

CASRNa	Chemical Name
75-07-0	Acetaldehyde
60-35-5	Acetamide
67-64-1	Acetone
75-05-8	Acetonitrile
98-86-2	Acetophenone
107-02-8	Acrolein
79-06-1	Acrylamide
79-10-7	Acrylic acid
107-13-1	Acrylonitrile
50-76-0	Actinomycin D
1596-84-5	Alar
309-00-2	Aldrin
107-05-1	Allyl chloride
7429-90-5	Aluminum and compounds <sup>b</sup>
1344-28-1	Aluminum oxide (fibrous forms)
97-56-3	ortho-Aminoazotoluene
6109-97-3	3-Amino-9-ethylcarbazole hydrochloride
68006-83-7	2-Amino-3-methyl-9H pyrido[2,3-b]indole
82-28-0	1-Amino-2-methylanthraquinone
76180-96-6	2-Amino-3-methylimidazo-[4,5-f]quinoline
712-68-5	2-Amino-5-(5-nitro-2-furyl)-1,3,4-thiadiazole
26148-68-5	A-alpha-c(2-amino-9h-pyrido[2,3-b]indole)
92-67-1	4-Aminobiphenyl
61-82-5	Amitrole
7664-41-7	Ammonia
7803-63-6	Ammonium bisulfate
6484-52-2	Ammonium nitrate
7783-20-2	Ammonium sulfate
62-53-3	Aniline
90-04-0	o-Anisidine
134-29-2	o-Anisidine hydrochloride
7440-36-0	Antimony and compounds <sup>b</sup>
1309-64-4	Antimony trioxide
140-57-8	Aramite



CASRNa	Chemical Name
7440-38-2	Arsenic and compounds <sup>b</sup>
7784-42-1	Arsine
1332-21-4	Asbestos
492-80-8	Auramine
115-02-6	Azaserine
446-86-6	Azathioprine
52-24-4	tris-(1-Aziridinyl)phosphine sulfide
103-33-3	Azobenzene
7440-39-3	Barium and compounds <sup>b</sup>
71-43-2	Benzene
92-87-5	Benzidine (and its salts)
271-89-6	Benzofuran
98-07-7	Benzoic trichloride (benzotrichloride)
98-88-4	Benzoyl chloride
94-36-0	Benzoyl peroxide
100-44-7	Benzyl chloride
1694-09-3	Benzyl Violet 4B
7440-41-7	Beryllium and compounds <sup>b</sup>
1304-56-9	Beryllium oxide
13510-49-1	Beryllium sulfate
92-52-4	Biphenyl
111-44-4	Bis(2-chloroethyl) ether (BCEE)
542-88-1	Bis(chloromethyl) ether
103-23-1	Bis(2-ethylhexyl) adipate
117-81-7	Bis(2-ethylhexyl) phthalate (DEHP)
7726-95-6	Bromine and compounds <sup>b</sup>
7789-30-2	Bromine pentafluoride
75-27-4	Bromodichloromethane
75-25-2	Bromoform
74-83-9	Bromomethane (methyl bromide)
106-94-5	1-Bromopropane ( <i>n</i> -propyl bromide)
126-72-7	tris(2,3-Dibromopropyl)phosphate
106-99-0	1,3-Butadiene
78-93-3	2-Butanone (methyl ethyl ketone)



CASRN <sup>a</sup>	Chemical Name
540-88-5	t-Butyl acetate
141-32-2	Butyl acrylate
71-36-3	n-Butyl alcohol
78-92-2	sec-Butyl alcohol
75-65-0	tert-Butyl alcohol
85-68-7	Butyl benzyl phthalate
25013-16-5	Butylated hydroxyanisole
3068-88-0	beta-Butyrolactone
7440-43-9	Cadmium and compounds <sup>b</sup>
156-62-7	Calcium cyanamide
105-60-2	Caprolactam
2425-06-1	Captafol
133-06-2	Captan
89 <sup>†</sup>	Carbon black extracts
75-15-0	Carbon disulfide
56-23-5	Carbon tetrachloride
463-58-1	Carbonyl sulfide
9000-07-1	Carrageenan (degraded)
120-80-9	Catechol
351 <sup>†</sup>	Ceramic fibers
133-90-4	Chloramben
305-03-3	Chlorambucil
57-74-9	Chlordane
143-50-0	Chlordecone
115-28-6	Chlorendic acid
76-13-1	Chlorinated fluorocarbon (1,1,2-trichloro-1,2,2-trifluoroethane, CFC-113)
108171-26-2	Chlorinated paraffins
7782-50-5	Chlorine
10049-04-4	Chlorine dioxide
79-11-8	Chloroacetic acid
532-27-4	2-Chloroacetophenone
85535-84-8	Chloroalkanes C10-13 (chlorinated paraffins)
106-47-8	<i>p</i> -Chloroaniline
108-90-7	Chlorobenzene



CASRNa	Chemical Name
510-15-6	Chlorobenzilate (ethyl-4,4'-dichlorobenzilate)
75-68-3	1-Chloro-1,1-difluoroethane
75-45-6	Chlorodifluoromethane (Freon 22)
75-00-3	Chloroethane (ethyl chloride)
67-66-3	Chloroform
74-87-3	Chloromethane (methyl chloride)
107-30-2	Chloromethyl methyl ether (technical grade)
563-47-3	3-Chloro-2-methyl-1-propene
95-57-8	2-Chlorophenol
95-83-0	4-Chloro- <i>o</i> -phenylenediamine
76-06-2	Chloropicrin
126-99-8	Chloroprene
1897-45-6	Chlorothalonil
95-69-2	<i>p</i> -Chloro- <i>o</i> -toluidine
54749-90-5	Chlorozotocin
18540-29-9	Chromium VI, chromate and dichromate particulate
7738-94-5	Chromium VI, chromic acid aerosol mist and chromium trioxide
569-61-9	C.I. Basic Red 9 monohydrochloride
87-29-6	Cinnamyl anthranilate
7440-48-4	Cobalt and compounds <sup>b</sup>
148 <sup>†</sup>	Coke oven emissions
7440-50-8	Copper and compounds <sup>b</sup>
150 <sup>†</sup>	Creosotes
120-71-8	<i>p</i> -Cresidine
1319-77-3	Cresols (mixture), including <i>m</i> -cresol, <i>o</i> -cresol, <i>p</i> -cresol
108-39-4	<i>m</i> -Cresol
95-48-7	o-Cresol
106-44-5	p-Cresol
4170-30-3	Crotonaldehyde
80-15-9	Cumene hydroperoxide
135-20-6	Cupferron
74-90-8	Cyanide, hydrogen
110-82-7	Cyclohexane
108-93-0	Cyclohexanol



CASRN <sup>a</sup>	Chemical Name
66-81-9	Cycloheximide
50-18-0	Cyclophosphamide (anhydrous)
6055-19-2	Cyclophosphamide (hydrated)
5160-02-1	D & C Red No. 9
4342-03-4	Dacarbazine
117-10-2	Danthron (chrysazin)
72-54-8	4,4'-DDD (4,4'-dichlorodiphenyldichloroethane)
53-19-0	2,4'-DDD (2,4'-dichlorodiphenyldichloroethane)
3547-04-4	DDE (1-chloro-4-[1-(4-chlorophenyl)ethyl]benzene)
3424-82-6	2,4'-DDE (2,4'-dichlorodiphenyldichloroethene)
72-55-9	4,4'-DDE (4,4'-dichlorodiphenyldichloroethene)
789-02-6	2,4'-DDT (2,4'-dichlorodiphenyltrichloroethane)
50-29-3	DDT
615-05-4	2,4-Diaminoanisole
39156-41-7	2,4-Diaminoanisole sulfate
101-80-4	4,4'-Diaminodiphenyl ether
95-80-7	2,4-Diaminotoluene (2,4-toluene diamine)
334-88-3	Diazomethane
333-41-5	Diazinon
132-64-9	Dibenzofuran
124-48-1	Dibromochloromethane
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)
96-13-9	2,3-Dibromo-1-propanol
84-74-2	Dibutyl phthalate
95-50-1	1,2-Dichlorobenzene
541-73-1	1,3-Dichlorobenzene
106-46-7	<i>p</i> -Dichlorobenzene (1,4-dichlorobenzene)
91-94-1	3,3'-Dichlorobenzidine
75-71-8	Dichlorodifluoromethane (Freon 12)
75-43-4	Dichlorofluoromethane (Freon 21)
75-34-3	1,1-Dichloroethane (ethylidene dichloride)
156-60-5	trans-1,2-Dichloroethene
75-09-2	Dichloromethane (methylene chloride)
120-83-2	2,4-Dichlorophenol



CASRN <sup>a</sup>	Chemical Name
94-75-7	Dichlorophenoxyacetic acid, salts and esters (2,4-D)
78-87-5	1,2-Dichloropropane (propylene dichloride)
542-75-6	1,3-Dichloropropene
62-73-7	Dichlorvos (DDVP)
115-32-2	Dicofol
84-61-7	Di-cyclohexyl phthalate (DCHP)
60-57-1	Dieldrin
200 <sup>†</sup>	Diesel particulate matter
111-42-2	Diethanolamine
111-46-6	Diethylene glycol
111-96-6	Diethylene glycol dimethyl ether
112-34-5	Diethylene glycol monobutyl ether
111-90-0	Diethylene glycol monoethyl ether
111-77-3	Diethylene glycol monomethyl ether
84-66-2	Diethylphthalate
64-67-5	Diethyl sulfate
134-62-3	Diethyltoluamide, N,N- (DEET)
75-37-6	1,1-Difluoroethane
101-90-6	Diglycidyl resorcinol ether
94-58-6	Dihydrosafrole
119-90-4	3,3'-Dimethoxybenzidine
60-11-7	4-Dimethylaminoazobenzene
121-69-7	N,N-Dimethylaniline
119-93-7	3,3'-Dimethylbenzidine ( <i>o</i> -tolidine)
79-44-7	Dimethyl carbamoyl chloride
68-12-2	Dimethyl formamide
57-14-7	1,1-Dimethylhydrazine
131-11-3	Dimethyl phthalate
77-78-1	Dimethyl sulfate
513-37-1	Dimethylvinylchloride
534-52-1	4,6-Dinitro-o-cresol (and salts)
51-28-5	2,4-Dinitrophenol
121-14-2	2,4-Dinitrotoluene
606-20-2	2,6-Dinitrotoluene



CASRNa	Chemical Name
123-91-1	1,4-Dioxane
630-93-3	Diphenylhydantoin
122-66-7	1,2-Diphenylhydrazine (hydrazobenzene)
25265-71-8	Dipropylene glycol
34590-94-8	Dipropylene glycol monomethyl ether
1937-37-7	Direct Black 38
2602-46-2	Direct Blue 6
16071-86-6	Direct Brown 95 (technical grade)
2475-45-8	Disperse Blue 1
298-04-4	Disulfoton
106-89-8	Epichlorohydrin
106-88-7	1,2-Epoxybutane
227 <sup>†</sup>	Epoxy resins
12510-42-8	Erionite
140-88-5	Ethyl acrylate
100-41-4	Ethyl benzene
74-85-1	Ethylene
106-93-4	Ethylene dibromide (EDB, 1,2-dibromoethane)
107-06-2	Ethylene dichloride (EDC, 1,2-dichloroethane)
107-21-1	Ethylene glycol
629-14-1	Ethylene glycol diethyl ether
110-71-4	Ethylene glycol dimethyl ether
111-76-2	Ethylene glycol monobutyl ether
110-80-5	Ethylene glycol monoethyl ether
111-15-9	Ethylene glycol monoethyl ether acetate
109-86-4	Ethylene glycol monomethyl ether
110-49-6	Ethylene glycol monomethyl ether acetate
2807-30-9	Ethylene glycol monopropyl ether
151-56-4	Ethyleneimine (aziridine)
75-21-8	Ethylene oxide
96-45-7	Ethylene thiourea
10028-22-5	Ferric sulfate
239 <sup>†</sup>	Fluorides
7782-41-4	Fluorine gas



CASRNa	Chemical Name
50-00-0	Formaldehyde
110-00-9	Furan
60568-05-0	Furmecyclox
3688-53-7	Furylfuramide
352 <sup>†</sup>	Glasswool fibers
111-30-8	Glutaraldehyde
67730-11-4	Glu-P-1
67730-10-3	Glu-P-2
16568-02-8	Gyromitrin
2784-94-3	HC Blue 1
76-44-8	Heptachlor
1024-57-3	Heptachlor epoxide
118-74-1	Hexachlorobenzene
87-68-3	Hexachlorobutadiene
608-73-1	Hexachlorocyclohexanes (mixture) including but not limited to:
319-84-6	alpha-Hexachlorocyclohexane
319-85-7	beta-Hexachlorocyclohexane
58-89-9	gamma-Hexachlorocyclohexane (Lindane)
77-47-4	Hexachlorocyclopentadiene
67-72-1	Hexachloroethane
680-31-9	Hexamethylphosphoramide
822-06-0	Hexamethylene-1,6-diisocyanate
110-54-3	Hexane
302-01-2	Hydrazine
10034-93-2	Hydrazine sulfate
7647-01-0	Hydrochloric acid
10035-10-6	Hydrogen bromide
7664-39-3	Hydrogen fluoride
7783-06-4	Hydrogen sulfide
123-31-9	Hydroquinone
10043-66-0	Iodine-131
13463-40-6	Iron pentacarbonyl
78-59-1	Isophorone
78-79-5	Isoprene, except from vegetative emission sources



CASRNa	Chemical Name
67-63-0	Isopropyl alcohol
98-82-8	Isopropylbenzene (cumene)
80-05-7	4,4'-Isopropylidenediphenol (bisphenol A)
303-34-4	Lasiocarpine
7439-92-1	Lead and compounds <sup>b</sup>
18454-12-1	Lead chromate oxide
108-31-6	Maleic anhydride
7439-96-5	Manganese and compounds <sup>b</sup>
148-82-3	Melphalan
3223-07-2	Melphalan HCl
7439-97-6	Mercury and compounds <sup>b</sup>
627-44-1	Diethylmercury
593-74-8	Dimethylmercury
22967-92-6	Methylmercury
67-56-1	Methanol
72-43-5	Methoxychlor
55738-54-0	<i>trans</i> -2[(Dimethylamino)-methylimino]-5-[2-(5-nitro-2-furyl)-vinyl]-1,3,4-oxadiazole
101-14-4	4,4'-Methylene <i>bis</i> (2-chloroaniline) (MOCA)
101-77-9	4,4'-Methylenedianiline (and its dichloride)
13552-44-8	4,4'-Methylenedianiline dihydrochloride
838-88-0	4,4'-Methylene <i>bis</i> (2-methylaniline)
101-61-1	4,4'-Methylene <i>bis</i> ( <i>N</i> , <i>N</i> '-dimethyl)aniline
101-68-8	Methylene diphenyl diisocyanate (MDI)
60-34-4	Methyl hydrazine
540-73-8	1,2-Dimethylhydrazine
74-88-4	Methyl iodide (iodomethane)
108-10-1	Methyl isobutyl ketone (MIBK, hexone)
624-83-9	Methyl isocyanate
75-86-5	2-Methyllactonitrile (acetone cyanohydrin)
80-62-6	Methyl methacrylate
66-27-3	Methyl methanesulfonate
129-15-7	2-Methyl-1-nitroanthraquinone
70-25-7	N-Methyl-N-nitro-N-nitrosoguanidine



CASRNa	Chemical Name
832-69-9	1-Methylphenanthrene
2381-21-7	1-Methylpyrene
109-06-8	2-Methylpyridine
1634-04-4	Methyl <i>tert</i> -butyl ether
56-04-2	Methylthiouracil
90-94-8	Michler's ketone
349 <sup>†</sup>	Mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.
350 <sup>†</sup>	Mineral fibers (fine mineral fibers which are man-made, and are airborne particles of a respirable size greater than 5 microns in length, less than or equal to 3.5 microns in diameter, with a length to diameter ratio of 3:1)
2385-85-5	Mirex
50-07-7	Mitomycin C
1313-27-5	Molybdenum trioxide
315-22-0	Monocrotaline
91-59-8	2-Naphthylamine
91-20-3	Naphthalene
7440-02-0	Nickel and compounds <sup>b</sup>
365 <sup>†</sup>	Nickel compounds, insoluble
7440-02-0	Nickel metal
1313-99-1	Nickel oxide
12035-72-2	Nickel subsulfide
11113-75-0	Nickel sulfide
368 <sup>†</sup>	Nickel compounds, soluble
373-02-4	Nickel acetate
3333-67-3	Nickel carbonate
12607-70-4	Nickel carbonate hydroxide
13463-39-3	Nickel carbonyl
7718-54-9	Nickel chloride
12054-48-7	Nickel hydroxide
7786-81-4	Nickel sulfate
10101-97-0	Nickel sulfate hexahydrate
13478-00-7	Nickel nitrate hexahydrate
1271-28-9	Nickelocene



CASRNa	Chemical Name
3570-75-0	Nifurthiazole
7697-37-2	Nitric acid
139-13-9	Nitrilotriacetic acid
18662-53-8	Nitrilotriacetic acid, trisodium salt monohydrate
99-59-2	5-Nitro- <i>o</i> -anisidine
98-95-3	Nitrobenzene
92-93-3	4-Nitrobiphenyl
1836-75-5	Nitrofen
59-87-0	Nitrofurazone
555-84-0	1-[(5-Nitrofurfurylidene)-amino]-2-imidazolidinone
531-82-8	N-[4-(5-nitro-2-furyl)-2-thiazolyl]-acetamide
302-70-5	Nitrogen mustard N-oxide
100-02-7	4-Nitrophenol
79-46-9	2-Nitropropane
924-16-3	N-Nitrosodibutylamine
1116-54-7	N-Nitrosodiethanolamine
55-18-5	N-Nitrosodiethylamine
62-75-9	N-Nitrosodimethylamine
86-30-6	N-Nitrosodiphenylamine
156-10-5	<i>p</i> -Nitrosodiphenylamine
621-64-7	N-Nitrosodipropylamine
10595-95-6	N-Nitrosomethylethylamine
759-73-9	N-Nitroso-N-ethylurea
615-53-2	N-Nitroso-N-methylurethane
684-93-5	N-Nitroso-N-methylurea
59-89-2	N-Nitrosomorpholine
16543-55-8	N-Nitrosonornicotine
100-75-4	N-Nitrosopiperidine
930-55-2	N-Nitrosopyrrolidine
39765-80-5	trans-Nonachlor
104-40-5	Nonylphenol, 4- (& ethoxylates)
8014-95-7	Oleum (fuming sulfuric acid)
56-38-2	Parathion
87-86-5	Pentachlorophenol



CASRNa	Chemical Name
32534-81-9	Pentabromodiphenyl ether
82-68-8	Pentachloronitrobenzene (quintobenzene)
79-21-0	Peracetic acid
489 <sup>†</sup>	Perfluorinated compounds (PFCs)
335-67-1	Perfluorooctanoic acid (PFOA)
1763-23-1	Perfluorooctanesulfonic acid (PFOS)
62-44-2	Phenacetin
94-78-0	Phenazopyridine
136-40-3	Phenazopyridine hydrochloride
3546-10-9	Phenesterin
50-06-6	Phenobarbital
108-95-2	Phenol
59-96-1	Phenoxybenzamine
63-92-3	Phenoxybenzamine hydrochloride
106-50-3	<i>p</i> -Phenylenediamine
132-27-4	o-Phenylphenate, sodium
90-43-7	2-Phenylphenol
75-44-5	Phosgene
7803-51-2	Phosphine
7664-38-2	Phosphoric acid
7723-14-0	Phosphorus and compounds <sup>b</sup>
10025-87-3	Phosphorus oxychloride
10026-13-8	Phosphorus pentachloride
1314-56-3	Phosphorus pentoxide
7719-12-2	Phosphorus trichloride
12185-10-3	Phosphorus, white
518 <sup>†</sup>	Phthalates
85-44-9	Phthalic anhydride
447 <sup>†</sup>	Polybrominated diphenyl ethers (PBDEs)
5436-43-1	PBDE-47 [2,2',4,4'-tetrabromodiphenyl ether]
60348-60-9	PBDE-99 [2,2',4,4',5-pentabromodiphenyl ether]
189084-64-8	PBDE-100 [2,2',4,4',6-pentabromodiphenyl ether]
182677-30-1	PBDE-138 [2,2',3,4,4',5'-hexabromodiphenyl ether]
68631-49-2	PBDE-153 [2,2',4,4',5,5'-hexabromodiphenyl ether]



CASRN <sup>a</sup>	Chemical Name
207122-15-4	PBDE-154 [2,2',4,4',5,6'-hexabromodiphenyl ether]
207122-16-5	PBDE-183 [2,2',3,4,4',5',6-heptabromodiphenyl ether]
1163-19-5	PBDE-209 [decabromodiphenyl ether]
1336-36-3	Polychlorinated biphenyls (PCBs)
645 <sup>†</sup>	Polychlorinated biphenyls (PCBs) TEQ <sup>c</sup>
34883-43-7	PCB-8 [2,4'-dichlorobiphenyl]
37680-65-2	PCB 18 [2,2',5-trichlorobiphenyl]
7012-37-5	PCB-28 [2,4,4'-trichlorobiphenyl]
41464-39-5	PCB-44 [2,2',3,5'-tetrachlorobiphenyl]
35693-99-3	PCB-52 [2,2',5,5'-tetrachlorobiphenyl]
32598-10-0	PCB-66 [2,3',4,4'-tetrachlorobiphenyl]
32598-13-3	PCB 77 [3,3',4,4'-tetrachlorobiphenyl]
70362-50-4	PCB 81 [3,4,4',5-tetrachlorobiphenyl]
37680-73-2	PCB-101 [2,2',4,5,5'-pentachlorobiphenyl]
32598-14-4	PCB 105 [2,3,3',4,4'-pentachlorobiphenyl]
74472-37-0	PCB 114 [2,3,4,4',5-pentachlorobiphenyl]
31508-00-6	PCB 118 [2,3',4,4',5-pentachlorobiphenyl]
65510-44-3	PCB 123 [2,3',4,4',5'-pentachlorobiphenyl]
57465-28-8	PCB 126 [3,3',4,4',5-pentachlorobiphenyl]
38380-07-3	PCB-128 [2,2',3,3',4,4'-hexachlorobiphenyl]
35065-28-2	PCB-138 [2,2',3,4,4',5'-hexachlorobiphenyl]
35065-27-1	PCB-153 [2,2',4,4',5,5'-hexachlorobiphenyl]
38380-08-4	PCB 156 [2,3,3',4,4',5-hexachlorobiphenyl]
69782-90-7	PCB 157 [2,3,3',4,4',5'-hexachlorobiphenyl]
52663-72-6	PCB 167 [2,3',4,4',5,5'-hexachlorobiphenyl]
32774-16-6	PCB 169 [3,3',4,4',5,5'-hexachlorobiphenyl]
35065-30-6	PCB-170 [2,2',3,3',4,4',5-heptachlorobiphenyl]
35065-29-3	PCB-180 [2,2',3,4,4',5,5'-heptachlorobiphenyl]
52663-68-0	PCB-187 [2,2',3,4',5,5',6-heptachlorobiphenyl]
39635-31-9	PCB 189 [2,3,3',4,4',5,5'-heptachlorobiphenyl]
52663-78-2	PCB-195 [2,2',3,3',4,4',5,6-octachlorobiphenyl]
40186-72-9	PCB-206 [2,2',3,3',4,4',5,5',6-nonachlorobiphenyl]
2051-24-3	PCB-209 [ decachlorobiphenyl]
646 <sup>†</sup>	Polychlorinated dibenzo-p-dioxins (PCDDs) & dibenzofurans (PCDFs) TEQ <sup>c</sup>



CASRNa	Chemical Name
1746-01-6	2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin (TCDD)
40321-76-4	1,2,3,7,8-Pentachlorodibenzo- <i>p</i> -dioxin (PeCDD)
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo- <i>p</i> -dioxin (HxCDD)
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo- <i>p</i> -dioxin (HxCDD)
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo- <i>p</i> -dioxin (HxCDD)
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo- <i>p</i> -dioxin (HpCDD)
3268-87-9	Octachlorodibenzo-p-dioxin (OCDD)
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran (TCDF)
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)
39001-02-0	Octachlorodibenzofuran (OCDF)
401 <sup>†</sup>	Polycyclic aromatic hydrocarbons (PAHs)
83-32-9	Acenaphthene
208-96-8	Acenaphthylene
120-12-7	Anthracene
191-26-4	Anthanthrene
56-55-3	Benz[a]anthracene
50-32-8	Benzo[a]pyrene
205-99-2	Benzo[b]fluoranthene
205-12-9	Benzo[c]fluorene
192-97-2	Benzo[e]pyrene
191-24-2	Benzo[g,h,i]perylene
205-82-3	Benzo[j]fluoranthene
207-08-9	Benzo[k]fluoranthene
86-74-8	Carbazole
218-01-9	Chrysene
27208-37-3	Cyclopenta[c,d]pyrene
226-36-8	Dibenz[a,h]acridine



CASRN <sup>a</sup>	Chemical Name
224-42-0	Dibenz[a,j]acridine
194-59-2	7H-Dibenzo[c,g]carbazole
53-70-3	Dibenz[a,h]anthracene
5385-75-1	Dibenzo[a,e]fluoranthene
192-65-4	Dibenzo[a,e]pyrene
189-64-0	Dibenzo[a,h]pyrene
189-55-9	Dibenzo[a,i]pyrene
191-30-0	Dibenzo[a,l]pyrene
206-44-0	Fluoranthene
86-73-7	Fluorene
193-39-5	Indeno[1,2,3-cd]pyrene
91-57-6	2-Methyl naphthalene
198-55-0	Perylene
85-01-8	Phenanthrene
129-00-0	Pyrene
432 <sup>†</sup>	Polycyclic aromatic hydrocarbon derivatives [PAH-Derivatives]
53-96-3	2-Acetylaminofluorene
117-79-3	2-Aminoanthraquinone
63-25-2	Carbaryl
57-97-6	7,12-Dimethylbenz[a]anthracene
42397-64-8	1,6-Dinitropyrene
42397-65-9	1,8-Dinitropyrene
56-49-5	3-Methylcholanthrene
3697-24-3	5-Methylchrysene
602-87-9	5-Nitroacenaphthene
7496-02-8	6-Nitrochrysene
607-57-8	2-Nitrofluorene
5522-43-0	1-Nitropyrene
57835-92-4	4-Nitropyrene
3564-09-8	Ponceau 3R
3761-53-3	Ponceau MX
7758-01-2	Potassium bromate
671-16-9	Procarbazine
366-70-1	Procarbazine hydrochloride



CASRNa	Chemical Name
1120-71-4	1,3-Propane sultone
57-57-8	beta-Propiolactone
123-38-6	Propionaldehyde
114-26-1	Propoxur (Baygon)
115-07-1	Propylene
6423-43-4	Propylene glycol dinitrate
107-98-2	Propylene glycol monomethyl ether
108-65-6	Propylene glycol monomethyl ether acetate
75-56-9	Propylene oxide
75-55-8	1,2-Propyleneimine (2-methylaziridine)
51-52-5	Propylthiouracil
110-86-1	Pyridine
91-22-5	Quinoline
106-51-4	Quinone
571 <sup>†</sup>	Radon and its decay products
572 <sup>†</sup>	Refractory ceramic fibers
50-55-5	Reserpine
353 <sup>†</sup>	Rockwool
94-59-7	Safrole
7783-07-5	Selenide, hydrogen
7782-49-2	Selenium and compounds <sup>b</sup>
7446-34-6	Selenium sulfide
7631-86-9	Silica, crystalline (respirable)
7440-22-4	Silver and compounds <sup>b</sup>
354 <sup>†</sup>	Slagwool
1310-73-2	Sodium hydroxide
10048-13-2	Sterigmatocystin
18883-66-4	Streptozotocin
100-42-5	Styrene
96-09-3	Styrene oxide
95-06-7	Sulfallate
7664-93-9	Sulfuric acid
505-60-2	Sulfur mustard
7446-11-9	Sulfur trioxide



CASRNa	Chemical Name
358 <sup>†</sup>	Talc containing asbestiform fibers
100-21-0	Terephthalic acid
40088-47-9	Tetrabromodiphenyl ether
630-20-6	1,1,1,2-Tetrachloroethane
79-34-5	1,1,2,2-Tetrachloroethane
127-18-4	Tetrachloroethene (perchloroethylene)
58-90-2	2,3,4,6-Tetrachlorophenol
811-97-2	1,1,1,2-Tetrafluoroethane
7440-28-0	Thallium and compounds <sup>b</sup>
62-55-5	Thioacetamide
139-65-1	4,4'-Thiodianiline
62-56-6	Thiourea
7550-45-0	Titanium tetrachloride
108-88-3	Toluene
26471-62-5	Toluene diisocyanates (2,4- and 2,6-)
584-84-9	Toluene-2,4-diisocyanate
91-08-7	Toluene-2,6-diisocyanate
95-53-4	o-Toluidine
636-21-5	<i>o</i> -Toluidine hydrochloride
41903-57-5	Total tetrachlorodibenzo-p-dioxin
36088-22-9	Total pentachlorodibenzo- <i>p</i> -dioxin
34465-46-8	Total hexachlorodibenzo-p-dioxin
37871-00-4	Total heptachlorodibenzo- <i>p</i> -dioxin
55722-27-5	Total tetrachlorodibenzofuran
30402-15-4	Total pentachlorodibenzofuran
55684-94-1	Total hexachlorodibenzofuran
38998-75-3	Total heptachlorodibenzofuran
8001-35-2	Toxaphene (polychlorinated camphenes)
126-73-8	Tributyl phosphate
120-82-1	1,2,4-Trichlorobenzene
71-55-6	1,1,1-Trichloroethane (methyl chloroform)
79-00-5	1,1,2-Trichloroethane (vinyl trichloride)
79-01-6	Trichloroethene (TCE, trichloroethylene)
75-69-4	Trichlorofluoromethane (Freon 11)



1	
CASRN <sup>a</sup>	Chemical Name
95-95-4	2,4,5-Trichlorophenol
88-06-2	2,4,6-Trichlorophenol
96-18-4	1,2,3-Trichloropropane
78-40-0	Triethyl phosphate
121-44-8	Triethylamine
112-49-2	Triethylene glycol dimethyl ether
512-56-1	Trimethyl phosphate
78-30-8	Triorthocresyl phosphate
115-86-6	Triphenyl phosphate
101-02-0	Triphenyl phosphite
1582-09-8	Trifluralin
526-73-8	1,2,3-Trimethylbenzene
95-63-6	1,2,4-Trimethylbenzene
108-67-8	1,3,5-Trimethylbenzene
540-84-1	2,2,4-Trimethylpentane
62450-06-0	Tryptophan-P-1
62450-07-1	Tryptophan-P-2
51-79-6	Urethane (ethyl carbamate)
7440-62-2	Vanadium (fume or dust)
1314-62-1	Vanadium pentoxide
108-05-4	Vinyl acetate
593-60-2	Vinyl bromide
75-01-4	Vinyl chloride
100-40-3	4-Vinylcyclohexene
75-02-5	Vinyl fluoride
75-35-4	Vinylidene chloride
1330-20-7	Xylene (mixture), including <i>m</i> -xylene, <i>o</i> -xylene, <i>p</i> -xylene
108-38-3	m-Xylene
95-47-6	o-Xylene
106-42-3	<i>p</i> -Xylene
7440-66-6	Zinc and compounds <sup>b</sup>
1314-13-2	Zinc oxide

- † Chemical designated by DEQ ID number.
- a) CASRN = Chemical Abstracts Service Registry Number, or DEQ ID if there is no CASRN.
- b) Inorganic chemicals designated with "and compounds" should be reported as the sum of all forms of the chemical, expressed as the inorganic element.
- c) TEQ = toxic equivalency, relative to 2,3,7,8-tetrachlorodibenzo-p-dioxin.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155 Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155



		Noncancer	Toxicity Reference Values (TRVs)							
		TBACT RAL <sup>p</sup>	Chronic Cancer <sup>a</sup>		Chronic Noncancer <sup>b</sup>		Acute Noncancer			
CASRN	Chemical	Notes		(μg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes	
75-07-0	Acetaldehyde		HI3	0.45	A	140	О	470	О	
60-35-5	Acetamide			0.050	О					
67-64-1	Acetone		HI3			31,000	Т	62,000	S	
75-05-8	Acetonitrile		HI3			60	I			
107-02-8	Acrolein		HI5			0.35	A	6.9	Т	
79-06-1	Acrylamide		HI3	0.010	I	6.0	I			
79-10-7	Acrylic acid		HI3			1.0	I	6,000	О	
107-13-1	Acrylonitrile		HI3	0.015	A	5.0	О	220	Т	
309-00-2	Aldrin			0.00020	I					
107-05-1	Allyl chloride		HI3	0.17	О	1.0	I			
7429-90-5	Aluminum and compounds	o	HI5			5.0	P			
7664-41-7	Ammonia		HI3			500	A	1,200	Т	
62-53-3	Aniline		HI5	0.63	О	1.0	I			
7440-36-0	Antimony and compounds	0	HI3			0.30	Т	1.0	Т	
140-57-8	Aramite			0.14	Ι					
7440-38-2	Arsenic and compounds	0	HI3	0.00023	A	0.015	О	0.20	S	



			Noncancer	Toxicity Reference Values (TRVs)							
		TBACT RAL <sup>p</sup>	Chro	_	Chronic Noncancer <sup>b</sup>		Acı Nonca				
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes		
7784-42-1	Arsine		HI3			0.015	О	0.20	О		
1332-21-4	Asbestos	k		4.3E-06	I						
103-33-3	Azobenzene			0.032	I						
71-43-2	Benzene	j	HI3	0.13	A	3.0	О	29	T		
92-87-5	Benzidine (and its salts)			7.1E-06	О						
100-44-7	Benzyl chloride		HI3	0.020	О	1.0	P	240	О		
7440-41-7	Beryllium and compounds	o	HI3	0.00042	A	0.0070	О	0.020	S		
111-44-4	Bis(2-chloroethyl) ether (BCEE)		HI3	0.0014	О			120	Tint		
542-88-1	Bis(chloromethyl) ether		HI5	7.7E-05	О			1.4	Tint		
117-81-7	Bis(2-ethylhexyl) phthalate (DEHP)			0.42	О						
75-25-2	Bromoform			0.91	I						
74-83-9	Bromomethane (methyl bromide)		HI3			5.0	A	3,900	О		
106-94-5	1-Bromopropane ( <i>n</i> -propyl bromide)		HI3	0.48	A	33	Т	1,700	Т		
106-99-0	1,3-Butadiene		HI3	0.033	A	2.0	О	660	O		



		Noncancer	Toxicity Reference Values (TRVs)							
			TBACT RAL <sup>p</sup>	Chronic Cancer <sup>a</sup>		Chronic Noncancer <sup>b</sup>		Acute Noncancer <sup>c</sup>		
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes	
78-93-3	2-Butanone (methyl ethyl ketone)		HI3			5,000	I	5,000	S	
78-92-2	sec-Butyl alcohol		HI3			30,000	P			
7440-43-9	Cadmium and compounds	0	HI3	0.00056	A	0.010	Т	0.030	S	
105-60-2	Caprolactam		HI3			2.2	О	50	О	
75-15-0	Carbon disulfide		HI3			800	A	6,200	О	
56-23-5	Carbon tetrachloride		HI3	0.17	A	100	I	1,900	О	
463-58-1	Carbonyl sulfide		HI3			10	О	660	О	
57-74-9	Chlordane	j	HI3	0.010	I	0.020	Т	0.20	Tint	
108171-26-2	Chlorinated paraffins	n		0.040	О					
7782-50-5	Chlorine		HI3			0.15	A	170	T	
10049-04-4	Chlorine dioxide		HI3			0.60	О	2.8	Tint	
532-27-4	2-Chloroacetophenone		HI5			0.030	Ι			
108-90-7	Chlorobenzene		HI3			50	P			
75-68-3	1-Chloro-1,1- difluoroethane		HI3			50,000	I			
75-45-6	Chlorodifluoromethane (Freon 22)		HI3			50,000	Ι			



			Noncancer	Toxicity Reference Values (TRVs)							
		TBACT RAL <sup>p</sup>	Chronic Cancer <sup>a</sup>		Chronic Noncancer <sup>b</sup>		Acı Nonca				
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes		
75-00-3	Chloroethane (ethyl chloride)		HI3			30,000	О	40,000	Т		
67-66-3	Chloroform		HI3		A2	300	A	490	Т		
74-87-3	Chloromethane (methyl chloride)		HI3			90	A	1,000	Т		
95-83-0	4-Chloro- <i>o</i> -phenylenediamine			0.22	О						
76-06-2	Chloropicrin		HI3			0.40	О	29	О		
126-99-8	Chloroprene		HI3	0.0033	I	20	I				
95-69-2	p-Chloro-o-toluidine			0.013	О						
18540-29-9	Chromium VI, chromate and dichromate particulate	d	HI3	8.3E-05	A	0.20	О	0.30	S		
7738-94-5	Chromium VI, chromic acid aerosol mist and chromium trioxide	d	HI3	8.3E-05	A	0.0050	Т	0.0050	S		
7440-48-4	Cobalt and compounds	o	HI3		A2	0.10	A				
148 <sup>†</sup>	Coke oven emissions			0.0016	I						
7440-50-8	Copper and compounds	0	HI3					100	О		
120-71-8	<i>p</i> -Cresidine			0.023	О						



		Noncancer	Toxicity Reference Values (TRVs)							
		TBACT RAL <sup>p</sup>	Chronic Cancer <sup>a</sup>		Chronic Noncancer <sup>b</sup>		Acı Nonca			
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes	
1319-77-3	Cresols (mixture), including <i>m</i> -cresol, <i>o</i> -cresol		HI3			600	О			
135-20-6	Cupferron			0.016	О					
74-90-8	Cyanide, hydrogen		HI3			0.80	A	340	О	
110-82-7	Cyclohexane		HI3			6,000	I			
50-29-3	DDT	e		0.010	I					
615-05-4	2,4-Diaminoanisole			0.15	О					
95-80-7	2,4-Diaminotoluene (2,4-toluene diamine)			0.00091	О					
333-41-5	Diazinon		HI3					10	Tint	
96-12-8	1,2-Dibromo-3- chloropropane (DBCP)		HI3	0.00017	P	0.20	I	1.9	Tint	
106-46-7	<i>p</i> -Dichlorobenzene (1,4-dichlorobenzene)		HI3	0.091	A	60	Т	12,000	Т	
91-94-1	3,3'-Dichlorobenzidine			0.0029	О					
75-34-3	1,1-Dichloroethane (ethylidene dichloride)			0.63	О					
156-60-5	trans-1,2-dichloroethene		HI3					790	T	



		Noncancer	Toxicity Reference Values (TRVs)							
			TBACT RAL P	Chronic Cancer <sup>a</sup>		Chronic Noncancer <sup>b</sup>		Acı Nonca		
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes	
75-09-2	Dichloromethane (methylene chloride)		HI3	100	A	600	I	2,100	Т	
78-87-5	1,2-Dichloropropane (propylene dichloride)		HI3			4.0	Ι	230	Т	
542-75-6	1,3-Dichloropropene		HI3	0.25	A	32	Т	36	Tint	
62-73-7	Dichlorvos (DDVP)		HI5			0.54	Т	18	Т	
60-57-1	Dieldrin			0.00022	I					
200 <sup>†</sup>	Diesel particulate matter		HI3	0.10	A	5.0	О			
111-42-2	Diethanolamine		HI3			0.20	P			
112-34-5	Diethylene glycol monobutyl ether		HI3			0.10	P			
111-90-0	Diethylene glycol monoethyl ether		HI5			0.30	P			
75-37-6	1,1-Difluoroethane		HI5			40,000	I			
60-11-7	4- Dimethylaminoazobenzene			0.00077	О					
68-12-2	Dimethyl formamide		HI3			80	О			
57-14-7	1,1-Dimethylhydrazine		HI3					0.49	Tint	
121-14-2	2,4-Dinitrotoluene			0.011	О					



				Toxicity Reference Values (TRVs)							
			TBACT RAL P	Chro Cano	_	Chro Nonca	_	Acı Nonca			
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes		
123-91-1	1,4-Dioxane		HI3	0.20	I	30	I	7,200	T		
122-66-7	1,2-Diphenylhydrazine (hydrazobenzene)			0.0045	I						
1937-37-7	Direct Black 38			7.1E-06	О						
2602-46-2	Direct Blue 6			7.1E-06	О						
16071-86-6	Direct Brown 95 (technical grade)			7.1E-06	О						
298-04-4	Disulfoton		HI3					6.0	T		
106-89-8	Epichlorohydrin		HI3	0.043	О	3.0	О	1,300	О		
106-88-7	1,2-Epoxybutane		HI5			20	О				
140-88-5	Ethyl acrylate		HI3			8.0	P				
100-41-4	Ethyl benzene		HI3	0.40	A	260	Т	22,000	Т		
106-93-4	Ethylene dibromide (EDB, 1,2-dibromoethane)		HI3	0.0017	A	9.0	I				
107-06-2	Ethylene dichloride (EDC, 1,2-dichloroethane)		HI3	0.038	A	7.0	P				
107-21-1	Ethylene glycol		HI3			400	О	2,000	Т		
111-76-2	Ethylene glycol monobutyl ether		HI3	_		82	О	29,000	Т		



			Noncancer	Toxicity Reference Values (TRVs)							
			TBACT RAL <sup>p</sup>	Chro Cano	_	Chro	· · · · · · · · · · · · · · · · · · ·	Acı Nonca			
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes		
110-80-5	Ethylene glycol monoethyl ether		HI3			70	О	370	О		
111-15-9	Ethylene glycol monoethyl ether acetate		HI3			60	P	140	О		
109-86-4	Ethylene glycol monomethyl ether		HI3			60	О	93	О		
110-49-6	Ethylene glycol monomethyl ether acetate		HI3			1.0	P				
75-21-8	Ethylene oxide		HI3	0.00033	A	30	О	160	Tint		
96-45-7	Ethylene thiourea			0.077	О						
239†	Fluorides		HI3			13	A	240	О		
7782-41-4	Fluorine gas		HI3					16	Т		
50-00-0	Formaldehyde		HI3	0.17	A	9.0	О	49	Т		
111-30-8	Glutaraldehyde		HI5			0.080	О	4.1	Т		
76-44-8	Heptachlor			0.00077	I						
1024-57-3	Heptachlor epoxide			0.00038	I						
118-74-1	Hexachlorobenzene			0.0020	О						
87-68-3	Hexachlorobutadiene			0.045	I						



				Toxicity Reference Values (TRVs)							
			TBACT RAL <sup>p</sup>	Chro Cano	_	Chro		Acı Nonca			
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes		
608-73-1	Hexachlorocyclohexanes (mixture) including but not limited to:			0.00091	О						
319-84-6	Hexachlorocyclohexane, alpha-			0.00091	О						
319-85-7	Hexachlorocyclohexane, beta-			0.00091	О						
58-89-9	Hexachlorocyclohexane, gamma- (Lindane)			0.0032	О						
77-47-4	Hexachlorocyclopentadiene		HI3			0.20	I	110	Tint		
67-72-1	Hexachloroethane		HI3			30	I	58,000	Т		
822-06-0	Hexamethylene-1,6- diisocyanate		HI5			0.069	Т	0.21	Tint		
110-54-3	Hexane		HI3			700	A				
302-01-2	Hydrazine		HI3	0.00020	О	0.030	P	5.2	Tint		
7647-01-0	Hydrochloric acid		HI3			20	A	2,100	О		
7664-39-3	Hydrogen fluoride		HI3			13	A	16	Т		
7783-06-4	Hydrogen sulfide		HI3			2.0	A	98	S		
78-59-1	Isophorone		HI3			2,000	О				



				Toxicity Reference Values (TRVs)							
			TBACT RAL <sup>p</sup>	Chro		Chro Nonca		Aci Nonca			
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(μg/m³)	Notes		
67-63-0	Isopropyl alcohol		HI3			200	Р	3,200	О		
98-82-8	Isopropylbenzene (c umene)		HI3			400	I				
7439-92-1	Lead and compounds	o	HI3		A2	0.15	A	0.15	S		
108-31-6	Maleic anhydride		HI5			0.70	О				
7439-96-5	Manganese and compounds	o	HI3			0.090	A	0.30	S		
7439-97-6	Mercury and compounds	О	HI3			0.30	A	0.60	О		
67-56-1	Methanol		HI3			4,000	A	28,000	О		
101-14-4	4,4'-Methylene <i>bis</i> (2-chloroaniline) (MOCA)			0.0023	О						
101-77-9	4,4'-Methylenedianiline (and its dichloride)		HI5	0.0022	О	20	О				
101-68-8	Methylene diphenyl diisocyanate (MDI)		HI3			0.080	О	12	О		
108-10-1	Methyl isobutyl ketone (MIBK, hexone)		HI3			3,000	I				
624-83-9	Methyl isocyanate		HI3			1.0	О				
80-62-6	Methyl methacrylate		HI5			700	I				



				Toxicity Reference Values (TRVs)							
			TBACT RAL P	Chro Cano	_	Chro Nonca		Acı Nonca			
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes		
1634-04-4	Methyl <i>tert</i> -butyl ether		HI3	3.8	О	8,000	О	8,000	О		
90-94-8	Michler's ketone			0.0040	О						
91-20-3	Naphthalene		HI3	0.029	A	3.7	Т	200	S		
365 <sup>†</sup>	Nickel compounds, insoluble	f	HI3	0.0038	A	0.014	О	0.20	0		
368†	Nickel compounds, soluble	f	HI3		A2	0.014	A	0.20	О		
7697-37-2	Nitric acid		HI5					86	О		
98-95-3	Nitrobenzene		HI3	0.025	I	9.0	I				
79-46-9	2-Nitropropane		HI3			20	I				
924-16-3	N-Nitrosodibutylamine			0.00032	О						
55-18-5	N-Nitrosodiethylamine			1.0E-04	О						
62-75-9	N-Nitrosodimethylamine			0.00022	О						
86-30-6	N-Nitrosodiphenylamine			0.38	О						
156-10-5	<i>p</i> -Nitrosodiphenylamine			0.16	О						
621-64-7	N-Nitrosodipropylamine			0.00050	О						
10595-95-6	N-Nitrosomethylethylamine			0.00016	О						



				Toxicity Reference Values (TRVs)							
			TBACT RAL P	Chro Cano	_	Chro Nonca		Acı Nonca			
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes		
59-89-2	N-Nitrosomorpholine			0.00053	О						
100-75-4	N-Nitrosopiperidine			0.00037	О						
930-55-2	N-Nitrosopyrrolidine			0.0017	О						
8014-95-7	Oleum (fuming sulfuric acid)		HI3					120	О		
56-38-2	Parathion		HI3					0.020	Tint		
87-86-5	Pentachlorophenol			0.20	О						
108-95-2	Phenol		HI3			200	О	5,800	О		
75-44-5	Phosgene		HI3			0.30	A	4.0	O		
7803-51-2	Phosphine		HI3			0.80	A				
7664-38-2	Phosphoric acid		HI3			10	A				
12185-10-3	Phosphorus, white		HI3			9.0	A	20	Т		
85-44-9	Phthalic anhydride		HI3			20	О				
447 <sup>†</sup>	Polybrominated diphenyl ethers (PBDEs)	g	HI3					6.0	Tint		
1336-36-3	Polychlorinated biphenyls (PCBs)			0.010	A						



				Toxicity Reference Values (TRVs)							
			TBACT RAL <sup>p</sup>	Chro Cano		Chro		Acı Nonca			
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes		
645 <sup>†</sup>	Polychlorinated biphenyls (PCBs) TEQ	h	HI3	2.6E-08	A1	4.E-05	О				
32598-13-3	PCB 77 [3,3',4,4'- tetrachlorobiphenyl]	h	HI3	0.00026	A1	0.40	О				
70362-50-4	PCB 81 [3,4,4',5- tetrachlorobiphenyl]	h	HI3	8.8E-05	A1	0.13	О				
32598-14-4	PCB 105 [2,3,3',4,4'-pentachlorobiphenyl]	h	HI3	0.00088	A1	1.3	О				
74472-37-0	PCB 114 [2,3,4,4',5- pentachlorobiphenyl]	h	HI3	0.00088	A1	1.3	О				
31508-00-6	PCB 118 [2,3',4,4',5- pentachlorobiphenyl]	h	HI3	0.00088	A1	1.3	О				
65510-44-3	PCB 123 [2,3',4,4',5'-pentachlorobiphenyl]	h	HI3	0.00088	A1	1.3	О				
57465-28-8	PCB 126 [3,3',4,4',5- pentachlorobiphenyl]	h	HI3	2.6E-07	A1	0.00040	О				
38380-08-4	PCB 156 [2,3,3',4,4',5-hexachlorobiphenyl]	h	HI3	0.00088	A1	1.3	О				
69782-90-7	PCB 157 [2,3,3',4,4',5'-hexachlorobiphenyl]	h	HI3	0.00088	A1	1.3	О				
52663-72-6	PCB 167 [2,3',4,4',5,5'-hexachlorobiphenyl]	h	HI3	0.00088	A1	1.3	О				



				Toxic	ity Re	eferen	ce Va	lues (T	RVs)
			TBACT RAL <sup>p</sup>	Chro		Chro		Acı Nonca	
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes
32774-16-6	PCB 169 [3,3',4,4',5,5'-hexachlorobiphenyl]	h	HI3	8.8E-07	A1	0.0013	О		
39635-31-9	PCB 189 [2,3,3',4,4',5,5'-heptachlorobiphenyl]	h	HI3	0.00088	A1	1.3	О		
646 <sup>†</sup>	Polychlorinated dibenzo- p-dioxins (PCDDs) & dibenzofurans (PCDFs) TEQ	h	HI3	2.6E-08	A1	4.0E-05	О		
1746-01-6	2,3,7,8- Tetrachlorodibenzo- <i>p</i> - dioxin (TCDD)		HI3	2.6E-08	A	4.0E-05	О		
40321-76-4	1,2,3,7,8- Pentachlorodibenzo- <i>p</i> - dioxin (PeCDD)	h	HI3	2.6E-08	A1	4.0E-05	О		
39227-28-6	1,2,3,4,7,8- Hexachlorodibenzo- <i>p</i> - dioxin (HxCDD)	h	HI3	2.6E-07	A1	0.00040	О		
57653-85-7	1,2,3,6,7,8- Hexachlorodibenzo- <i>p</i> - dioxin (HxCDD)	h	HI3	2.6E-07	A1	0.00040	О		
19408-74-3	1,2,3,7,8,9- Hexachlorodibenzo- <i>p</i> - dioxin (HxCDD)	h	HI3	2.6E-07	A1	0.00040	0		



				Toxicity Reference Values (TRVs)							
			TBACT RAL <sup>p</sup>	Chro		Chro Nonca		Acı Nonca			
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes		
35822-46-9	1,2,3,4,6,7,8- Heptachlorodibenzo- <i>p</i> - dioxin (HpCDD)	h	HI3	2.6E-06	A1	0.0040	О				
3268-87-9	Octachlorodibenzo- <i>p</i> -dioxin (OCDD)	h	HI3	8.8E-05	A1	0.13	О				
51207-31-9	2,3,7,8- Tetrachlorodibenzofuran (TCDF)	h	HI3	2.6E-07	A1	0.00040	О				
57117-41-6	1,2,3,7,8- Pentachlorodibenzofuran (PeCDF)	h	HI3	8.8E-07	A1	0.0013	О				
57117-31-4	2,3,4,7,8- Pentachlorodibenzofuran (PeCDF)	h	HI3	8.8E-08	A1	0.00013	О				
70648-26-9	1,2,3,4,7,8- Hexachlorodibenzofuran (HxCDF)	h	HI3	2.6E-07	A1	0.00040	О				
57117-44-9	1,2,3,6,7,8- Hexachlorodibenzofuran (HxCDF)	h	HI3	2.6E-07	A1	0.00040	0				
72918-21-9	1,2,3,7,8,9- Hexachlorodibenzofuran (HxCDF)	h	HI3	2.6E-07	A1	0.00040	О				



				Toxicity Reference Values (TRVs)							
			TBACT RAL <sup>p</sup>	Chro	_	Chro Nonca	· · · · · · · · · · · · · · · · · · ·	Acı Nonca			
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes		
60851-34-5	2,3,4,6,7,8- Hexachlorodibenzofuran (HxCDF)	h	HI3	2.6E-07	A1	0.00040	О				
67562-39-4	1,2,3,4,6,7,8- Heptachlorodibenzofuran (HpCDF)	h	HI3	2.6E-06	A1	0.0040	О				
55673-89-7	1,2,3,4,7,8,9- Heptachlorodibenzofuran (HpCDF)	h	HI3	2.6E-06	A1	0.0040	О				
39001-02-0	Octachlorodibenzofuran (OCDF)	h	HI3	8.8E-05	A1	0.13	О				
401†	Polycyclic aromatic hydrocarbons (PAHs)	q		0.0017	A						
191-26-4	Anthanthrene	i		0.0042	A1						
56-55-3	Benz[a]anthracene	i		0.0083	A1						
50-32-8	Benzo[a]pyrene	m	HI3	0.0017	A	0.0020	I	0.0020	I		
205-99-2	Benzo[b]fluoranthene	i		0.0021	A1						
205-12-9	Benzo[c]fluorene	i		8.3E-05	A1						
191-24-2	Benzo[g,h,i]perylene	i		0.19	A1						
205-82-3	Benzo[j]fluoranthene	i		0.0056	A1						



			Noncancer	Toxicity Reference Values (TRVs)							
			TBACT RAL <sup>p</sup>	Chro Cano	_	Chro Nonca		Acı Nonca			
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes		
207-08-9	Benzo[k]fluoranthene	i		0.056	A1						
218-01-9	Chrysene	i		0.017	A1						
27208-37-3	Cyclopenta[c,d]pyrene	i		0.0042	A1						
53-70-3	Dibenz[a,h]anthracene	i		0.00017	A1						
192-65-4	Dibenzo[a,e]pyrene	i		0.0042	A1						
189-64-0	Dibenzo[a,h]pyrene	i		0.0019	A1						
189-55-9	Dibenzo[a,i]pyrene	i		0.0028	A1						
191-30-0	Dibenzo[a,l]pyrene	i		5.6E-05	A1						
206-44-0	Fluoranthene	i		0.021	A1						
193-39-5	Indeno[1,2,3-cd]pyrene	i		0.024	A1						
3697-24-3	5-Methylchrysene	i		0.0017	A1						
7496-02-8	6-Nitrochrysene	i		0.00017	A1						
7758-01-2	Potassium bromate			0.0071	О						
1120-71-4	1,3-Propane sultone			0.0014	О						
123-38-6	Propionaldehyde		HI5			8.0	Ι				
115-07-1	Propylene		HI5			3,000	О				



				Toxicity Reference Values (TRVs)							
			TBACT RAL P	Chro Cano	_	Chro Nonca		Acute Noncancer <sup>c</sup>			
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes		
6423-43-4	Propylene glycol dinitrate		HI5			0.27	Т	20	Т		
107-98-2	Propylene glycol monomethyl ether		HI3			7,000	О				
75-56-9	Propylene oxide		HI3	0.27	О	30	О	3,100	О		
572 <sup>†</sup>	Refractory ceramic fibers	k	HI5			0.030	Т				
7783-07-5	Selenide, hydrogen		HI3					5.0	О		
7782-49-2	Selenium and compounds	j, o	HI3				A3	2.0	S		
7631-86-9	Silica, crystalline (respirable)		HI5			3.0	О				
1310-73-2	Sodium hydroxide		HI3					8.0	О		
100-42-5	Styrene		HI3			1,000	A	21,000	S		
7664-93-9	Sulfuric acid		HI5			1.0	О	120	О		
505-60-2	Sulfur mustard		HI3					0.70	T		
7446-11-9	Sulfur trioxide		HI5			1.0	О	120	О		
630-20-6	1,1,1,2-Tetrachloroethane			0.14	I						
79-34-5	1,1,2,2-Tetrachloroethane			0.017	О						
127-18-4	Tetrachloroethene (perchloroethylene)		HI3	3.8	A	41	Т	41	Т		



			Noncancer TBACT RAL <sup>p</sup>	Toxicity Reference Values (TRVs)						
				Chronic Cancer <sup>a</sup>		Chronic Noncancer <sup>b</sup>		Acute Noncancer <sup>c</sup>		
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes	
811-97-2	1,1,1,2-Tetrafluoroethane		HI3			80,000	I			
62-55-5	Thioacetamide			0.00059	О					
7550-45-0	Titanium tetrachloride		HI3			0.10	Т	10	Tint	
108-88-3	Toluene		HI3			5,000	A	7,500	Т	
26471-62-5	Toluene diisocyanates (2,4- and 2,6-)		HI3	0.091	О	0.021	A	0.071	Т	
8001-35-2	Toxaphene (polychlorinated camphenes)			0.0031	I					
71-55-6	1,1,1-Trichloroethane (methyl chloroform)		HI3			5,000	A	11,000	Т	
79-00-5	1,1,2-Trichloroethane (vinyl trichloride)			0.063	О					
79-01-6	Trichloroethene (TCE, trichloroethylene)		HI3	0.24	A	2.1	Т	2.1	Tint	
88-06-2	2,4,6-Trichlorophenol			0.050	О					
96-18-4	1,2,3-Trichloropropane		HI5			0.30	Ι	1.8	Т	
121-44-8	Triethylamine		HI3			200	О	2,800	О	
526-73-8	1,2,3-Trimethylbenzene		HI3			60	Ι			



			Noncancer TBACT RAL <sup>p</sup>	Toxicity Reference Values (TRVs)						
				Chronic Cancer <sup>a</sup>		Chronic Noncancer <sup>b</sup>		Acute Noncancer <sup>c</sup>		
CASRN	Chemical	Notes		(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes	
95-63-6	1,2,4-Trimethylbenzene		HI3			60	I			
108-67-8	1,3,5-Trimethylbenzene		HI3			60	I			
51-79-6	Urethane (ethyl carbamate)			0.0034	О					
7440-62-2	Vanadium (fume or dust)		HI3			0.10	Т	0.80	T	
1314-62-1	Vanadium pentoxide		HI3	0.00012	P	0.0070	P	30	О	
108-05-4	Vinyl acetate	j	HI3			200	О	200	I	
593-60-2	Vinyl bromide		HI5			3.0	I			
75-01-4	Vinyl chloride		HI3	0.11	I	100	I	1,300	Т	
75-35-4	Vinylidene chloride	j	HI3			200	I	200	I	
1330-20-7	Xylene (mixture), including <i>m</i> -xylene, <i>o</i> - xylene, <i>p</i> -xylene		HI3			220	A	8,700	Т	

#### Footnotes for OAR 340-247-8010 Table 2:

- † Chemical designated by DEQ ID number.
- a) TRV based on a 1 in 1 million excess cancer risk.  $TRV = 1x10^{-6} / IUR, \text{ where } IUR = \text{chemical-specific inhalation unit risk value } [(\mu g/m^3)^{-1}].$
- b) TRV based on chronic noncancer value from authoritative sources ( $\mu g/m^3$ ).
- c) TRV based on acute or subchronic noncancer value from authoritative sources (μg/m³).
- d) The TRVs presented for chromium are applicable to hexavalent chromium.
- e) DDT TRVs apply to the sum of DDT, DDE, and DDD compounds.

- f) As recommended by the ATSAC in 2018, the two categories of nickel compounds contain the following specific nickel compounds:
  - Soluble nickel compounds are considered to be emitted mainly in aerosol form, to be less potent carcinogens than insoluble nickel compounds, and include nickel acetate, nickel chloride, nickel carbonate, nickel hydroxide, nickelocene, nickel sulfate, nickel sulfate hexahydrate, nickel nitrate hexahydrate, nickel carbonate hydroxide.
  - <u>Insoluble nickel compounds</u> are considered to be emitted mainly in particulate form, to be more potent carcinogens than soluble nickel compounds, and to include nickel subsulfide, nickel oxide, nickel sulfide, nickel metal.
- g) TRVs apply to octabrominated diphenyl ethers (CASRN 32536-52-0) and pentabrominated diphenyl ethers (CASRN 32534-81-9), including BDE-99.
- h) TRV for chronic cancer calculated by applying toxicity equivalency factor to 2,3,7,8-TCDD TRV.
- i) TRV for chronic cancer calculated by applying toxicity equivalency factor to benzo[a]pyrene TRV.
- j) If the short-term toxicity reference value is lower than the chronic noncancer toxicity reference value, the chronic noncancer toxicity reference value was used for the short-term toxicity reference value because chronic noncancer toxicity reference values are generally more reliable.
- k) TRVs for asbestos and refractory ceramic fibers are in units of fibers/cm<sup>3</sup>.
- m) Because benzo[a]pyrene can cause developmental effects, the chronic noncancer TRV is also used as the acute noncancer TRV.
- n) Chlorinated paraffins of average chain length of C12, approximately 60% chlorine by weight.
- o) An inorganic chemical designated with "and compounds" indicates that the TRV applies to the sum of all forms of the chemical, expressed as the inorganic element.
- p) Noncancer TBACT RAL = noncancer Toxics Best Available Control Technology Risk Action Level, OAR 340-245-8010, Table 1.
- q) Cancer TRV for PAHs was developed using benzo[a]pyrene TRV.

#### Legend:

A = ATSAC, DEQ Air Toxics Science Advisory Committee, 2018.

A1 = ATSAC, 2018. TRV for cancer calculated by applying toxic equivalency factor.

A2 = Because the ATSAC decided it was inappropriate to develop an ABC based on carcinogenic effects, DEQ did not obtain a cancer TRV from the other authoritative sources.

A3 = Because the ATSAC decided it was inappropriate to develop an ABC based on noncarcinogenic effects, DEQ did not obtain a TRV from the other authoritative sources.

CASRN = Chemical Abstracts Service Registry Number, or DEQ ID if there is no CASRN.

I = IRIS, EPA integrated risk information system

O = OEHHA, California Environmental Protection Agency, Office of Environmental Health Hazard Assessment

P = PPRTV, EPA preliminary peer reviewed toxicity value

S = SGC, DEQ short-term guideline concentration

T = ATSDR, U.S. Agency for Toxic Substances and Disease Registry

TEQ = toxic equivalency, relative to 2,3,7,8-tetrachlorodibenzo-p-dioxin.

Tint = ATSDR, intermediate minimal risk level

TRV = toxicity reference value