

## ENVIRONMENTAL PROTECTION AGENCY

The Clean Air Act was incorporated into the United States Code as Title 42, Chapter 85. EPA is responsible for controlling chemicals, certain industrial processes and consumer products which result in the emission of ozone-depleting substances (ODS) including:

Common Name	Chemical Nomenclature	CAS No.
CFC-11	CFCl <sub>3</sub> , Trichlorofluoromethane	75-69-4
CFC-12	CF <sub>2</sub> Cl <sub>2</sub> , Dichlorodifluoromethane	75-71-8
CFC-113	C <sub>2</sub> F <sub>3</sub> Cl <sub>3</sub> , Trichlorotrifluoromethane	76-13-1
CFC-114	C <sub>2</sub> F <sub>4</sub> Cl <sub>2</sub> , Dichlorotetrafluoroethane	76-14-2
CFC-115	C <sub>2</sub> F <sub>5</sub> Cl, Monochloropentafluoroethane	76-15-3
Halon-1211	CF <sub>2</sub> ClBr, Bromochlorodifluoromethane	353-59-3
Halon-1301	Cf <sub>3</sub> Br, Bromotrifluoromethane	75-63-8
Halon-2402	C <sub>2</sub> F <sub>4</sub> Br <sub>2</sub> , Dibromotetrafluoroethane	124-73-2
Carbon Tetrachloride	CCl <sub>4</sub> , Tetrachloromethane	56-23-5
Methyl Chloroform	C <sub>2</sub> H <sub>3</sub> Cl <sub>3</sub> , 1, 1, 1 Trichloroethane	71-55-6
CFC-13	CF <sub>3</sub> Cl, Chlorotrifluoromethane	75-72-9
CFC-111	C <sub>2</sub> FCl <sub>5</sub> , Pentachlorofluoroethane	354-56-3
CFC-112	C <sub>2</sub> F <sub>2</sub> Cl <sub>4</sub> , Tetrachlorodifluoroethane	76-12-0
CFC-211	C <sub>3</sub> FCl <sub>7</sub> , Heptachlorofluoropropane	422-78-6
CFC-212	C <sub>3</sub> F <sub>2</sub> Cl <sub>6</sub> , Hexachlorodifluoropropane	3182-26-1
CFC-213	C <sub>3</sub> F <sub>3</sub> Cl <sub>5</sub> , Pentachlorotrifluoropropane	2354-06-5
CFC-214	C <sub>3</sub> F <sub>4</sub> Cl <sub>4</sub> , Tetrachlorotetrafluoropropane	29255-31-0
CFC-215	C <sub>3</sub> F <sub>5</sub> Cl <sub>3</sub> , Trichloropentafluoropropane	1599-41-3
CFC-216	C <sub>3</sub> F <sub>6</sub> Cl <sub>2</sub> , Dichlorohexafluoropropane	661-97-2
CFC-217	C <sub>3</sub> F <sub>7</sub> Cl, Monochloroheptafluoropropane	422-86-6

## REACH SVHC LIST - 191 Substances

This list is the European Union's Directive 1907/2006 (REACH) of SVHC's (Substances of Very High Concern). There are 191 substances total, organized in sections of the month and year that they were official placed on the candidate list. Inclusion on this list does not necessarily mean that these substances are banned in the EU but have been included for future study and action. Click [here](#) to see the ECHA website and follow up on these substances.

### SVHC candidate list released August 2008:

CAS No.	E C No.	Substance Name
101-77-9	202-974-4	Diaminodiphenyl-methane
81-15-2	201-329-4	5-tert-butyl-2, 4, 6-trinitro-m-xylene (musk-xylene)
85535-84-8	287-476-5	Alkanes, C10-13 chloro (short chain chlorinated paraffins)
120-12-7	204-371-1	Anthracene
1303-28-2	215-116-9	Diarsenic pentaoxide
1327-53-3	215-481-4	Diarsenic trioxide
117-81-7	204-211-0	Bis(2-ethylhexyl)phthalate (DEHP)
56-35-9	200-268-0	Bis(tributyltin)oxide
85-68-7	201-622-7	Butyl benzyl phthalate
7646-79-9	231-589-4	Cobalt dichloride
84-74-2	201-557-4	Dibutyl phthalate
25637-99-4 and 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8)	247-148-4 221-695-9	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified ( -HBCDD,-HBCDD, -HBCDD)
7784-40-9	232-064-2	Lead hydrogen arsenate
7789-12-0 10588-01-9	234-190-3	Sodium dichromate
15606-95-8	427-700-2	Triethyl arsenate

### SVHC candidate list released January 2010:

CAS No.	E C No.	Substance Name
90640-80-5	292-602-7	Anthracene oil
91995-17-4	295-278-5	Anthracene oil, anthracene paste, distn. Lights
91995-15-2	295-275-9	Anthracene oil, anthracene paste, anthracene fraction

90640-82-7	292-604-8	Anthracene oil, anthracene low
90640-81-6	292-603-2	Anthracene oil, anthracene paste
84-69-5	201-553-2	Diisobutyl phthalate (DIBP)
121-14-2	204-450-0	2, 4,-Dinitrotoluene
775-97-6	231-846-0	Lead chromate
12656-85-8	235-759-9	Lead chromate molybdate sulfate red (C.I. Pigment Red 104)
1344-37-2	215-693-7	Lead sulfochromate yellow (C.I. Pigment Yellow 104)
65996-93-2	266-028-2	Coal tar pitch, high, temperature
115-96-8	204-118-5	tris(2-chloroethyl)phosphate (TCEP)
Index number 650-017-00-8	Index number 650-017-00-8	Aluminosilicate, Refractory Ceramic Fibres
Index number 650-017-00-8	Index number 650-017-00-8	Zirconia Aluminosilicate, Refractory Ceramic Fibres

**SVHC candidate list released June 2010:**

CAS No.	E C No.	Substance Name
79-01-6	201-167-4	Ttichloroethylene
10043-35-3 11113-50-1	233-139-2 234-343-4	Boric Acid
1330-43-4 12179-04-3 1303-96-4	215-540-4	Disodium tetraborate, anhydrous
12267-73-1	235-541-3	Tetraboron disodium heptaoxide, hydrate
7775-11-3	231-889-5	Sodium chromate
7789-00-6	232-140-5	Potassium chromate
7789-09-5	232-143-1	Ammonium dichromate
7778-50-9	231-906-6	Potassium dichromate

**SVHC candidate list released December 2010:**

CAS No.	E C No.	Substance Name
10124-43-3	233-334-2	Cobalt (II) sulphate
10141-05-6	233-402-1	Cobalt (II) dinitrate
513-79-1	208-169-4	Cobalt (II) carbonate
71-48-7	200-755-8	Cobalt (II) diacetate
109-86-4	203-713-7	2-Methoxyethanol
110-80-5	203-804-1	2-Ethoxyethanol
1333-82-0	215-607-8	Chromium trioxide
7738-94-5 13530-68-2	231-801-5 236-881-5	Chromic acid, Dichromic acid,

Not assigned	Not assigned	Oligomers of chromic acid and dichromic acid,
--------------	--------------	---

**SVHC candidate list released June 2011:**

CAS No.	E C No.	Substance Name
71888-89-6	276-158-1	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich
96-18-4	202-486-1	1,2,3-Trichloropropane
872-50-4	212-828-1	1-Methyl-2-pyrrolidone
302-01-2 / 7803-57-8	206-114-9	Hydrazine
68515-42-4	271-084-6	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters
7789-06-2	232-142-6	Strontium chromate
111-15-9	203-839-2	2-Ethoxyethyl acetate

**SVHC candidate list released December 2011:**

CAS No.	E C No.	Substance Name
15245-44-0	239-290-0	Lead styphnate
13424-46-9	236-542-1	Lead diazide, Lead azide
6477-64-1	229-335-2	Lead dipicrate
77-09-8	201-004-7	Phenolphthalein
101-14-4	202-918-9	2,2'-Dichloro-4,4'-methylenedianiline
127-19-5	204-826-4	N,N-dimethylacetamide
3687-31-8	222-979-5	Trilead diarsenate
7778-44-1	231-904-5	Calcium arsenate
7778-39-4	231-901-9	Arsenic acid
111-96-6	203-924-4	Bis(2-methoxyethyl) ether
107-06-2	203-458-1	1,2-Dichloroethane
140-66-9	205-426-2	4-(1,1,3,3-Tetramethylbutyl)phenol; 4-tert-octyl phenol
90-04-0	201-963-1	2-Methoxyaniline; o-Anisidine
117-82-8	204-212-6	Bis(2-methoxyethyl) phthalate
25214-70-4	500-036-1	Formaldehyde, oligomeric reaction products with aniline (technical MDA)
-----	-----	Zirconia Aluminosilicate Refractory Ceramic Fibres
-----	-----	Aluminosilicate Refractory Ceramic Fibres
49663-84-5	256-418-0	Pentazinc chromate octahydroxide
11103-86-9	234-329-8	Potassium hydroxyoctaoxodizincatedichromate
24613-89-6	246-356-2	Dichromium tris(chromate)

**SVHC candidate list released June 2012:**

CAS No.	E C No.	Substance Name
112-49-2	203-977-3	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)
110-71-4	203-794-9	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)
1303-86-2	215-125-8	Diboron trioxide
75-12-7	200-842-0	Formamide
17570-76-2	401-750-5	Lead(II) bis(methanesulfonate)
2451-62-9	219-514-3	1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (TGIC)
59653-74-6	423-400-0	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione ( $\beta$ -TGIC)
90-94-8	202-027-5	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)
101-61-1	202-959-2	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)
2580-56-5	219-943-6	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride
548-62-9	208-953-6	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride
561-41-1	209-218-2	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol <i>[with <math>\geq 0.1\%</math> of Michler's ketone]</i>
6786-83-0	229-851-8	$\alpha,\alpha$ -Bis[4-(dimethylamino)phenyl]-4(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) <i>[with <math>\geq 0.1\%</math> of Michler's ketone]</i>

**SVHC candidate list released December 2012:**

CAS No.	E C No.	Substance Name
8012-00-8	232-382-1	Pyrochlore, antimony lead yellow
120-71-8	204-419-1	6-methoxy-m-toluidine (p-cresidine)
2058-94-8	218-165-4	Henicosfluoroundecanoic acid
25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	247-094-1, 243-072-0, 256-356-4, 260-566-1	Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] <i>[The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]</i>
85-42-7, 13149-00-3, 14166-21-3	201-604-9, 236-086-3, 238-009-9	Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] <i>[The</i>

		<i>individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry]</i>
683-18-1	211-670-0	Dibutyltin dichloride (DBTC)
13814-96-5	237-486-0	Lead bis(tetrafluoroborate)
10099-74-8	233-245-9	Lead dinitrate
11120-22-2	234-363-3	Silicic acid, lead salt
60-09-3	200-453-6	4-Aminoazobenzene
12626-81-2	235-727-4	Lead titanium zirconium oxide
1317-36-8	215-267-0	Lead monoxide (lead oxide)
95-53-4	202-429-0	o-Toluidine
143860-04-2	421-150-7	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine
68784-75-8	272-271-5	Silicic acid (H <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), barium salt (1:1), lead-doped [ <i>with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD); the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008</i> ]
1319-46-6	215-290-6	Trilead bis(carbonate)dihydroxide
110-00-9	203-727-3	Furan
68-12-2	200-679-5	N,N-dimethylformamide
-----	-----	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [ <i>covering well-defined substances and UVCB substances, polymers and homologues</i> ]
-----	-----	4-Nonylphenol, branched and linear [ <i>substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof</i> ]
838-88-0	212-658-8	4,4'-methylenedi-o-toluidine
64-67-5	200-589-6	Diethyl sulphate
77-78-1	201-058-1	Dimethyl sulphate
12036-76-9	234-853-7	Lead oxide sulfate
12060-00-3	235-038-9	Lead titanium trioxide
51404-69-4	257-175-3	Acetic acid, lead salt, basic
69011-06-9	273-688-5	[Phthalato(2-)]dioxotrilead
1163-19-5	214-604-9	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)
79-16-3	201-182-6	N-methylacetamide
88-85-7	201-861-7	Dinoseb (6-sec-butyl-2,4-dinitrophenol)
629-14-1	211-076-1	1,2-Diethoxyethane

12202-17-4	235-380-9	Tetralead trioxide sulphate
776297-69-9	-----	N-pentyl-isopentylphthalate
12578-12-0	235-702-8	Dioxobis(stearato)trilead
78-00-2	201-075-4	Tetraethyllead
12065-90-6	235-067-7	Pentalead tetraoxide sulphate
72629-94-8	276-745-2	Pentacosafuorotridecanoic acid
307-55-1	206-203-2	Tricosafuorododecanoic acid
376-06-7	206-803-4	Heptacosafuorotetradecanoic acid
106-94-5	203-445-0	1-bromopropane (n-propyl bromide)
625-45-6	210-894-6	Methoxyacetic acid
95-80-7	202-453-1	4-methyl-m-phenylenediamine (toluene-2,4-diamine)
75-56-9	200-879-2	Methyloxirane (Propylene oxide)
12141-20-7	235-252-2	Trilead dioxide phosphonate
97-56-3	202-591-2	o-aminoazotoluene
84777-06-0	284-032-2	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear
101-80-4	202-977-0	4,4'-oxydianiline and its salts
1314-41-6	215-235-6	Orange lead (lead tetroxide)
92-67-1	202-177-1	Biphenyl-4-ylamine
605-50-5	210-088-4	Diisopentylphthalate
91031-62-8	292-966-7	Fatty acids, C16-18, lead salts
123-77-3	204-650-8	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))
62229-08-7	263-467-1	Sulfurous acid, lead salt, dibasic
20837-86-9	244-073-9	Lead cyanamidate

**SVHC candidate list released June 2013:**

CAS No.	E C No.	Substance Name
7440-43-9	231-152-8	Cadmium
1306-19-0	215-146-2	Cadmium oxide
3825-26-1	223-320-4	Ammonium pentadecafluorooctanoate (APFO)
335-67-1	206-397-9	Pentadecafluorooctanoic acid (PFOA)
131-18-0	205-017-9	Dipentyl phthalate (DPP)
-----	-----	4-Nonylphenol, branched and linear, ethoxylated

**SVHC candidate list released December 2013:**

CAS No.	E C No.	Substance Name
1306-23-6	215-147-8	Cadmium sulphide
1937-37-7	217-710-3	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct

		Black 38)
84-75-3	201-559-5	Dihexyl phthalate
96-45-7	202-506-9	Imidazolidine-2-thione; (2-imidazoline-2-thiol)
25155-23-1	246-677-8	Trixylyl phosphate
573-58-0	209-358-4	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diy]bis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)
301-04-2	206-104-4	Lead di(acetate)

**SVHC candidate list released JUNE 2014:**

CAS No.	E C No.	Substance Name
10108-64-2	233-296-7	Cadmium chloride
68515-50-4	271-093-5	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear
7632-04-4	231-556-4	Sodium peroxometaborate
-----	239-172-9; 234-390-0	Sodium perborate; perboric acid, sodium salt

**SVHC candidate list released December 2014:**

CAS No.	E C No.	Substance Name
3846-71-7	223-346-6	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)
239-622-4	15571-58-1	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)
-----	-----	reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)
25973-55-1	247-384-8	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)
7790-79-6	232-222-0	Cadmium fluoride
10124-36-4,31119-53-6	233-331-6	Cadmium sulphate

Re-issue		
7778-50-9	231-906-6	Potassium dichromate

**SVHC candidate list released June 2015:**

CAS No.	E C No.	Substance Name
---------	---------	----------------



68515-51-5	271-094-0	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with $\geq 0.3\%$ of dihexyl phthalate (EC No. 201-559-5)
68648-93-1	272-013-1	
-----	-----	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]

**SVHC candidate list released December 2015:**

CAS No.	E C No.	Substance Name
1120-71-4	214-317-9	1,3-propanesultone
3864-99-1	223-383-8	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)
36437-37-3	253-037-1	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)
98-95-3	202-716-0	Nitrobenzene
375-95-1 21049-39-8 4149-60-4	206-801-3	Perfluorononan-1-oic-acid and its sodium and ammonium salts

**SVHC candidate list released JUNE 2016:**

CAS No.	E C No.	Substance Name
50-32-8	200-028-5	Benzo[def]chrysene

**SVHC candidate list released JANUARY 2017:**

CAS No.	E C No.	Substance Name
80-05-7	201-245-8	4,4'-isopropylidenediphenol Bisphenol A; BPA
-----	-----	4-heptylphenol, branched and linear substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof
335-76-2	206-400-3	<u>Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts</u>
3108-42-7	221-470-5	<i>Nonadecafluorodecanoic acid</i>

3830-45-3	-----	<i>Ammonium nonadecafluorodecanoate</i> <i>Decanoic acid, nonadecafluoro-, sodium salt</i>
80-46-6	201-280-9	<a href="#">p-(1,1-dimethylpropyl)phenol</a> <a href="#">p-(1,1-dimethylpropyl)phenol</a>

**SVHC candidate list released July 2017:**

CAS No.	E C No.	Substance Name
-----	-----	Perfluorohexane-1-sulphonic acid and its salts

**SVHC candidate list released January 2018**

CAS No.	EC No.	Substance Name
56-55-3, 1718-53-2	200-280-6	Benz[a]anthracene
513-78-0	208-168-9	Cadium Carbonate
21041-95-2	2 244-168-5	Cadmium hydroxide
10022-68-1, 10325-94-7	233-710-6	Cadmium nitrate
218-01-9, 1719-03-5	205-923-4	Chrysene
-----	-----	Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca7,15-diene ("Dechlorane Plus" <sup>TM</sup> )
-----	-----	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)

**SVHC candidate list released April 2018**

CAS No.	EC No.	Substance Name
84-61-7	201-545-9	Dicyclohexyl phthalate (DCHP)
552-30-7	209-008-0	benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride)(TMA)

**SVHC candidate list released June 2018**

CAS No.	EC No.	Substance Name
556-67-2	209-136-7	Octamethylcyclotetrasiloxane (D4)
541-02-6	208-764-9	Decamethylcyclopentasiloxane (D5)
540-97-6	208-762-8	Dodecamethylcyclohexasiloxane (D6)

7439-92-1	231-100-4	Lead
12008-41-2	234-541-0	Disodium octaborate
191-24-2	205-883-8	Benzo[ghi]perylene
61788-32-7	262-967-7	Terphenyl hydrogenated
107-15-3	203-468-6	Ethylenediamine (EDA)
556-67-2	209-136-7	Octamethylcyclotetrasiloxane (D4)
541-02-6	208-764-9	Decamethylcyclopentasiloxane (D5)