiphenyl	35065-27-1	C ₁₂ H ₄ Cl ₆
2,2',3,4,4',5'-hexachlorobiphenyl	35065-28-2	C ₁₂ H ₄ Cl ₆
2,2',3,3',5,5'-hexachlorobiphenyl	35694-04-3	C ₁₂ H ₄ Cl ₆
2,2',3,4,4',5-hexachlorobiphenyl	35694-06-5	C ₁₂ H ₄ Cl ₆
2,2',3,4',5',6-hexachlorobiphenyl	38380-04-0	C ₁₂ H ₄ Cl ₆
2,2',3,3',4,6'-hexachlorobiphenyl	38380-05-1	C ₁₂ H ₄ Cl ₆
2,2',3,3',4,4'-hexachlorobiphenyl	38380-07-3	C ₁₂ H ₄ Cl ₆
2,3,3',4,4',5-hexachlorobiphenyl	38380-08-4	C ₁₂ H ₄ Cl ₆
2,2',3,3',6,6'-hexachlorobiphenyl	38411-22-2	C ₁₂ H ₄ Cl ₆
2,3,3',4',5,5'-hexachlorobiphenyl	39635-34-2	C ₁₂ H ₄ Cl ₆
2,3,3',4,5,5'-hexachlorobiphenyl	39635-35-3	C ₁₂ H ₄ Cl ₆
2,2',3,4,5,6-hexachlorobiphenyl	41411-61-4	C ₁₂ H ₄ Cl ₆
2,3,3',4,5,6-hexachlorobiphenyl	41411-62-5	C ₁₂ H ₄ Cl ₆
2,3,4,4',5,6-hexachlorobiphenyl	41411-63-6	C ₁₂ H ₄ Cl ₆
2,2',3,4',5,5'-hexachlorobiphenyl	51908-16-8	C ₁₂ H ₄ Cl ₆
2,2',3,5,5',6-hexachlorobiphenyl	52663-63-5	C ₁₂ H ₄ Cl ₆
2,2',3,3',4,5'-hexachlorobiphenyl	52663-66-8	C ₁₂ H ₄ Cl ₆
2,3',4,4',5,5'-hexachlorobiphenyl	52663-72-6	C ₁₂ H ₄ Cl ₆
2,2',3,3',5,6-hexachlorobiphenyl	52704-70-8	C ₁₂ H ₄ Cl ₆
2,2',3,4,5,5'-hexachlorobiphenyl	52712-04-6	C ₁₂ H ₄ Cl ₆
2,2',3,3',5,6'-hexachlorobiphenyl	52744-13-5	C ₁₂ H ₄ Cl ₆
2,2',3,3',4,5-hexachlorobiphenyl	55215-18-4	C ₁₂ H ₄ Cl ₆
(±) -2,2',3,4,4',6-hexachlorobiphenyl	56030-56-9	C ₁₂ H ₄ Cl ₆
2,2',3,4,4',6'-hexachlorobiphenyl	59291-64-4	C ₁₂ H ₄ Cl ₆
2,3',4,4',5',6-hexachlorobiphenyl	59291-65-5	C ₁₂ H ₄ Cl ₆
2,2',4,4',5,6'-hexachlorobiphenyl	60145-22-4	C ₁₂ H ₄ Cl ₆
2,2',3,3',4,6-hexachlorobiphenyl	61798-70-7	C ₁₂ H ₄ Cl ₆

2,2',3,4',6,6'-hexachlorobiphenyl	68194-08-1	C ₁₂ H ₄ Cl ₆
2,2',3,5,6,6'-hexachlorobiphenyl	68194-09-2	C ₁₂ H ₄ Cl ₆
2,2',3,4',5,6-hexachlorobiphenyl	68194-13-8	C ₁₂ H ₄ Cl ₆
2,2',3,4,5',6-hexachlorobiphenyl	68194-14-9	C ₁₂ H ₄ Cl ₆
2,2',3,4,5,6'-hexachlorobiphenyl	68194-15-0	C ₁₂ H ₄ Cl ₆
2,3,3',4,4',5'-hexachlorobiphenyl	69782-90-7	C ₁₂ H ₄ Cl ₆
2,2',3,4,6,6'-hexachlorobiphenyl	74472-40-5	C ₁₂ H ₄ Cl ₆
2,2',3,4',5,6'-hexachlorobiphenyl	74472-41-6	C ₁₂ H ₄ Cl ₆
2,3,3',4,4',6-hexachlorobiphenyl	74472-42-7	C ₁₂ H ₄ Cl ₆
2,3,3',4,5',6-hexachlorobiphenyl	74472-43-8	C ₁₂ H ₄ Cl ₆
2,3,3',4',5,6-hexachlorobiphenyl	74472-44-9	C ₁₂ H ₄ Cl ₆
2,3,3',4',5',6-hexachlorobiphenyl	74472-45-0	C ₁₂ H ₄ Cl ₆
2,3,3',5,5',6-hexachlorobiphenyl	74472-46-1	C ₁₂ H ₄ Cl ₆
(±)-2,2',3,4,4',6-hexachlorobiphenyl	99554-09-3	C ₁₂ H ₄ Cl ₆
(+)-2,2',3,4,4',6-hexachlorobiphenyl	99554-12-8	C ₁₂ H ₄ Cl ₆
(-)-2,2',3,4,4',6-hexachlorobiphenyl	99554-13-9	C ₁₂ H ₄ Cl ₆
Aroclor 1260	11096-82-5	C ₁₂ H ₃ Cl ₇
2,2',5,6',?,?,-Heptachlorobiphenyl	111276-80-3	C ₁₂ H ₃ Cl ₇
(R)-2,2',3,3',4,4',6-heptachlorobiphenyl	176914-46-8	C ₁₂ H ₃ Cl ₇
(R)-2,2',3,4,4',5',6-heptachlorobiphenyl	176914-47-9	C ₁₂ H ₃ Cl ₇
(S)-2,2',3,3',4,4',6-heptachlorobiphenyl	176914-48-0	C ₁₂ H ₃ Cl ₇
(S)-2,2',3,4,4',5',6-heptachlorobiphenyl	176914-49-1	C ₁₂ H ₃ Cl ₇
(R)-2,2',3,3',4,5,6'-heptachlorobiphenyl	179678-28-5	C ₁₂ H ₃ Cl ₇
(S)-2,2',3,3',4,5,6'-heptachlorobiphenyl	179678-29-6	C ₁₂ H ₃ Cl ₇
(R)-2,2',3,3',4,5',6-heptachlorobiphenyl	179678-30-9	C ₁₂ H ₃ Cl ₇
(S)-2,2',3,3',4,5',6-heptachlorobiphenyl	179678-31-0	C ₁₂ H ₃ Cl ₇
(R)-2,2',3,3',4,6,6'-heptachlorobiphenyl	179678-32-1	C ₁₂ H ₃ Cl ₇
(S)-2,2',3,3',4,6,6'-heptachlorobiphenyl	179678-33-2	C ₁₂ H ₃ Cl ₇
(-)-2,2',3,3',4,5,6'-heptachlorobiphenyl	207004-31-7	C ₁₂ H ₃ Cl ₇
(+)-2,2',3,3',4,6,6'-heptachlorobiphenyl	207004-32-8	C ₁₂ H ₃ Cl ₇
(+)-2,2',3,3',4,5',6-heptachlorobiphenyl	207004-34-0	C ₁₂ H ₃ Cl ₇
(+)-2,2',3,4,4',5',6-heptachlorobiphenyl	228420-07-3	C ₁₂ H ₃ Cl ₇
Heptachloro-1,1'-biphenyl	28655-71-2	C ₁₂ H ₃ Cl ₇
2,2',3,4,4',5,5'-heptachlorobiphenyl	35065-29-3	C ₁₂ H ₃ Cl ₇
2,2',3,3',4,4',5-heptachlorobiphenyl	35065-30-6	C ₁₂ H ₃ Cl ₇
2,2',3,3',4,5,6'-heptachlorobiphenyl	38411-25-5	C ₁₂ H ₃ Cl ₇
2,3,3',4,4',5,5'-heptachlorobiphenyl	39635-31-9	C ₁₂ H ₃ Cl ₇
2,2',3,3',4,5',6-heptachlorobiphenyl	40186-70-7	C ₁₂ H ₃ Cl ₇
2,3,3',4,4',5,6-heptachlorobiphenyl	41411-64-7	C ₁₂ H ₃ Cl ₇
2,2',3,3',5,6,6'-heptachlorobiphenyl	52663-64-6	C ₁₂ H ₃ Cl ₇
2,2',3,3',4,6,6'-heptachlorobiphenyl	52663-65-7	C ₁₂ H ₃ Cl ₇
2,2',3,3',5,5',6-heptachlorobiphenyl	52663-67-9	C ₁₂ H ₃ Cl ₇
2,2',3,4',5,5',6-heptachlorobiphenyl	52663-68-0	C ₁₂ H ₃ Cl ₇
2,2',3,4,4',5',6-heptachlorobiphenyl	52663-69-1	C ₁₂ H ₃ Cl ₇
2,2',3,3',4,5',6'-heptachlorobiphenyl	52663-70-4	C ₁₂ H ₃ Cl ₇
2,2',3,3',4,4',6-heptachlorobiphenyl	52663-71-5	C ₁₂ H ₃ Cl ₇
2,2',3,3',4,5,5'-heptachlorobiphenyl	52663-74-8	C ₁₂ H ₃ Cl ₇
2,2',3,4,5,5',6-heptachlorobiphenyl	52712-05-7	C ₁₂ H ₃ Cl ₇
2,2',3,4,4',5,6'-heptachlorobiphenyl	60145-23-5	C ₁₂ H ₃ Cl ₇
2,2',3,3',4,5,6-heptachlorobiphenyl	68194-16-1	C ₁₂ H ₃ Cl ₇
2,3,3',4',5,5',6-heptachlorobiphenyl	69782-91-8	C ₁₂ H ₃ Cl ₇

2,2',3,4,4',5,6-heptachlorobiphenyl	74472-47-2	C ₁₂ H ₃ Cl ₇
2,2',3,4,4',6,6'-heptachlorobiphenyl	74472-48-3	C ₁₂ H ₃ Cl ₇
2,2',3,4,5,6,6'-heptachlorobiphenyl	74472-49-4	C ₁₂ H ₃ Cl ₇
2,3,3',4,4',5',6-heptachlorobiphenyl	74472-50-7	C ₁₂ H ₃ Cl ₇
2,3,3',4,5,5',6-heptachlorobiphenyl	74472-51-8	C ₁₂ H ₃ Cl ₇
2,2',3,4',5,6,6'-heptachlorobiphenyl	74487-85-7	C ₁₂ H ₃ Cl ₇
(R)-2,2',3,3',4,4',6,6'-octachlorobiphenyl	109328-45-2	C ₁₂ H ₂ Cl ₈
(S)-2,2',3,3',4,4',6,6'-octachlorobiphenyl	109328-46-3	C ₁₂ H ₂ Cl ₈
2,3,3',4,4',5,5',? -Octachlorobiphenyl	111276-82-5	C ₁₂ H ₂ Cl ₈
2,2',5,6',?, ?, ? -Octachlorobiphenyl	111276-83-6	C ₁₂ H ₂ Cl ₈
(R)-2,2',3,3',4,4',5,6'-octachlorobiphenyl	177020-15-4	C ₁₂ H ₂ Cl ₈
(S)-2,2',3,3',4,4',5,6'-octachlorobiphenyl	177020-16-5	C ₁₂ H ₂ Cl ₈
(+)-2,2',3,3',4,4',5,6'-octachlorobiphenyl	207004-35-1	C ₁₂ H ₂ Cl ₈
2,2',3,3',5,5',6,6'-octachlorobiphenyl	2136-99-4	C ₁₂ H ₂ Cl ₈
Tetrachloro(tetrachlorophenyl)benzene	31472-83-0	C ₁₂ H ₂ Cl ₈
2,2',3,3',4,4',6,6'-octachlorobiphenyl	33091-17-7	C ₁₂ H ₂ Cl ₈
2,2',3,3',4,4',5,5'-octachlorobiphenyl	35694-08-7	C ₁₂ H ₂ Cl ₈
2,2',3,3',4,5',6,6'-octachlorobiphenyl	40186-71-8	C ₁₂ H ₂ Cl ₈
2,2',3,3',4,4',5,6'-octachlorobiphenyl	42740-50-1	C ₁₂ H ₂ Cl ₈
2,2',3,3',4,5,6,6'-octachlorobiphenyl	52663-73-7	C ₁₂ H ₂ Cl ₈
2,2',3,3',4,5,5',6'-octachlorobiphenyl	52663-75-9	C ₁₂ H ₂ Cl ₈
2,2',3,4,4',5,5',6-octachlorobiphenyl	52663-76-0	C ₁₂ H ₂ Cl ₈
2,2',3,3',4,4',5,6-octachlorobiphenyl	52663-78-2	C ₁₂ H ₂ Cl ₈
Octachlorobiphenyl	55722-26-4	C ₁₂ H ₂ Cl ₈
2,2',3,3',4,5,5',6-octachlorobiphenyl	68194-17-2	C ₁₂ H ₂ Cl ₈
2,2',3,4,4',5,6,6'-octachlorobiphenyl	74472-52-9	C ₁₂ H ₂ Cl ₈
2,3,3',4,4',5,5',6-octachlorobiphenyl	74472-53-0	C ₁₂ H ₂ Cl ₈
2,2',3,3',4,4',5,5',6-nonachlorophenyl	40186-72-9	C ₁₂ HCl ₉
2,2',3,3',4,5,5',6,6'-nonachlorophenyl	52663-77-1	C ₁₂ HCl ₉
2,2',3,3',4,4',5,6,6'-nonachlorophenyl	52663-79-3	C ₁₂ HCl ₉
Nonachloro-1,1'-biphenyl	53742-07-7	C ₁₂ HCl ₉
2,2',3,3',4,4',5,5',6,6'-decachlorobiphenyl	2051-24-3	C ₁₂ Cl ₁₀
Aroclor (9Cl)	12767-79-2	(C ₆ -C ₆)H _x Cl _y
Aroclor 1221	11104-28-2	-
Aroclor 1232	11141-16-5	-
Aroclor 5442	12642-23-8	-
Polychlorinated biphenyl (KANECHLOR 500)	37317-41-2	-
Terphenyl, chlorinated	61788-33-8	C ₁₈ H _{14-n} Cl _n (n=1~14)
Aroclor 5460	11126-42-4	C ₁₈ H ₅ Cl ₉

3. Polychlorinated terphenyl (PCT)

Application example: Insulating oils, lubricant, Electric insulation medium, Paint solvent etc.

Major harmfulness: Injurious to liver and skin

Name of substance	CAS No.	Chemical Formula
Polychlorinated terphenyl	61788-33-8	C ₁₈ H _{14-n} Cl _n (n=1~14)

4. Polychlorinated Naphthalenes (PCN)/(3 or more chlorine atoms)

Application example: Plasticizer, lubricating oil additive, inhibitor, etc.

Major harmfulness: Injurious to liver and skin

Name of substance	CAS No.	Chemical Formula
Naphthalene, chloro derivatives	70776-03-3	C ₁₀ H _{8-x} Cl _x (x ≥ 1)

Octachloronaphthalene	2234-13-1	C ₁₀ Cl ₈
Heptachloronaphthalene	32241-08-0	C ₁₀ HCl ₇
1,2,3,4,5,6,7-heptachloronaphthalene	58863-14-2	C ₁₀ HCl ₇
1,2,3,4,5,6,8-heptachloronaphthalene	58863-15-3	C ₁₀ HCl ₇
1,2,4,5,7,8-hexachloronaphthalene	103426-92-2	C ₁₀ H ₂ Cl ₆
1,2,3,4,5,8-hexachloronaphthalene	103426-93-3	C ₁₀ H ₂ Cl ₆
1,2,3,5,7,8-hexachloronaphthalene	103426-94-4	C ₁₀ H ₂ Cl ₆
1,2,3,5,6,8-hexachloronaphthalene	103426-95-5	C ₁₀ H ₂ Cl ₆
1,2,3,4,6,7-hexachloronaphthalene	103426-96-6	C ₁₀ H ₂ Cl ₆
1,2,3,5,6,7-hexachloronaphthalene	103426-97-7	C ₁₀ H ₂ Cl ₆
Hexachloronaphthalene	1335-87-1	C ₁₀ H ₂ Cl ₆
1,2,3,6,7,8-hexachloronaphthalene	17062-87-2	C ₁₀ H ₂ Cl ₆
1,2,3,4,5,6-hexachloronaphthalene	58877-88-6	C ₁₀ H ₂ Cl ₆
1,2,3,4,5,7-hexachloronaphthalene	67922-27-4	C ₁₀ H ₂ Cl ₆
1,2,4,5,6,8-hexachloronaphthalene	90948-28-0	C ₁₀ H ₂ Cl ₆
Pentachloronaphthalene	1321-64-8	C ₁₀ H ₃ Cl ₅
1,2,3,7,8-pentachloronaphthalene	150205-21-3	C ₁₀ H ₃ Cl ₅
1,2,3,6,7-pentachloronaphthalene	150224-16-1	C ₁₀ H ₃ Cl ₅
1,2,4,6,7-pentachloronaphthalene	150224-17-2	C ₁₀ H ₃ Cl ₅
1,2,3,5,6-pentachloronaphthalene	150224-18-3	C ₁₀ H ₃ Cl ₅
1,2,4,5,7-pentachloronaphthalene	150224-19-4	C ₁₀ H ₃ Cl ₅
1,2,4,5,6-pentachloronaphthalene	150224-20-7	C ₁₀ H ₃ Cl ₅
1,2,4,7,8-pentachloronaphthalene	150224-21-8	C ₁₀ H ₃ Cl ₅
1,2,4,6,8-pentachloronaphthalene	150224-22-9	C ₁₀ H ₃ Cl ₅
1,2,3,6,8-pentachloronaphthalene	150224-23-0	C ₁₀ H ₃ Cl ₅
1,2,3,5,8-pentachloronaphthalene	150224-24-1	C ₁₀ H ₃ Cl ₅
1,2,4,5,8-pentachloronaphthalene	150224-25-2	C ₁₀ H ₃ Cl ₅
1,2,3,5,7-pentachloronaphthalene	53555-65-0	C ₁₀ H ₃ Cl ₅
1,2,3,4,5-pentachloronaphthalene	67922-25-2	C ₁₀ H ₃ Cl ₅
1,2,3,4,6-pentachloronaphthalene	67922-26-3	C ₁₀ H ₃ Cl ₅
Tetrachloronaphthalene	1335-88-2	C ₁₀ H ₄ Cl ₄
1,2,3,6-tetrachloronaphthalene	149864-78-8	C ₁₀ H ₄ Cl ₄
1,2,6,7-tetrachloronaphthalene	149864-79-9	C ₁₀ H ₄ Cl ₄
1,2,5,8-tetrachloronaphthalene	149864-80-2	C ₁₀ H ₄ Cl ₄
1,2,3,8-tetrachloronaphthalene	149864-81-3	C ₁₀ H ₄ Cl ₄
1,2,7,8-tetrachloronaphthalene	149864-82-4	C ₁₀ H ₄ Cl ₄
1,3,6,8-tetrachloronaphthalene	150224-15-0	C ₁₀ H ₄ Cl ₄
1,2,3,4-tetrachloronaphthalene	20020-02-4	C ₁₀ H ₄ Cl ₄
1,3,5,8-tetrachloronaphthalene	31604-28-1	C ₁₀ H ₄ Cl ₄
1,4,5,8-tetrachloronaphthalene	3432-57-3	C ₁₀ H ₄ Cl ₄
2,3,6,7-tetrachloronaphthalene	34588-40-4	C ₁₀ H ₄ Cl ₄
1,2,4,6-tetrachloronaphthalene	51570-45-7	C ₁₀ H ₄ Cl ₄
1,2,3,5-tetrachloronaphthalene	53555-63-8	C ₁₀ H ₄ Cl ₄
1,3,5,7-tetrachloronaphthalene	53555-64-9	C ₁₀ H ₄ Cl ₄
1,2,3,7-tetrachloronaphthalene	55720-41-7	C ₁₀ H ₄ Cl ₄
1,3,6,7-tetrachloronaphthalene	55720-42-8	C ₁₀ H ₄ Cl ₄
1,4,6,7-tetrachloronaphthalene	55720-43-9	C ₁₀ H ₄ Cl ₄
1,2,4,8-tetrachloronaphthalene	6529-87-9	C ₁₀ H ₄ Cl ₄
1,2,4,5-tetrachloronaphthalene	6733-54-6	C ₁₀ H ₄ Cl ₄
1,2,4,7-tetrachloronaphthalene	67922-21-8	C ₁₀ H ₄ Cl ₄
1,2,5,6-tetrachloronaphthalene	67922-22-9	C ₁₀ H ₄ Cl ₄

1,2,5,7-tetrachloronaphthalene	67922-23-0	C ₁₀ H ₄ Cl ₄
1,2,6,8-tetrachloronaphthalene	67922-24-1	C ₁₀ H ₄ Cl ₄
Naphthalene, trichloro-	1321-65-9	C ₁₀ H ₅ Cl ₃
1,4,6-trichloronaphthalene	2437-54-9	C ₁₀ H ₅ Cl ₃
1,4,5-trichloronaphthalene	2437-55-0	C ₁₀ H ₅ Cl ₃
1,2,4-trichloronaphthalene	50402-51-2	C ₁₀ H ₅ Cl ₃
1,2,3-trichloronaphthalene	50402-52-3	C ₁₀ H ₅ Cl ₃
1,3,5-trichloronaphthalene	51570-43-5	C ₁₀ H ₅ Cl ₃
1,2,6-trichloronaphthalene	51570-44-6	C ₁₀ H ₅ Cl ₃
1,2,5-trichloronaphthalene	55720-33-7	C ₁₀ H ₅ Cl ₃
1,2,7-trichloronaphthalene	55720-34-8	C ₁₀ H ₅ Cl ₃
1,2,8-trichloronaphthalene	55720-35-9	C ₁₀ H ₅ Cl ₃
1,3,6-trichloronaphthalene	55720-36-0	C ₁₀ H ₅ Cl ₃
1,3,7-trichloronaphthalene	55720-37-1	C ₁₀ H ₅ Cl ₃
1,3,8-trichloronaphthalene	55720-38-2	C ₁₀ H ₅ Cl ₃
1,6,7-trichloronaphthalene	55720-39-3	C ₁₀ H ₅ Cl ₃
2,3,6-trichloronaphthalene	55720-40-6	C ₁₀ H ₅ Cl ₃
Dichloronaphthalene	28699-88-9	C ₁₀ H ₆ Cl ₂
1,2-Dichloronaphthalene	2050-69-3	C ₁₀ H ₆ Cl ₂
1,3-Dichloronaphthalene	1825-30-5	C ₁₀ H ₆ Cl ₂
1,4-Dichloronaphthalene	1825-31-6	C ₁₀ H ₆ Cl ₂
1,5-Dichloronaphthalene	1825-30-5	C ₁₀ H ₆ Cl ₂
1,6-Dichloronaphthalene	2050-72-8	C ₁₀ H ₆ Cl ₂
1,7-Dichloronaphthalene	2050-73-9	C ₁₀ H ₆ Cl ₂
1,8-Dichloronaphthalene	2050-74-0	C ₁₀ H ₆ Cl ₂
2,3-Dichloronaphthalene	2050-75-1	C ₁₀ H ₆ Cl ₂
2,4-Dichloronaphthalene	2198-75-6	C ₁₀ H ₆ Cl ₂
2,5-Dichloronaphthalene	3172-52-9	C ₁₀ H ₆ Cl ₂
2,6-Dichloronaphthalene	2065-70-5	C ₁₀ H ₆ Cl ₂
2,7-Dichloronaphthalene	2198-77-8	C ₁₀ H ₆ Cl ₂
* 1-Chloronaphthalene	90-13-1	C ₁₀ H ₇ Cl
* 2-Chloronaphthalene	91-58-7	C ₁₀ H ₇ Cl

5.Short chain chlorinated paraffin

Application example:Chlorinated paraffin: Primer, flame retarder, etc.

Major harmfulness: Risk to create dioxin when incinerated.

Name of substance	CAS No.	Chemical Formula
Chlorinated paraffin, Chloroparaffin C10-13		
Alkanes, C10-13, chloro	85535-84-8	-
Paraffin waxes, chloro	63449-39-8	-
Chlorinated n-paraffins (C6-18)	68920-70-7	-
Alkanes, C12-13, chloro	71011-12-6	-
Alkanes, C10-21, chloro	84082-38-2	-
Chlorinatedparaffins(C12,60%Chlorine)	108171-26-2	C ₁₀ H ₁₆ Cl ₆
Decachloroundecane	276673-33-7	C ₁₁ H ₁₄ Cl ₁₀
1,1,1,3,5,7,9,11,11-nonachloroundecane	18993-26-5	C ₁₁ H ₁₅ Cl ₉
Nonachloroundecane	219697-11-7	C ₁₁ H ₁₅ Cl ₉
1,2,10,11,?,?,?,? -Octachloroundecane	221174-07-8	C ₁₁ H ₁₆ Cl ₈
Octachloroundecane	36312-81-9	C ₁₁ H ₁₆ Cl ₈
1,1,1,3,6,7,10,11-octachloroundecane	601523-20-0	C ₁₁ H ₁₆ Cl ₈
1,1,1,3,9,11,11,11-octachloroundecane	601523-25-5	C ₁₁ H ₁₆ Cl ₈

Heptachloroundecane	219697-10-6	C ₁₁ H ₁₇ Cl ₇
1-chloroundecane	2473-03-2	C ₁₁ H ₂₃ Cl
Laurylchloride	112-52-7	C ₁₂ H ₂₅ Cl
1-chlorotridecane	822-13-9	C ₁₃ H ₂₇ Cl

6. Asbestos : Brake lining, insulator

Application example: heat insulator gasket, etc. Major harmfulness: Asbestosis , lung cancer

Name of substance	CAS No.	Chemical Formula
Asbestos	1332-21-4	-
Anthophyllite	17068-78-9	(Mg, Fe) ₇ Si ₈ O ₂₂ (OH) ₂
Asbestos, anthophyllite	77536-67-5	(Mg, Fe) ₇ Si ₈ O ₂₂ (OH) ₂
Actinolite	12172-67-7	Ca ₂ (Mg, Fe) ₅ Si ₈ O ₂₂ (OH) ₂
Actinolite	13768-00-8	Ca ₂ (Mg, Fe) ₅ Si ₈ O ₂₂ (OH) ₂
Asbestos, actinolite	77536-66-4	Ca ₂ (Mg, Fe) ₅ Si ₈ O ₂₂ (OH) ₂
Tremolite	14567-73-8	Ca ₂ Mg ₅ Si ₈ O ₂₂ (OH) ₂
Asbestos, Tremolite	77536-68-6	Ca ₂ Mg ₅ Si ₈ O ₂₂ (OH) ₂
Asbestos, amosite	12172-73-5	Fe ₅ Mg ₂ (Si ₈ O ₂₂)(OH) ₂
Asbestos, chrysotile	12001-29-5	Mg ₃ (Si ₂ O ₅)(OH) ₄
Chrysotile	132207-32-0	Mg ₃ (Si ₂ O ₅)(OH) ₄
Asbestos, crocidolite	12001-28-4	Na ₂ Fe ²⁺ ₃ Fe ³⁺ ₂ Si ₈ O ₂₂ (OH) ₂
Crocidolite	132207-33-1	Na ₂ Fe ²⁺ ₃ Fe ³⁺ ₂ Si ₈ O ₂₂ (OH) ₂

7. Ozone-Depleting Substances (Class)/ (HCFC is excluded)

Application example: Bubble agent, Aerosol injection agent, Washing agent

Major harmfulness: Ozone-Depleting

Name of substance	CAS No.	Chemical Formula
l-Halothane	51230-18-3	C ₂ HBrClF ₃
d-Halothane	51230-17-2	C ₂ HBrClF ₃
Halone -3102 (dibromofluoropropane)	661-96-1	C ₃ Cl ₆ F ₂
1,1,1,2,2-pentachloro-3,3,3-trifluoropropane	1652-89-7	C ₃ Cl ₅ F ₃
1,1-difluorotetrachloroethane	76-11-9	C ₂ Cl ₄ F ₂
1,1,1,3-Tetrachlorotetrafluoropropane	2268-46-4	C ₃ Cl ₄ F ₄
1,1,1-Trichlorotrifluoroethane	354-58-5	C ₂ Cl ₃ F ₃
1,1,1-Trichloroethane	71-55-6	C ₂ H ₃ Cl ₃
1,1,1-Trichloropentafluoropropane	4259-43-2	C ₃ Cl ₃ F ₅
Tribromodifluoropropane	70192-80-2	C ₃ H ₃ Br ₃ F ₂
1,2-difluorotetrachloroethane	76-12-0	C ₂ Cl ₄ F ₂
1,1,2,2-tetrabromo-1-fluoroethane	306-80-9	C ₂ HFBr ₄
1,1,2-Trichlorotrifluoroethane	76-13-1	C ₂ Cl ₃ F ₃
Bromotrifluoroethylene	598-73-2	C ₂ BrF ₃
1,1,2-Tribromo-2-fluoroethane	598-67-4	C ₂ H ₂ Br ₃ F
Tribromoethylene	598-16-3	C ₂ HBr ₃
1,1,3-trichloropentafluoropropane	1652-81-9	C ₃ Cl ₃ F ₅
1,1-dichlorotetrafluoroethane	374-07-2	C ₂ Cl ₂ F ₄
1-bromo-1,1-difluoro-ethane	420-47-3	C ₂ H ₃ BrF ₂
Dibromotrifluoropropane	70192-83-5	C ₃ H ₃ Br ₂ F ₃
1,1-difluoro-2,2-dibromoethane	359-19-3	C ₂ H ₂ Br ₂ F ₂
1,1 – dibromodifluoroethylene	430-85-3	C ₂ Br ₂ F ₂
1,2,2-tribromo-3,3,3-trifluoropropane	421-90-9	C ₃ H ₂ Br ₃ F ₃
1,2,2-Trichloropentafluoropropane	1599-41-3	C ₃ Cl ₃ F ₅
Tribromofluoropropane	75372-14-4	C ₃ H ₄ Br ₃ F

1,2-dichlorotetrafluoroethane	76-14-2	C ₂ Cl ₂ F ₄
1,2-dibromotetrachloroethane	630-25-1	C ₂ Br ₂ Cl ₄
2,3-dibromo-1,1,1,3,3-pentafluoropropane	431-78-7	C ₃ HBr ₂ F ₅
1,2-dibromo-1,1-difluoroethane	75-82-1	C ₂ H ₂ Br ₂ F ₂
1, 3-dibromo-1-fluoropropane	51584-26-0	C ₃ H ₅ Br ₂ F
1,2-Dibromo-1,1,2-trichloroethane	13749-38-7	C ₂ H Br ₂ Cl ₃
1,2-Dibromo-1-chloro-1,2,2-trifluoroethane	354-51-8	C ₂ Br ₂ ClF ₃
1-chloro-1,1,2,2,3,3,3-heptafluoropropane	422-86-6	C ₃ ClF ₇
1-bromo-1-chlorodifluoroethylene	758-24-7	C ₂ BrClF ₂
1-Bromo-1,1,2,2,3,3-hexafluoropropane	63905-11-3	C ₃ HBrF ₆
1-bromo-1,1,2,2-tetrafluoroethane	354-07-4	C ₂ HBrF ₄
Bromopentafluoropropane	460-88-8	C ₃ H ₂ BrF ₅
1-bromo-1,1-difluoroethane	420-43-9	C ₂ H ₃ BrF ₂
Bromo-1,1-difluoroethane	359-08-0	C ₂ HBrF ₂
1-bromo-2-chloro-1,1,2-trifluoroethane	354-06-3	C ₂ HBrClF ₃
1-bromo-2-fluoro-propane-	1871-72-3	C ₃ H ₆ BrF
1-Bromo-3-fluoropropane	352-91-0	C ₃ H ₆ BrF
Bromopentafluoroethane	354-55-2	C ₂ BrF ₅
1,1,1-Tribromotrifluoroethane	354-48-3	C ₂ Br ₃ F ₃
1,1-Dibromo-1,2,2,2-tetrafluoroethane	27336-23-8	C ₂ Br ₂ F ₄
1,2-dibromo-3,3,3-trifluoropropane	431-21-0	C ₃ H ₃ Br ₂ F ₃
2-bromo-1,1,1,2-tetrafluoroethane	124-72-1	C ₂ HBrF ₄
2-bromo-1,1,1,3,3,3-hexafluoropropane	2252-79-1	C ₃ HBrF ₆
2-bromo-1,1,1-trifluoropropane	421-46-5	C ₃ H ₄ BrF ₃
2-bromo-1,1-dichloroethylene	5870-61-1	C ₂ HBrCl ₂
2-bromo-1,1-difluoroethane	359-07-9	C ₂ H ₃ BrF ₂
2-Bromo-1-chloro-1,1,2-trifluoroethane	354-20-1	C ₂ HBrClF ₃
3-bromo-1,1,1-trifluoropropane	460-32-2	C ₃ H ₄ BrF ₃
3-Bromo-1,1,2,2-tetrafluoropropane	679-84-5	C ₃ H ₃ BrF ₄
Chlorotrifluoromethane	75-72-9	CClF ₃
Tribromochloromethane	594-15-0	CBr ₃ Cl
Chlorobromotrifluoroethane	74925-63-6	C ₂ HBrClF ₃
Chloroheptafluoropropane	30143-46-5	C ₃ Cl F ₇
2-Chloroheptafluoropropane	76-18-6	C ₃ ClF ₇
Chloropentafluoroethane	76-15-3	C ₂ ClF ₅
Dichlorodifluoromethane	75-71-8	CCl ₂ F ₂
Dichlorotetrafluoroethane	1320-37-2	C ₂ Cl ₂ F ₄
Dichlorohexafluoropropane	42560-98-5	C ₃ Cl ₂ F ₆
1,2-dichlorohexafluoropropane	661-97-2	C ₃ Cl ₂ F ₆
Chlorodibromomethane	124-48-1	CHBr ₂ Cl
Dibromodichloromethane	594-18-3	CBr ₂ Cl ₂
1,1-Dibromodifluoroethene	31392-96-8	C ₂ H ₂ Br ₂ F ₂
1,3-Dibromo-1,1-difluoropropane	460-25-3	C ₃ H ₄ Br ₂ F ₂
Dibromodifluoromethane	75-61-6	CBr ₂ F ₂
1,2-Dibromotetrafluoroethane	124-73-2	C ₂ Br ₂ F ₄
Dibromotetrafluoroethane	25497-30-7	C ₂ Br ₂ F ₄
1,2-Dibromo-1,1,2-trifluoroethane	354-04-1	C ₂ HBr ₂ F ₃
1,2-Dibromofluoroethane	358-97-4	C ₂ H ₃ Br ₂ F
Dibromofluoromethane	1868-53-7	CHBr ₂ F
Tetrachlorodifluoroethane	28605-74-5	C ₂ Cl ₄ F ₂
1,2,2,3-tetrachloro-1,1,3,3-tetrafluoro-propane	29255-31-0	C ₃ Cl ₄ F ₄

1,2,2,3-tetrachloro-1,1,3,3-tetrafluoro-propane	677-68-9	C ₃ Cl ₄ F ₄
Tetrabromoethylene	79-28-7	C ₂ Br ₄
Trichlorotetrafluoropropane	134237-38-0	C ₃ HF ₄ Cl ₃
Trichlorofluoroethane	134237-34-6	C ₂ H ₂ Cl ₃ F
Trichlorofluoromethane	75-69-4	CCl ₃ F
Trichloropentafluoropropane	28109-69-5	C ₃ Cl ₃ F ₅
1,2,3-Trichloropentafluoropropane	76-17-5	C ₃ Cl ₃ F ₅
Trichlorotrifluoroethane	26523-64-8	C ₂ Cl ₃ F ₃
Fluorotribromomethane	353-54-8	CBr ₃ F
1,1,2-tribromo-1-fluoroethane(Halon-2103)	420-88-2	C ₂ H ₂ Br ₃ F
Tetrabromofluoroethane(Halon-2104)	353-93-5	C ₂ HFBr ₄
1,1,2-tribromo-1,2-difluoroethane(Halon-2203)	353-97-9	C ₂ HBr ₃ F ₂
1,2,2-tribromo-1,1-difluoroethane(Halon-2203)	677-34-9	C ₂ HBr ₃ F ₂
Tribromodifluoroethane(Halon-2203)	7304-53-2	C ₂ HBr ₃ F ₂
Dibromofluoropropane(Halon-3102)	1786-38-5	C ₃ H ₅ Br ₂ F
1,2-Dibromo-3-fluoropropane(Halon-3102)	453-00-9	C ₃ H ₅ Br ₂ F
1,2-dibromo-1-fluoropropane(Halon-3102)	62135-10-8	C ₃ H ₅ Br ₂ F
Dibromofluoropropane(Halon-3102)	62135-11-9	C ₃ H ₅ Br ₂ F
Tetrabromofluoropropane(Halon-3104)	148875-95-0	C ₃ H ₃ Br ₄ F
Bromodifluoropropane(Halon-3201)	111483-20-6	C ₃ H ₅ BrF ₂
Bromodifluoropropane(Halon-3201)	2195-05-3	C ₃ H ₅ BrF ₂
Bromodifluoropropane(Halon-3201)	420-89-3	C ₃ H ₅ BrF ₂
Bromodifluoropropane(Halon-3201)	420-98-4	C ₃ H ₅ BrF ₂
Bromodifluoropropane(Halon-3201)	430-87-5	C ₃ H ₅ BrF ₂
Bromodifluoropropane(Halon-3201)	461-49-4	C ₃ H ₅ BrF ₂
Dibromotrifluoropropane(Halon-3203)	666-25-1	C ₃ H ₃ Br ₂ F ₃
Tetrabromodifluoropropane(Halon-3204)	148875-98-3	C ₃ H ₂ Br ₄ F ₂
1,2,2-Tribromo-3,3,3-trifluoropropane(Halon-3303)	491-90-9	C ₃ H ₂ Br ₃ F ₃
Bromotetrafluoropropane(Halon-3401)	19041-01-1	C ₃ H ₃ BrF ₄
2-bromo-1,1,1,3-tetrafluoropropane(Halon-3401)	29151-25-5	C ₃ H ₃ BrF ₄
3-bromo-1,1,1,3-tetrafluoropropane(Halon-3401)	460-67-3	C ₃ H ₃ BrF ₄
Bromotetrafluoropropane(Halon-3401)	70192-71-1	C ₃ H ₃ BrF ₄
Bromotetrafluoropropane(Halon-3401)	70192-84-6	C ₃ H ₃ BrF ₄
1,3-Dibromo-1,1,3,3-tetrafluoropropane(Halon-3402)	460-86-6	C ₃ H ₂ Br ₂ F ₄
Tribromotetrafluoropropane(Halon-3403)	666-48-8	C ₃ HBr ₃ F ₄
Bromopentafluoropropane(Halon-3501)	22692-16-6	C ₃ H ₂ BrF ₅
Bromopentafluoropropane(Halon-3501)	26391-11-7	C ₃ H ₂ BrF ₅
Bromopentafluoropropane(Halon-3501)	422-01-5	C ₃ H ₂ BrF ₅
Bromopentafluoropropane(Halon-3501)	53692-43-6	C ₃ H ₂ BrF ₅
Bromopentafluoropropane(Halon-3501)	53692-44-7	C ₃ H ₂ BrF ₅
Bromopentafluoropropane(Halon-3501)	677-52-1	C ₃ H ₂ BrF ₅
Bromopentafluoropropane(Halon-3501)	677-53-2	C ₃ H ₂ BrF ₅
Bromopentafluoropropane(Halon-3501)	679-94-7	C ₃ H ₂ BrF ₅
Fluoroethyne	2713-09-9	C ₂ HF
Bromochlorodifluoromethane	353-59-3	CBrClF ₂
Bromochloromethane	74-97-5	CH ₂ BrCl
Bromodichlorofluoromethane	353-58-2	CBrCl ₂ F
1-bromo-1,1-difluoroethane	357188-74-0	C ₂ H ₃ BrF ₂
Bromodifluoromethane	1511-62-2	CH BrF ₂
Bromotrichloromethane	75-62-7	CBrCl ₃
2-bromo-1,1,1-trifluoroethane	421-06-7	C ₂ H ₂ BrF ₃

Bromotrifluoromethane	75-63-8	CBrF ₃
2-Fluoroethyl bromide	762-49-2	C ₂ H ₄ BrF
1-bromo-1-fluoropropane	65291-92-1	C ₃ H ₆ BrF
Bromofluoromethane	373-52-4	CH ₂ BrF
1-bromo-1,1,2,3,3,3-hexafluoropropane	2252-78-0	C ₃ HBrF ₆
1,1,1,3,3,3-hexachloro-2,2-difluoro-propane	3182-26-1	C ₃ Cl ₆ F ₂
Hexachlorodifluoropropane	134452-44-1	C ₃ Cl ₆ F ₂
Heptachlorofluoropropane	135401-87-5	C ₃ Cl ₇ F
1,1,1,2,2,3,3-heptachloro-3-fluoro-propane	422-78-6	C ₃ Cl ₇ F
1,1,1,3,3,3-Pentachloro-2,2,3-trifluoropropane	2354-06-5	C ₃ Cl ₅ F ₃
Pentachlorotrifluoropropane	134237-31-3	C ₃ Cl ₅ F ₃
1,1,1,2,2-pentachloro-2-fluoroethane	29756-45-4	C ₂ Cl ₅ F
1,1,1,2,2-pentachloro-2-fluoroethane	354-56-3	C ₂ Cl ₅ F
Fluoropentachloroethane	954-56-3	C ₂ Cl ₅ F
Pentabromoethane	75-95-6	C ₂ HBr ₅
Carbon tetrachloride	56-23-5	CCl ₄
Carbon tetrabromide	558-13-4	CBr ₄
Methyl bromide	74-83-9	CH ₃ Br

8. PFOS/PFOS related compounds

Application example: Surfactant, Repellents, Coating

Major harmfulness: Carcinogenic, The disturbance of cholesterol metabolism

Name of substance	CAS No.	Chemical Formula
Polymer of butan-1-yl methacrylate, dodecan-1-yl methacrylate, methacrylic acid and 2-[N-methylperfluoro-alkane(C4-8)sulfonamido]ethyl methacrylate	127133-66-8	-
N-Methyl-N-(oxiran-2-ylmethyl)perfluoroalkane(C4-8)sulfonamide	129813-71-4	-
N-[3-(N,N-Dimethylamino)propan-1-yl]perfluorooctanesulfonamide	13417-01-1	-
2-(N-Methylperfluorooctane-1-sulfonamido)ethyl methacrylate	14650-24-9	-
Fatty acids, C18-unsatd., trimers, 2-[[[(1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctyl)sulfonyl]methylamino]ethyl esters	148240-78-2	-
Reaction products of ethylene glycol, N-(hydroxyethyl)-N-methylperfluoroalkane(C4-8)sulfonamide and poly(1,6-diisocyanatohexane)	148684-79-1	-
Reaction products of 2-ethylhexan-1-ol, N-ethyl-N-(hydroxyethyl) perfluoroalkane(C4-8)sulfonamide and polymethylenepolyphenylene isocyanate	160901-25-7	-
Trimethyl[3-(perfluorooctane-1-sulfonamido)propan-1-yl] ammonium iodide	1652-63-7	C ₁₄ H ₁₆ F ₁₇ IN ₂ O ₂ S
N-Ethyl-N-(2-hydroxyethyl)perfluorooctane-1-sulfonamide	1691-99-2	C ₁₂ H ₁₀ F ₁₇ NO ₃ S
Perfluorooctane sulfonate acid	1763-23-1	C ₈ HF ₁₇ O ₃ S
Potassium salt of N-[3-(N,N-dimethylazino)propan-1-yl]perfluorooctane-1-sulfonamide	178094-69-4	-
Sulfonamides, C4-8-alkane, perfluoro, N-ethyl-N-(hydroxyethyl), polymers with 1,1'-methylenebis[4-isocyanatobenzene] and polymethylenepolyphenylene isocyanate, 2-ethylhexyl esters, Me Et ketone oxime-blocked	178535-22-3	-
1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-hepta-decafluoro-N-methyl-, reaction products with benzene-chlorine-sulfur chloride (S ₂ Cl ₂) reaction products chlorides	182700-90-9	-

Ethyl (N-ethylperfluorooctane-1-sulfonamido)acetate	1869-77-8	C ₁₄ H ₁₂ F ₁₇ NO ₄ S
Reaction products of acrylic acid and N-[3-(N,N-dimethylamino)propan-1-yl]perfluoroalkane(C4-8)sulfonamide	192662-29-6	-
Tris[2-(N-ethylperfluorooctane-1-sulfonamido)ethyl] phosphate	2250-98-8	C ₃₆ H ₂₇ F ₅₁ N ₃ O ₁₀ PS ₃
N-Butan-1-yl-N-(2-hydroxyethyl)perfluorooctane-1-sulfonamide	2263-09-4	C ₁₄ H ₁₄ F ₁₇ NO ₃ S
N-(2-Hydroxyethyl)-N-methylperfluorooctane-1-sulfonamide	24448-09-7	C ₁₁ H ₈ F ₁₇ NO ₃ S
N-Allyl-N-ethylperfluorooctane-1-sulfonamide	24924-36-5	C ₁₃ H ₁₀ F ₁₇ NO ₂ S
Didecan-1-yl(dimethyl)ammonium perfluorooctane-1-sulfonate	251099-16-8	-
2-(N-Methylperfluorooctane-1-sulfonamido)ethyl acrylate	25268-77-3	C ₁₄ H ₁₀ F ₁₇ NO ₄ S
Perfluorooctane sulfonate potasium salt	2795-39-3	C ₈ HF ₁₇ O ₃ S.K
Perfluorooctane sulfonate ammonium salt	29081-56-9	C ₈ HF ₁₇ O ₃ S.NH ₃
alpha-[2-(N-Ethylperfluorooctane-1-sulfonamido)ethyl]-omega-hydroxypoly(oxyethylene)	29117-08-6	(C ₂ H ₄ O) _n C ₁₂ H ₁₀ F ₁₇ N O ₃ S
Perfluorooctane sulfonate lithium salt	29457-72-5	C ₈ HF ₁₇ O ₃ SLi
(N-Ethylperfluorooctane-1-sulfonamido)acetic acid	2991-50-6	C ₁₂ H ₈ F ₁₇ N O ₄ S
Glycine, N-ethyl-N-[(heptadecafluorooctyl)sulfonyl]-, potassium salt	2991-51-7	C ₁₂ H ₈ F ₁₇ N O ₄ SK
N-[3-(N,N-Dimethylazino)propan-1-yl]perfluorooctane-1-sulfonamide	30295-51-3	C ₁₃ H ₁₃ F ₁₇ N ₂ O ₃ S
Ammonium bis[2-(N-ethylperfluorooctane-1-sulfonamido)ethyl] phosphate	30381-98-7	C ₂₄ H ₁₉ F ₃₄ N ₂ O ₈ PS ₂ H ₃ N
Fatty acids, linseed-oil, dimers, 2-[[[(1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctyl)sulfonyl]methylamino]ethyl esters	306973-46-6	-
Sulfonamides, C4-8-alkane, perfluoro, N-(hydroxyethyl)-N-methyl, reaction products with 12-hydroxyoctadecanoic acid and 2,4-TDI, ammonium salts	306973-47-7	-
N-Methyl-N-(3-octadecan-1-yl-2-oxo-1,3-oxazolidin-5-yl)perfluoroalkane(C4-8)sulfonamide	306974-19-6	-
Siloxanes and Silicones, di-Me, mono[3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl group]-terminated, polymers with 2-[methyl[(perfluoro-C4-8-alkyl)sulfonyl]amino]ethyl acrylate and stearyl methacrylate	306974-28-7	-
Sulfonic acids, C6-8-alkane, perfluoro, compds. with polyethylene-polypropylene glycol bis(2-aminopropyl) ether	306974-45-8	-
Fatty acids, C18-unsatd., dimers, 2-[methyl[(perfluoro-C4-8-alkyl)sulfonyl]amino]ethyl esters	306974-63-0	-
Propanoic acid,3-hydroxy-2-(hydroxymethyl)-2-methyl-, polymer with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol and N,N',2-tris(6-isocyanatohexyl)imidodicarbonic diamide, reaction products with N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-hydroxyethyl)-1-octanesulfonamide and N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-N-(2-hydroxyethyl)-1-heptanesulfonamide, compds. with triethylamine	306975-56-4	-
Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl-, polymer with 1,1'-methylenebis[4-isocyanatobenzene] and 1,2,3-propanetriol, reaction products with N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-hydroxyethyl)-1-octanesulfonamide and N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-N-(2-hydroxyethyl)-1-heptanesulfonamide, compds. with morpholine	306975-57-5	-
2-Propenoic acid, 2-methyl-, dodecyl ester, polymers with 2-[methyl[(perfluoro-C4-8-alkyl)sulfonyl]amino]ethyl acrylate and vinylidene chloride	306975-62-2	-

Poly(oxy-1,2-ethanediyl), .alpha.-hydro.-omega.-hydroxy-, poly-mer with 1,6-diisocyanatohexane, N-(hydroxyethyl)-N-methyl perfluoro-C4-8-alkanesulfonamides-blocked	306975-84-8	-
Polymer of 1,1-dichloroethene, dodecan-1-yl methacrylate, N-(hydroxyl-methyl)acrylamide, 2-[N-methylperfluoroalkane(C4-8)-sulfonamido]-ethyl methacrylate and octadecan-1-yl methacrylate	306975-85-9	-
Polymer of butan-1-yl acrylate, butan-1-yl methacrylate, hexadecan-1-yl[2-(methacryloyloxy)ethyl](dimethyl)ammonium bromide and 2-[N-methylperfluoroalkane(C4-8)sulfonamido]ethyl acrylate	306976-25-0	-
2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with 2,4-diisocyanato-1-methylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol and 2-propenoic acid, N-ethyl-N-(hydroxyethyl)perfluoro-C4-8-alkanesulfonamides-blocked	306976-55-6	-
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymers with acrylic acid, 2-[methyl[(perfluoro-C4-8-alkyl)sulfonyl]amino]ethyl acrylate and propylene glycol monoacrylate, hydrolyzed, compds. with 2,2'-(methylimino)bis[ethanol]	306977-58-2	-
Polymer of acrylamide, butan-1-yl acrylate, 1,1-dichloroethene and 2-[N-methylperfluoroalkane(C4-8)sulfonamido]ethyl acrylate	306978-04-1	-
Hexane, 1,6-diisocyanato-, homopolymer, N-(hydroxyethyl)-N-methyl-perfluoro-C4-8-alkanesulfonamides- and stearylalc.-blocked	306978-65-4	-
Poly(oxy-1,2-ethanediyl), alpha-[2-(methylamino)ethyl]-omega-[(1,1,3,3-tetramethylbutyl)phenoxy]-, N-[(perfluoro-C4-8-alkyl)sulfonyl] derivs.	306979-40-8	-
N,N'-Dimethyl-N,N'-(hexane-1,6-diylobis[(2-oxo-1,3-oxazolidine-3,5-diy)methylene])bis[perfluoroalkane(C4-8)sulfonamide]	306980-27-8	-
Perfluoro-1-octanesulfonyl fluoride	307-35-7	C ₈ F ₁₈ O ₂ S
N-Methylperfluorooctane-1-sulfonamide	31506-32-8	C ₉ H ₄ F ₁₇ NO ₂ S
2-(N-Ethylperfluorooctane-1-sulfonamido)ethyl methacrylate	376-14-7	C ₁₆ H ₁₄ F ₁₇ NO ₄ S
Trimethyl[3-(perfluorooctane-1-sulfonamido)propan-1-yl] ammonium chloride	38006-74-5	C ₁₄ H ₁₆ ClF ₁₇ N ₂ O ₂ S
2-(N-Ethylperfluorooctane-1-sulfonamido)ethyl dihydrogen phosphate	3820-83-5	C ₁₂ H ₁₁ F ₁₇ NO ₆ PS
2-(N-Butan-1-ylperfluorooctane-1-sulfonamido)ethyl acrylate	383-07-3	C ₁₇ H ₁₆ F ₁₇ NO ₄ S
Sodium (N-ethylperfluorooctane-1-sulfonamido)acetate	3871-50-9	C ₁₂ H ₈ F ₁₇ NO ₄ SNa
Sodium perfluorooctanesulfonate	4021-47-0	
N-Ethylperfluorooctane-1-sulfonamide	4151-50-2	C ₁₀ H ₆ F ₁₇ NO ₂ S
2-(N-Ethylperfluorooctane-1-sulfonamido)ethyl acrylate	423-82-5	C ₁₅ H ₁₂ F ₁₇ NO ₄ S
N-Allylperfluorooctane-1-sulfonamide	423-86-9	C ₁₁ H ₆ F ₁₇ NO ₂ S
Perfluorooctane sulfonate anion	45298-90-6	C ₈ F ₁₇ O ₃ S
N-Benzylperfluorooctane-1-sulfonamide	50598-29-3	C ₁₅ H ₈ F ₁₇ NO ₂ S
Alpha-Hydro-omega-[2-(N-propan-1-ylperfluorooctane-1-sulfonamido)ethoxy]	52550-45-5	—
poly(oxyethylene)"	56773-42-3	C ₈ H ₂₀ N.C ₈ F ₁₇ O ₃ S
Tetraethylammoniumheptadecafluorooctansulfonate	57589-85-2	C ₂₂ H ₆ Cl ₄ F ₁₇ NO ₆ SK
Potassium 2,3,4,5-tetrachloro-6-[(3-[[[(perfluorooctan-1-yl)sulfonyl]oxy}phenyl] carbamoyl]benzoate	58920-31-3	C ₁₆ H ₁₄ F ₁₇ NO ₄ S
4-(N-Methylperfluorooctane-1-sulfonamido)butan-1-yl acrylate	61577-14-8	C ₁₇ H ₁₆ F ₁₇ NO ₄ S
4-(N-Methylperfluorooctane-1-sulfonamido)butan-1-yl methacrylate	61660-12-6	C ₁₆ H ₂₀ F ₁₇ NO ₅ SSi
N-Ethyl-N-[3-(trimethoxysilyl)propan-1-yl]perfluorooctane-1-sulfonamide	67939-42-8	C ₁₃ H ₁₁ Cl ₃ F ₁₇ NO ₂ SSi

N-Ethyl-N-[3-(trichlorosilyl)propan-1-yl]perfluorooctane-1-sulfonamide	67939-88-2	C ₁₃ H ₁₄ ClF ₁₇ N ₂ O ₂ S
Dimethyl[3-(perfluorooctane-1-sulfonamido)propan-1-yl]ammonium chloride	67969-69-1	C ₁₂ H ₁₇ F ₁₇ N ₃ O ₆ PS
Diammonium 2-(N-ethylperfluorooctane-1-sulfonamido)ethyl phosphate	68081-83-4	—
2-[N-Ethylperfluoroalkane(C4-8)sulfonamido]ethyl N-{5-[[2-[N-ethylperfluoroalkane(C4-8)sulfonamido]ethoxy]carbonyl]amino]-2-methylphenyl}carbamate	68239-73-6	C ₁₃ H ₁₂ F ₁₇ NO ₃ S
N-(4-Hydroxybutan-1-yl)-N-methylperfluorooctane-1-sulfonamide	68298-11-3	C ₁₈ H ₂₃ F ₁₇ N ₂ O ₆ S ₂
3-(N-[3-[(2-Hydroxyethyl)(dimethyl)ammonio]propan-1-yl]perfluorooctane-1-sulfonamido)propane-1-sulfonate	68310-75-8	C ₁₄ H ₁₉ F ₁₇ IN ₃ O ₂ S
1-Propanaminium, 3-[[1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-hepta-decafluorooctyl) sulfonyl]amino]-N,N,N-trimethyl-, iodide, ammonium salt (1:1:1)	68329-56-6	—
Polymer of hexadecan-1-yl acrylate, icosan-1-yl acrylate	68541-80-0	—
2-(N-methylperfluorobutane-1-sulfonamido)ethyl acrylate	68555-90-8	—
2-(N-methylperfluoroheptane-1-sulfonamido)ethyl acrylate	68555-91-9	—
2-(N-methylperfluorohexane-1-sulfonamido)ethyl acrylate	68555-92-0	—
2-(N-methylperfluoroocta"	68608-14-0	—
Polymer of acrylic acid, 2-(N-ethylperfluorooctane-1-sulfonamido)ethyl methacrylate and octadecan-1-yl acrylate	68649-26-3	—
Polymer of butan-1-yl acrylate	68867-60-7	—
2-(N-methylperfluorobutane-1-sulfonamido)ethyl acrylate	68877-32-7	—
2-(N-methylperfluoroheptane-1-sulfonamido)ethyl acrylate	68891-96-3	—
2-(N-methylperfluorohexane-1-sulfonamido)ethyl acrylate	68909-15-9	—
2-(N-methylperfluorooctane-1-sulfonamido)ethyl	68958-61-2	—
"Polymer of butan-1-yl acrylate	70225-14-8	C ₁₂ H ₁₂ F ₁₇ NO ₅ S
2-(N-methylperfluorobutane-1-sulfonamido)ethyl acrylate	70776-36-2	—
2-(N-methylperfluoroheptane-1-sulfonamido)ethyl acrylate	71463-74-6	—
2-(N-methyl perfluorohexane-1-sulfonamido)ethyl acrylate	71463-78-0	C ₁₃ H ₁₃ F ₁₇ NO ₅ PS
2-(N-methylperfluorooctane-1-sulfonamido)ethyl	71463-80-4	C ₁₇ H ₂₁ F ₁₇ NO ₅ PS
Polymer of 2-(N-methylperfluorobutane-1-sulfonamido)ethyl methacrylate	71487-20-2	—
2-(N-methylperfluoroheptane-1-sulfonamido)ethyl methacrylate	754-91-6	C ₈ H ₂ F ₁₇ NO ₂ S
2-(N-methylperfluorohexane-1-sulfonamido)ethyl methacrylate	91036-71-4	—
2-(N-methylperfluorooctane-1-sulfonamido)ethyl methacrylate	91081-99-1	—
Reaction products of N-ethyl-N-(hydroxyethyl)perfluoroalkane (C4-8)sulfonamide and bis(4-isocyanatophenyl)methane	92265-81-1	—
"Reaction products of N-ethyl-N-(2-hydroxyethyl)perfluorobutane-1-sulfonamide, N-ethyl-N-(2-hydroxyethyl)perfluoroheptane-1-sulfonamide	94133-90-1	C ₁₆ H ₁₉ F ₁₇ N ₂ O ₆ S ₂ Na
N-ethyl-N-(2-hydroxyethyl)perfluorohexane-1-sulfonamide	94313-84-5	C ₃₈ H ₅₀ F ₁₇ N ₃ O ₆ S
N-ethyl-N-(2-hydroxyethyl)perfluorooctane-1-sulfonamide	98999-57-6	—

9. 2-(2H-1,2,3-benzotriazole-2-yl) -4,6-the-tert-butyl phenol

Application example: Ultraviolet absorber Major harmfulness: Chronic Toxicity

Name of substance	CAS No.	Chemical Formula
2-(2H-1,2,3-benzotriazole-2-yl) -4,6-the-tert-butyl phenol	3846-71-7	C ₂₀ H ₂₅ N ₃ O

10. Hexachlorobenzene

Application example: Disinfectant, Flameproofing agent, Plasticizer, etc.

Major harmfulness: Carcinogenic

Name of substance	CAS No.	Chemical Formula
Hexachlorobenzene	118-74-1	C ₆ Cl ₆

11. Dimethylfumarate (DMF)

Application example: Fungicide, Antifungal agent Major harmfulness: Dermatitis

Name of substance	CAS No.	Chemical Formula
Dimethylfumarate	624-49-7	C ₆ H ₈ O ₄

12. Hexabromocyclododecane (HBCD or HBCDD)

Application example: Flame retardant Major harmfulness: Recalcitrant, Endocrine disruption effect

Name of substance	CAS No.	Chemical Formula
α- Hexabromocyclododecane ; rel-(1R,2R,5S,6R,9R,10S)-1,2,5,6,9,10- Hexabromocyclododecane	134237-50-6	C ₁₂ H ₁₈ Br ₆
β- Hexabromocyclododecane ; rel-(1R,2S,5R,6R,9R,10S)-1,2,5,6,9,10- Hexabromocyclododecane	134237-51-7	C ₁₂ H ₁₈ Br ₆
γ- Hexabromocyclododecane ; rel-(1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10- Hexabromocyclododecane	134237-52-8	C ₁₂ H ₁₈ Br ₆
(1R,2R,5R,6S,9S,10S)-1,2,5,6,9,10- Hexabromocyclododecane	138257-17-7	C ₁₂ H ₁₈ Br ₆
(1R,2R,5R,6S,9R,10S)-1,2,5,6,9,10- Hexabromocyclododecane	138257-18-8	C ₁₂ H ₁₈ Br ₆
(1R,2S,5S,6R,9S,10S)-1,2,5,6,9,10- Hexabromocyclododecane	138257-19-9	C ₁₂ H ₁₈ Br ₆
(1R,2S,5S,6S,9S,10R)-1,2,5,6,9,10- Hexabromocyclododecane	169102-57-2	C ₁₂ H ₁₈ Br ₆
Hexabromocyclododecane	25637-99-4	C ₁₂ H ₁₈ Br ₆
1,2,5,6,9,10- Hexabromocyclododecane	3194-55-6	C ₁₂ H ₁₈ Br ₆
rel-(1R,2S,5R,6S,9R,10S)-1,2,5,6,9,10- Hexabromocyclododecane	4736-49-6	C ₁₂ H ₁₈ Br ₆
rel-(1R,2S,5R,6S,9S,10R)-1,2,5,6,9,10- Hexabromocyclododecane	65701-47-5	C ₁₂ H ₁₈ Br ₆
(1R,2R,5S,6R,9R,10S)-1,2,5,6,9,10- Hexabromocyclododecane	678970-15-5	C ₁₂ H ₁₈ Br ₆
(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10- Hexabromocyclododecane	678970-16-6	C ₁₂ H ₁₈ Br ₆
(1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10- Hexabromocyclododecane	678970-17-7	C ₁₂ H ₁₈ Br ₆

13. Decabromodiphenyl ether (DBDE)

Application example: Flame retardant Major harmfulness: Recalcitrant, Endocrine disruption effect

Name of substance	CAS No.	Chemical Formula
Decabromodiphenyl ether	1163-19-5	C ₁₂ Br ₁₀ O

14. PFOA (perfluorooctanoic acid) and its salts and PFOA related substances

Application example:

Name of substance	CAS No.	Chemical Formula
Perfluorooctanoic acid	335-67-1	C ₈ HF ₁₅ O ₂
Perfluorooctanoic acid ammonium salt	3825-26-1	C ₈ H ₄ F ₁₅ NO ₂
Perfluorooctanoic acid, sodium salt	335-95-5	NaOOC(CF ₂) ₆ CF ₃
Potassium perfluorooctanoate	2395-00-8	C ₈ F ₁₅ KO ₂
Silver(I) perfluorooctanoate	335-93-3	C ₈ AgF ₁₅ O ₂
Perfluorooctanoyl fluoride	335-66-0	C ₈ F ₁₆ O
Methylperfluorooctanoate	376-27-2	C ₉ H ₃ F ₁₅ O ₂
Ethylperfluorooctanoate	3108-24-5	C ₁₀ H ₅ F ₁₅ O ₂