

Substance	CAS No.	TWA		STEL		Ceiling		Skin designation
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Acetaldehyde	75-07-0	100	180	150	270	—	—	—
Acetic acid	64-19-7	10	25	—	—	—	—	—
Acetic anhydride	108-24-7	—	—	—	—	5	20	—
Acetone	67-64-1	750	1800	1000	2400	—	—	—
Acetonitrile	75-05-8	40	70	60	105	—	—	—
2-Acetylaminofluorine; see 29 CFR 1910.1003	53-96-3	—	—	—	—	—	—	—
Acetylene dichloride; see 1,2-Dichloroethylene								
Acetylene tetrabromide	79-27-6	1	14	—	—	—	—	—
Acetylsalicylic acid (Asprin)	50-78-2	—	5	—	—	—	—	—
Acrolein	107-02-8	0.1	0.25	0.3	0.8	—	—	—
Acrylamide	79-06-1	—	0.03	—	—	—	—	X
Acrylic acid	79-10-7	10	30	—	—	—	—	X
Acrylonitrile; see 29 CFR 1910.1045	107-13-1	—	—	—	—	—	—	—
Aldrin	309-00-2	—	0.25	—	—	—	—	X
Allyl alcohol	107-18-6	2	5	4	10	—	—	X
Allyl chloride	107-05-1	1	3	2	6	—	—	—
Allyd glycidl ether (AGE)	106-92-3	5	22	10	44	—	—	—
Allyl propyl disulfide	2179-59-1	2	12	3	18	—	—	—
alpha-Alumina	1344-28-1	—	—	—	—	—	—	—
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Aluminum (As al) Metal	7429-90-5							
Total dust	—	—	15	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Pyro powders	—	—	5	—	—	—	—	—
Welding fumes	—	—	5	—	—	—	—	—
Soluble salts	—	—	2	—	—	—	—	—
Alkyls	—	—	2	—	—	—	—	—
4-Aminodiphenyl; see 29 CFR 1910.1003	92-67-1							
2-Aminoethanol; see Ethanolamine								
2-Aminopyridine	504-29-0	0.5	2	—	—	—	—	—
Amitrole	61-82-5	—	0.2	—	—	—	—	—
Ammonia	7664-41-7	—	—	35	27	—	—	—
Ammonium chloride fume	12125-02-9	—	10	—	20	—	—	—
Ammonium sulfamate	7773-06-0							
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
n-Amyl acetate	628-63-7	100	525	—	—	—	—	—
Sec-Amyl acetate	626-38-0	125	650	—	—	—	—	—
Aniline and homologs	62-53-3	2	8	—	—	—	—	X
Anisidine (o-,p-isomers)	29191-52-4	—	0.5	—	—	—	—	X
Antimony and compounds (as Sb)	7440-36-0	—	0.5	—	—	—	—	—
ANTU (alpha Naphthylthiourea)	86-88-4	—	0.3	—	—	—	—	—
Arsenic, organic compounds (as As)	7440-38-2	—	0.5	—	—	—	—	—
Arsenic, inorganic compounds (as As); see 29 CFR 1910.1018	7440-38-2							

Substance	CAS No.	TWA		STEL		Ceiling		Skin designation
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Arsine	7784-42-1	0.05	0.2	—	—	—	—	—
Asbestos; see 29 CFR 1910.1001 and 29 CFR 1926.1101	Varies							
Atrazine	1912-24-9	—	5	—	—	—	—	—
Azinphos-methyl	86-50-0	—	0.2	—	—	—	—	X
Barium, soluble compounds (as Ba)	7440-39-3	—	0.5	—	—	—	—	—
Barium sulfate	7727-43-7							
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Benomyl	17804-35-2							
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Benzene; see 29 CFR 1910.1028	71-43-2							
Industries excluded from 29 CFR 1910.1028 (STEL – 10 minutes)		10	—	25	—	50	—	—
Benzidine; see 29 CFR 1910.1003	92-87-5							
p-Benzoquinone; see Quinone								
Benzo(a)pyrene; see Coal tar pitch volatiles								
Benzoyl peroxide	94-36-0	—	5	—	—	—	—	—
Benzyl chloride	100-44-7	1	5	—	—	—	—	—
Beryllium and beryllium Compounds (as Be) (STEL – 30 minutes)	7440-41-7	—	0.002	—	0.005	—	0.025	—
Biphenyl; see Diphenyl								
Bismuth telluride, Undoped	1304-82-1							
Total dust	—	—	15	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Bismuth telluride, Se-doped	—	—	5	—	—	—	—	—
Borates, tetra, sodium salts								
Anhydrous	1330-43-4	—	10	—	—	—	—	—
Decahydrate	1303-96-4	—	10	—	—	—	—	—
Pentahydrate	12179-04-3	—	10	—	—	—	—	—
Boron oxide	1303-86-2							
Total dust	—	—	10	—	—	—	—	—
Boron tribromide	10294-33-4	—	—	—	—	1	10	—
Boron trifluoride	7637-07-2	—	—	—	—	1	3	—
Bromacil	314-40-9	1	10	—	—	—	—	—
Bromine	7726-95-6	0.1	0.7	0.3	2	—	—	—
Bromine pentafluoride	7789-30-2	0.1	0.7	—	—	—	—	—
Bromoform	75-25-2	0.5	5	—	—	—	—	X
Butadiene (1,3-Butadiene) see 29 CFR 1910.1051	106-99-8							
Butane	106-97-8	800	1900	—	—	—	—	—
Butanethiol; see Butyl mercaptan								
2-Butanone (Methyl ethyl ketone)	78-93-3	200	590	300	885	—	—	—
2-Butoxyethanol	111-76-2	25	120	—	—	—	—	X
n-butyl-acetate	123-86-4	150	710	200	950	—	—	—
Sec-Butyl acetate	105-46-4	200	950	—	—	—	—	—
Tert-Butyl acetate	540-88-5	200	950	—	—	—	—	—
Butyl acrylate	141-32-2	10	55	—	—	—	—	—
n-Butyl alcohol	71-36-3	—	—	—	—	50	150	X
Sec-Butyl alcohol	78-92-2	100	305	—	—	—	—	—
Tert-Butyl alcohol	75-65-0	100	300	150	450	—	—	—

Substance	CAS No.	TWA		STEL		Ceiling		Skin designation
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Butylamine	109-73-9	—	—	—	—	5	15	X
Tert-Butyl chromate (as CrO <sub>3</sub> )	1189-85-1	—	—	—	—	—	0.1	X
n-Butyl glycidyl ether (BGE)	2426-08-6	25	135	—	—	—	—	—
n-Butyl lactate	138-22-7	5	25	—	—	—	—	—
Butyl mercaptan	109-79-5	0.5	1.5	—	—	—	—	—
o-sec-Butylphenol	89-72-5	5	30	—	—	—	—	X
p-tert-Butyltoluene	98-51-1	10	60	20	120	—	—	—
Cadmium fume and dust (as Cd); see 29 CFR 1910.1027	7440-43-9							
Calcium carbonate	1317-65-3							
Total dust	—	—	15	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Calcium cyanamide	156-62-7	—	0.5	—	—	—	—	—
Calcium hydroxide	1305-62-0			—	—	—	—	—
Total dust	—	—	15	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Calcium oxide	1305-78-8		5	—	—	—	—	—
Calcium silicate	1344-95-2							
Total dust	—	—	15	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Calcium sulfate	7778-18-9							
Total dust	—	—	15	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Camphor, synthetic	76-22-2	—	2	—	—	—	—	—
Caprolactam	105-60-2							
Dust	—	—	1	—	3	—	—	—
Vapor	—	5	20	10	40	—	—	—
Captafol (Difolatan®)	2425-06-1	—	0.1	—	—	—	—	—
Captan	133-06-2	—	5	—	—	—	—	—
Carbaryl (Sevin®)	63-25-2	—	5	—	—	—	—	—
Carbofluran (Furadan®)	1563-66-2	—	0.1	—	—	—	—	—
Carbon black	1333-86-4	—	3.5	—	—	—	—	—
Carbon dioxide	124-38-9	10,000	18,000	30,000	54,000	—	—	—
Carbon disulfide	75-15-0	4	12	12	36	—	—	X
Carbon monoxide (STEL – 5 minutes)	630-08-0	35	40	200	229	1500	—	—
Carbon tetrabromide	558-13-4	0.1	1.4	0.3	4	—	—	—
Carbon tetrachloride	56-23-5	2	12.6	—	—	—	—	—
Carbonyl fluoride	353-50-4	2	5	5	15	—	—	—
Catechol (Pyrocatechol)	120-80-9	5	20	—	—	—	—	X
Cellulose	9004-34-6							
Total Dust	—	—	15	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Cesium hydroxide	21351-79-1	—	2	—	—	—	—	—
Chlordane	57-74-9	—	0.5	—	—	—	—	X
Chlorinated camphene	8001-35-2	—	0.5	—	1	—	—	X
Chlorinated diphenyl oxide	55720-99-5	—	0.5	—	—	—	—	—
Chlorine	7782-50-5	0.5	1.5	1	3	—	—	—
Chlorine dioxide	10049-04-4	0.1	0.3	0.3	0.9	—	—	—
Chlorine trifluoride	7790-91-2	—	—	—	—	0.1	0.4	—
Chloroacetaldehyde	107-20-0	—	—	—	—	1	3	—
a-Chloroacetophenone (Phenacyl chloride)	532-27-4	0.05	0.3	—	—	—	—	—
Chloroacetyl chloride	79-04-9	0.05	0.2	—	—	—	—	—

Substance	CAS No.	TWA		STEL		Ceiling		Skin designation
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Chlorobenzene	108-90-7	75	350	—	—	—	—	—
o-Chlorobenzylidene malononitrile	2698-41-1	—	—	—	—	0.05	0.4	X
Chlorobromomethane	74-97-5	200	1050	—	—	—	—	—
2-Chloro-1,3-butadiene; see b-Chloroprene								
Chlorodifluoromethane	75-45-6	1000	3500	—	—	—	—	—
Chlorodiphenyl (42% Chlorine) (PCB)	53469-21-9	—	1	—	—	—	—	X
Chlorodiphenyl (54% Chlorine) (PCB)	11097-69-1	—	0.5	—	—	—	—	X
1-Chloro,2,3-epoxypropane; see Epichlorohydrin								
2-Chloroethanol; see Ethylene chlorohydrin								
Chloroethylene; see Vinyl chloride								
Chloroform (Trichloromethane)	67-66-3	2	9.78	—	—	—	—	—
Bis(Chloromethyl) ether see 29 CFR 1910.1003	542-88-1							
Chloromethyl methyl ether; see 29 CFR 1910.1003	107-30-2							
1-Chloro-1-nitropropane	600-25-9	2	10	—	—	—	—	—
Chloropentafluoroethane	76-15-3	1000	6320	—	—	—	—	—
Chloropicrin	76-06-2	0.1	0.7	—	—	—	—	—
Beta-Chloroprene	126-99-8	10	35	—	—	—	—	X
o-Chlorostyrene	2039-87-4	50	285	75	428	—	—	—
o-Chlorotoluene	95-49-8	50	250	—	—	—	—	—
2-Chloro-6-trichloro-methpyridine	1929-82-4							
Total dust	—	—	15	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Chlorpyrifos	2921-88-2	—	0.2	—	—	—	—	X
Chromic acid and chromates (as CrO <sub>3</sub> )	Varies with compound	—	—	—	—	—	0.1	—
Chromium, sol chromic, chromous salts (as Cr)	7440-47-3	—	0.5	—	—	—	—	—
Chromium, metal and insoluble Salts	7440-47-3	—	1	—	—	—	—	—
Chrysene; see Coal tar pitch volatiles								
Clopidol	2971-90-6							
Total dust	—	—	15	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Coal dust (less than 5% SiO <sub>2</sub> )	—	—	0.2	—	—	—	—	—
Respirable fraction	—	—	0.1	—	—	—	—	—
Coal dust (greater than or equal to 5% SiO <sub>2</sub> ), Respirable quartz fraction	—	—	0.1	—	—	—	—	—
Coal tar pitch volatiles (benzene soluble fraction), anthracene, BaP, phenanthrene, acidine, chrysene, pyrene	65966-93-2	—	0.2	—	—	—	—	—
Cobalt metal, dust, and fume (as Co)	7440-48-4	—	0.05	—	—	—	—	—
Cobalt carbonyl (as Co)	10210-68-1	—	0.1	—	—	—	—	—
Cobalt hydrocarbonyl (as Co)	16842-03-8	—	0.1	—	—	—	—	—
Coke oven emissions; see 29 CFR 1910.1029	—							
Copper	7440-50-8	—	—	—	—	—	—	—
Fume (as Cu)	—	—	0.1	—	—	—	—	—
Dusts and mists (as Cu)	—	—	1	—	—	—	—	—

Substance	CAS No.	TWA		STEL		Ceiling		Skin designation
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Cotton dust (raw)	—	—	1	—	—	—	—	—
This 8-hour TWA applies to respirable dust as measured by a vertical elutriator cotton dust sampler or equivalent instruction. The time-weighted average applies to the cotton waste processing operations of waste recycling (sorting, blending, cleaning and willowing) and ginning. See also 29 CFR 1910.1043 for cotton dust limits applicable to other sectors.								
Crag herbicide (Sesone)	136-78-7	—	—	—	—	—	—	—
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Cresol, all isomers	1319-77-3	5	22	—	—	—	—	X
Crotonaldehyde	123-73-9; 4170-30-3	2	6	—	—	—	—	—
Crufomate	299-86-5	—	5	—	—	—	—	—
Cumene	98-82-8	50	245	—	—	—	—	X
Cyanamide	420-04-2	—	2	—	—	—	—	—
Cyanides (as CN)	Varies with compound	—	5	—	—	—	—	—
Cyanogen	460-19-5	10	20	—	—	—	—	—
Cyanogen chloride	506-77-4	—	—	—	—	0.3	0.6	—
Cyclohexane	110-82-7	300	1050	—	—	—	—	—
Cyclohexanol	108-93-0	50	200	—	—	—	—	X
Cyclohexanone	108-94-1	25	100	—	—	—	—	X
Cyclohexene	110-83-8	300	1015	—	—	—	—	—
Cyclohexylamine	108-91-8	10	40	—	—	—	—	—
Cyclonite	121-82-4	—	1.5	—	—	—	—	X
Cyclopentadiene	542-92-7	75	200	—	—	—	—	—
Cyclopentane	287-92-3	600	1720	—	—	—	—	—
Cyhexatin	13121-70-5	—	5	—	—	—	—	—
2,4-D (Dichlorophenoxyacetic acid)	94-75-7	—	10	—	—	—	—	—
Decaborane	17702-41-9	0.05	0.3	0.15	0.9	—	—	X
Demeton (Systox®)	8065-48-3	—	0.1	—	—	—	—	X
Dichlorodiphenyltrichloroethane (DDT)	50-29-3	—	1	—	—	—	—	X
Dichlorvos (DDVP)	62-73-7	—	1	—	—	—	—	X
Diacetone alcohol (4-Hydroxy-4-methyl-2-pentanone)	123-42-2	50	240	—	—	—	—	—
1,2-Diaminoethane; see Ethylenediamine								
Diazinon	333-41-5	—	0.1	—	—	—	—	X
Diazomethane	334-88-3	0.2	0.4	—	—	—	—	—
Diborane	19287-45-7	0.1	0.1	—	—	—	—	—
1,2-Dibromo-3-chloropropane; see 29 CFR 1910.1044	96-12-8							
2-N-Dibutylaminoethanol	102-81-8	2	14	—	—	—	—	—
Dibutyl phosphate	107-66-4	1	5	2	10	—	—	—
Dibutyl phthalate	84-74-2	—	5	—	—	—	—	—
Dichloroacetylene	7572-29-4	—	—	—	—	0.1	0.4	—
o-Dichlorobenzene	95-50-1	—	—	—	—	50	300	—
p-Dichlorobenzene	106-46-7	75	450	110	675	—	—	—
3,3'-Dichlorobenzidine see 29 CFR 1910.1003	91-94-1							
Dichlorodifluoromethane	75-71-8	1000	4950	—	—	—	—	—
1,3-Dichloro-5,5-dimethyl hydantion	118-52-5	—	0.2	—	0.4	—	—	—

Substance	CAS No.	TWA		STEL		Ceiling		Skin designation
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
1,1-Dichloroethane	75-34-3	100	400	—	—	—	—	—
1,2-Dichloroethylene	540-59-0	200	790	—	—	—	—	—
Dichloroethyl ether	111-44-4	5	30	10	60	—	—	X
Dichloromethane; see Methylene chloride								
Dichloromonofluoro-methane	75-43-4	10	40	—	—	—	—	—
1,1-Dichloro-1-nitroethane	594-72-9	2	10	—	—	—	—	—
1,2-Dichloropropane; see Propylenedichloride								
1,3-Dichloropropene	542-75-8	1	5	—	—	—	—	X
2,2-Dichloropropionic acid	75-99-0	1	6	—	—	—	—	—
Dichlorotetrafluoroethane	76-14-2	1000	7000	—	—	—	—	—
Dicrotophos	141-66-2	—	0.25	—	—	—	—	X
Dicyclopentadiene	77-73-6	5	30	—	—	—	—	—
Dicyclopentadienyl iron	102-54-5	—	—	—	—	—	—	—
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Dieldrin	60-57-1	—	0.25	—	—	—	—	X
Diethanolamine	111-42-2	3	15	—	—	—	—	—
Diethylamine	109-89-7	10	30	25	75	—	—	—
2-Diethylaminoethanol	100-37-8	10	50	—	—	—	—	X
Diethylene triamine	111-40-0	1	4	—	—	—	—	—
Diethyl ether, see Ethyl ether								
Diethyl ketone	96-22-0	200	705	—	—	—	—	—
Diethyl phthalate	84-66-2	—	5	—	—	—	—	—
Difluorodibromomethane	75-61-6	100	860	—	—	—	—	—
Diglycidyl ether (DGE)	2238-07-5	0.1	0.5	—	—	—	—	—
Dihydroxybenzene; see Hydroquinone								
Diisobutyl ketone	108-83-8	25	150	—	—	—	—	—
Diisopropylamine	108-18-9	5	20	—	—	—	—	X
4-Dimethylaminoazo-benzene; see 29 CFR 1910.1003	60-11-7	—	—	—	—	—	—	—
Dimethoxymethane; see Methytal								
Dimethyl acetamide	127-19-5	10	35	—	—	—	—	X
Dimethylamine	124-40-3	10	18	—	—	—	—	—
Dimethylaminobenzene; see Xylidine								
Dimethylaniline (N,N-Dimethylaniline)	121-69-7	5	25	10	50	—	—	X
Dimethylbenzene; see Xylene								
Dimethyl-1,2-dibromo-2,2-dichloroethyl phosphate	300-76-5	—	3	—	—	—	—	X
Dimethylformamide	68-12-2	10	30	—	—	—	—	X
2,6-Dimethyl-4-hepta-none; see Diisobutyl ketone								
1,1-Dimethylhydrazine	57-14-7	0.5	1	—	—	—	—	X
Dimethylphthalate	131-11-3	—	5	—	—	—	—	—
Dimethyl sulfate	77-78-1	0.1	0.5	—	—	—	—	X
Dinitolmide (3,5-Dinitro-o-toluamide)	148-01-6	—	5	—	—	—	—	—
Dinitrobenzene (all isomers)		—	1	—	—	—	—	X
(alpha-)	528-29-0							
(meta-)	99-65-0							
(para-)	100-25-4							
Dinitro-o-cresol	534-52-1	—	0.2	—	—	—	—	X

Substance	CAS No.	TWA		STEL		Ceiling		Skin designation
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Dinitrotoluene	25321-14-6	—	1.5	—	—	—	—	X
Dioxane (Diethylene dioxide)	123-91-1	25	90	—	—	—	—	X
Dioxathion (Delnav)	78-34-2	—	0.2	—	—	—	—	X
Diphenyl (Biphenyl)	92-52-4	0.2	1	—	—	—	—	—
Diphenylamine	122-39-4	—	10	—	—	—	—	—
Diphenylmethane diisocyanate; see Methylene bisphenyl isocyanate								
Dipropylene glycol methyl ether	34590-94-8	100	600	150	900	—	—	X
Diprophy ketone	123-19-3	50	235	—	—	—	—	—
Diquat	85-00-7	—	0.5	—	—	—	—	—
Di-sec octyl phthalate (Di-2-ethylhexyl-phthalate)	117-81-7	—	5	—	10	—	—	—
Disulfiram	97-77-8	—	2	—	—	—	—	—
Disulfoton	298-04-4	—	0.1	—	—	—	—	X
2-6Di-tert-butyl-p-cresol	128-37-0	—	10	—	—	—	—	—
Diuron	330-54-1	—	10	—	—	—	—	—
Divinyl benzene	1321-74-0	10	50	—	—	—	—	—
Emery	12415-34-8	—	—	—	—	—	—	—
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Endosulfan	115-29-7	—	0.1	—	—	—	—	X
Endrin	72-20-8	—	0.1	—	—	—	—	X
Epichlorohdrin	106-89-8	2	8	—	—	—	—	X
EPN	2104-64-5	—	0.5	—	—	—	—	X
1,2-epoxypropane; see Propylene oxide								
2-3-Epoxy-1-propanol; see Glydicol								
Ethanethiol; see Ethy mercaptan								
Ethanolamine	141-43-5	3	8	6	15	—	—	—
Ethion	563-12-2	—	0.4	—	—	—	—	X
2-Ethoxyethanol	110-80-5	200	740	—	—	—	—	X
2-Ethoxyethyl acetate (Cellosolve acetate)	111-15-9	100	540	—	—	—	—	X
Ethyl acetate	141-78-6	400	1400	—	—	—	—	—
Ethyl acrylate	140-88-5	5	20	25	100	—	—	X
Ethyl alcohol (Ethonal)	64-17-5	1000	1900	—	—	—	—	—
Ethylamine	75-04-7	10	18	—	—	—	—	—
Ethyl amyl ketone (5-Methyl-3-heptanone)	541-85-5	25	130	—	—	—	—	—
Ethyl benzene	100-41-4	100	435	125	545	—	—	—
Ethyl bromide	74-96-4	200	890	250	1110	—	—	—
Ethyl butyl ketone (3-Heptanone)	106-35-4	50	230	—	—	—	—	—
Ethyl chloride	75-00-3	1000	2600	—	—	—	—	—
Ethyl ether	60-29-7	400	1200	500	1500	—	—	—
Ethyl formate	109-94-4	100	300	—	—	—	—	—
Ethyl mercaptan	75-08-1	0.5	1	—	—	—	—	—
Ethyl silicate	78-10-4	10	85	—	—	—	—	—
Ethylene chlorohydrin	107-07-3	—	—	—	—	1	3	X
Ethylenediamine	107-15-3	10	25	—	—	—	—	—
Ethylene dibromide (STEL – 5 minutes)	106-93-4	20	—	—	30	—	50	—
Ethylene dichloride	107-06-2	1	4	2	8	—	—	—
Ethylene glycol	107-21-1	—	—	—	—	50	125	—
Ethylene glycol dinitrate	628-96-6	—	—	—	0.1	—	—	X

Substance	CAS No.	TWA		STEL		Ceiling		Skin designation
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Ethylene glycol methyl acetate; see Methyl cellosolve acetate								
Ethyleneimine; see 29 CFR 1910.1003	151-56-4							
Ethylene oxide; see 29 CFR 1910.1047	75-21-8							
Ethylidene chloride; see 1,1-Dichloroethane								
Ethylidene norbornene	16219-75-3	—	—	—	—	5	25	—
Nethylmorpholine	100-74-3	5	23	—	—	—	—	X
Fenamiphos	22224-92-6	—	0.1	—	—	—	—	X
Fensulfothion (Dasanit)	115-90-2	—	0.1	—	—	—	—	—
Fenthion	55-38-9	—	0.2	—	—	—	—	X
Ferbam	14484-64-1	—	—	—	—	—	—	—
Total dust	—	—	10	—	—	—	—	—
Ferrovandium dust	12604-58-9	—	1	—	3	—	—	—
Fluorides (as F)	Varies with compound	—	2.5	—	—	—	—	—
Fluorine	7782-41-4	01.	0.2	—	—	—	—	—
Fluorotrichloromethane (Trichlorofluoromethane)	75-69-4	—	—	—	—	1000	5600	—
Fonofos	944-22-9	—	0.1	—	—	—	—	X
Formaldehyde; see 29 CFR 1910.1048								
Formamide	75-12-7	20	30	30	45	—	—	—
Formic acid	64-18-6	5	9	—	—	—	—	—
Furfural	98-01-1	2	8	—	—	—	—	X
Furfuryl alcohol	98-00-0	10	40	15	60	—	—	X
Gasoline	8006-61-9	300	900	500	1500	—	—	—
Bermanium tetrahydride	7782-65-2	0.2	0.6	—	—	—	—	—
Glutaraldehyde	111-30-8	—	—	—	—	0.2	0.8	—
Glycerin (mist)	56-81-5	—	—	—	—	—	—	—
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Glycidol	556-52-5	25	75	—	—	—	—	—
Glycol monoethyl ether see 2-Ethoxyethanol								
Grain dust (oat, wheat, barley)	—	—	10	—	—	—	—	—
Graphite, natural respirable dust	7782-42-5	—	2.5	—	—	—	—	—
Graphite, synthetic	—	—	—	—	—	—	—	—
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Guthion®, see Azinphos methyl								
Gypsum	13397-24-5							
Total dust	—	—	15	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Hafnium	7440-58-6	—	0.5	—	—	—	—	—
Heptachlor	76-44-8	—	0.5	—	—	—	—	X
Heptane (n-Heptane)	142-82-5	400	1600	500	2000	—	—	—
Hexachlorobutadiene	87-68-3	0.02	0.24	—	—	—	—	—
Hexachlorocyclo-pentadiene	77-47-4	0.01	0.1	—	—	—	—	—
Hexachloroethane	67-72-1	1	10	—	—	—	—	X
Hexachloronaphthalene	1335-87-1	—	0.2	—	—	—	—	X
Hexafluoroacetone	684-16-2	0.1	0.7	—	—	—	—	X
n-Hexane	110-54-3	50	180	—	—	—	—	—



Substance	CAS No.	TWA		STEL		Ceiling		Skin designation
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Hexane isomers	Varies with compound	500	1800	1000	3600	—	—	—
2-Hexanone (Methyl n-butyl ketone)	591-78-6	5	20	—	—	—	—	—
Hexone (Methyl isobutyl ketone)	108-10-1	50	205	75	300	—	—	—
sec-Hexyl acetate	108-84-9	50-	300	—	—	—	—	—
Hexylene glycol	107-41-5	—	—	—	—	25	125	—
Hydrazine	302-01-2	0.2	0.1	—	—	—	—	X
Hydrogenated terphenyls	61788-32-7	0.5	5	—	—	—	—	—
Hydrogen bromide	10035-10-6	—	—	—	—	3	10	—
Hydrogen chloride	7647-01-0	—	—	—	—	5	7	—
Hydrogen cyanide	74-90-8	—	—	4.7	5	—	—	X
Hydrogen fluoride (as F)	7664-39-3	3	—	6	—	—	—	—
Hydrogen peroxide	7722-84-1	1	1.4	—	—	—	—	—
Hydrogen selenide (as Se)	7783-07-5	0.05	0.2	—	—	—	—	—
Hydrogen sulfide	7783-06-4	10	14	15	21	—	—	—
Hydroquinone	123-31-9	—	2	—	—	—	—	—
2-Hydroxypropyl acrylate	999-61-1	0.5	3	—	—	—	—	X
Indene	95-13-6	10	45	—	—	—	—	—
Indium and compounds (as in)	7440-74-6	—	0.1	—	—	—	—	—
Iodine	7553-56-2	—	—	—	—	0.1	1	—
Iodoform	75-47-8	0.6	10	—	—	—	—	—
Iron oxide fume	1309-37-1	—	10	—	—	—	—	—
Iron pentacarbonyl (as Fe)	13463-40-6	0.1	0.8	0.2	1.6	—	—	—
Iron salts (soluble) (as Fe)	Varies with compound	—	1	—	—	—	—	—
Isoamyl acetate	123-92-2	100	525	—	—	—	—	—
Isoamyl alcohol (primary and secondary)	123-51-3	100	360	125	450	—	—	—
Isobutyl acetate	110-19-0	150	700	—	—	—	—	—
Isobutyl alcohol	78-83-1	50	150	—	—	—	—	—
Isooctyl alcohol	26952-21-6	50	270	—	—	—	—	X
Isophorone	78-59-1	4	23	—	—	—	—	—
Isophorone diisocyanate	4098-71-9	0.005	—	0.02	—	—	—	X
2-Isopropoxyethanol	109-59-1	25	105	—	—	—	—	—
Isopropyl acetate	108-21-4	250	950	310	1185	—	—	—
Isopropyl alcohol	67-63-0	400	980	500	1225	—	—	—
Isopropylamine	75-31-0	5	12	10	24	—	—	—
N-isopropylaniline	768-52-5	2	10	—	—	—	—	X
Isopropyl ether	108-20-3	500	2100	—	—	—	—	—
Isopropyl glycidyl ether (IGE)	4016-14-2	50	240	75	360	—	—	—
Kaolin								
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Ketene	463-51-4	0.5	0.9	1.5	3	—	—	—
Lead inorganic (as Pb); see 29 CFR 1910.1025	7439-92-1							
Limestone	1317-65-3							
Total dust	—	—	15	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Lindane	58-89-9	—	0.5	—	—	—	—	X
Lithium hydride	7580-67-8	—	0.025	—	—	—	—	—
L.P.G. (liquefied petroleum gas)	68476-85-7	1000	1800	—	—	—	—	—

Substance	CAS No.	TWA		STEL		Ceiling		Skin designation
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Magnesite	546-93-0	—	—	—	—	—	—	—
Total dust	—	—	15	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Magnesium oxide fume	1309-48-4	—	—	—	—	—	—	—
Total particulate	—	—	10	—	—	—	—	—
Malathion	121-75-5	—	—	—	—	—	—	—
Total dust	—	—	10	—	—	—	—	X
Maleic anhydride	108-31-6	0.25	1	—	—	—	—	—
Manganese compounds (as Mn)	7439-96-5	—	—	—	—	—	5	—
Manganese fume (as Mn)	7439-96-5	—	1	—	3	—	—	—
Manganese cyclopenta-dienyl tricarbonyl (as Mn)	12079-65-1	—	0.1	—	—	—	—	X
Manganese tetroxide (as Mn)	1317-35-7	—	1	—	—	—	—	—
Marble	1317-65-3	—	—	—	—	—	—	—
Total dust	—	—	15	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Mercury (aryl and inorganic) (as Hg)	7439-97-6	—	—	—	—	—	0.1	X
Mercury (organo) alkyl compounds (as Hg)	7439-97-6	—	0.01	—	0.03	—	—	X
Mercury (vapor) (as Hg)	7439-97-6	—	0.05	—	—	—	—	X
Mesityl oxide	141-79-7	15	60	25	100	—	—	—
Methacrylic acid	79-41-4	20	70	—	—	—	—	X
Methanethiol; see Methyl mercaptan								
Methomyl (Lannate)	16752-77-5	—	2.5	—	—	—	—	—
Methoxychlor	72-43-5	—	—	—	—	—	—	—
Total dust	—	—	10	—	—	—	—	—
2-Methoxyethanol; see Methyl cellosolve								
4-Methoxyphenol	150-76-5	—	5	—	—	—	—	—
Methyl acetate	79-20-9	200	610	250	760	—	—	—
Methyl acetylene (Propyne)	74-99-7	1000	1650	—	—	—	—	—
Methyl acetylene-propadiene mixture (MAPP)	—	1000	1800	1250	2250	—	—	—
Methyl acrylate	96-33-3	10	35	—	—	—	—	X
Methylacrylonitrile	126-98-7	1	3	—	—	—	—	X
Methylal (Dimethoxy-methane)	109-87-5	100	3100	—	—	—	—	—
Methyl alcohol	67-56-1	200	260	250	325	—	—	X
Methylamine	74-89-5	10	12	—	—	—	—	—
Methyl amyl alcohol; see Methyl isobutyl carbinol								
Methyl n-amyl ketone	110-43-0	100	465	—	—	—	—	—
Methyl bromide	74-83-9	5	20	—	—	—	—	X
Methyl butyl ketone; see 2-Hexanone								
Methyl cellosolve (2-Methoxyethanol)	109-86-4	25	80	—	—	—	—	X
Methyl cellosolve acetate (2-Methoxyethyl acetate)	110-49-6	25	120	—	—	—	—	X
Methyl chloride	74-87-3	50	105	100	210	—	—	—
Methyl chloroform (1,1,1-Trichloroethane)	71-55-6	350	1900	450	2450	—	—	—
Methyl 2-cyanoacrylate	137-05-3	2	8	4	16	—	—	—
Methyl cyclohexane	108-87-2	400	1600	—	—	—	—	—
Methylcyclohexanol	25639-42-3	50	235	—	—	—	—	—
o-Methylcyclohexanone	583-60-8	50	230	75	345	—	—	X

Substance	CAS No.	TWA		STEL		Ceiling		Skin designation
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Methylcyclopentadienyl manganese tricarbonyl (as Mn)	12106-13-3	—	0.2	—	—	—	—	X
Methyl demeton	8022-00-2	—	0.5	—	—	—	—	X
4,4'-Methylene bis (2-chloroaniline (MBOCA))	101-14-4	0.02	0.22	—	—	—	—	X
Methylene bis (4-cyclohexy-isocyanate)	5124-30-1	—	—	—	—	0.01	0.11	X
Methylene chloride; see 29 CFR 1910.1052	75-09-2	—	—	—	—	—	—	—
Methylenedianiline; see 29 CFR 1910.1050								
Methyl ethyl ketone peroxide (MEKP)	1338-23-4	—	—	—	—	0.7	5	—
Methyl formate	107-31-3	100	250	150	375	—	—	—
Methyl hydrazine (monomethyl hydrazine)	60-34-4	—	—	—	—	0.2	0.35	X
Methyl iodide	74-88-4	2	10	—	—	—	—	X
Methyl isoamyl ketone	110-12-3	50	240	—	—	—	—	—
Methyl isobutyl carbinol	108-11-2	25	100	40	165	—	—	X
Methyl isobutyl ketone; see Hexone								
Methyl isocyanate	624-83-9	0.02	0.05	—	—	—	—	X
Methyl isopropyl ketone	563-80-4	200	705	—	—	—	—	—
Methyl mercaptan	74-93-1	0.5	1	—	—	—	—	—
Methyl methacrylate	80-62-6	100	410	—	—	—	—	—
Methyl parathion	298-00-0	—	0.2	—	—	—	—	X
Methyl propyl ketone; see 2-Pentanone								
Methyl silicate	681-84-5	1	6	—	—	—	—	—
alpha-Methyl styrene	98-83-9	50	240	100	485	—	—	—
Methylene diisphenyl isocyanate (MDI)	101-68-8	—	—	—	—	0.02	0.2	—
Metribuzin	21087-64-9	—	5	—	—	—	—	—
Mica; see Silicates								
Molybdenum (as Mo)	7439-98-7							
Soluble compounds	—	—	5	—	—	—	—	—
Insoluble compounds								
Total dust	—	—	10	—	—	—	—	—
Monocrotophos (Azodrin®)	6923-22-4	—	0.25	—	—	—	—	—
Monomethyl aniline	100-61-8	0.5	2	—	—	—	—	X
Morpholine	110-91-8	20	70	30	105	—	—	X
Naphtha (Coal tar)	8030-30-6	100	400	—	—	—	—	—
Naphthalene	91-20-3	10	50	15	75	—	—	—
alpha-Naphthylamine; see 29 CFR 1910.1003	134-32-7							
beta-Naphthylamine; see 29 CFR 1910.1003	91-59-8							
Nickel carbonyl (as Ni)	13463-39-3	0.001	0.007	—	—	—	—	—
Nickel, metal and insoluble compounds (as Ni)	7440-02-0	—	1	—	—	—	—	—
Nickel, soluble compounds (as Ni)	7440-02-0	—	0.1	—	—	—	—	—
Nicotine	54-11-5	—	0.5	—	—	—	—	X
Nitric acid	7697-37-2	2	5	4	10	—	—	—
Nitric oxide	10102-43-9	25	30	—	—	—	—	—
p-Nitroaniline	100-01-6	—	3	—	—	—	—	X
Nitrobenzene	98-95-3	1	5	—	—	—	—	X
p-Nitrochlorobenzene	100-00-5	—	1	—	—	—	—	x
4-Nitrodiphenyl; see 29 CFR 1910.1003	92-93-3							



Substance	CAS No.	TWA		STEL		Ceiling		Skin designation
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Phenyl glycidyl ether (PGE)	122-60-1	1	6	—	—	—	—	—
Phenylhydrazine	100-63-0	5	20	10	45	—	—	X
Phenyl mercaptan	108-98-5	0.5	2	—	—	—	—	—
Phenylphosphine	638-21-1	—	—	—	—	0.05	0.25	—
Phorate	298-02-2	—	0.05	—	0.2	—	—	X
Phosdrin (Mevinphos®)	7786-34-7	0.01	0.1	0.03	0.3	—	—	X
Phosgene (Carbonyl chloride)	75-44-5	0.1	0.4	—	—	—	—	—
Phosphine	7803-51-2	0.3	0.4	1	1	—	—	—
Phosphoric acid	7664-38-2	—	1	—	3	—	—	—
Phosphorus (yellow)	7723-14-0	—	0.1	—	—	—	—	—
Phosphorus oxychloride	10025-87-3	0.1	0.6	—	—	—	—	—
Phosphorus pentachloride	10026-13-8	—	1	—	—	—	—	—
Phosphorus pentasulfide	1314-80-3	—	1	—	3	—	—	—
Phosphorus trichloride	7719-12-2	0.2	1.5	0.5	3	—	—	—
Phthalic anhydride	85-44-9	1	6	—	—	—	—	—
m-Phthalodinitrile	626-17-5	—	5	—	—	—	—	—
Picloram	1918-02-1	—	—	—	—	—	—	—
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Picric acid	88-89-1	—	0.1	—	—	—	—	x
Piperazine dihydro-chloride	142-64-3	—	5	—	—	—	—	—
Pindone (2-Pivalyl-1,3-indandione)	83-26-1	—	0.1	—	—	—	—	—
Plaster of Paris	26499-65-0	—	—	—	—	—	—	—
Total dust	—	—	15	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Platinum (as Pt)	7440-06-4	—	—	—	—	—	—	—
Metal	—	—	1	—	—	—	—	—
Soluble salts	—	—	0.002	—	—	—	—	—
Portland cement	65997-15-1	—	—	—	—	—	—	—
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Potassium hydroxide	1310-58-3	—	—	—	—	—	2	—
Propane	74-98-6	1000	1800	—	—	—	—	—
Propargyl alcohol	107-19-7	1	2	—	—	—	—	X
beta-Propiolactone; see 29 CFR 1910.1013	57-57-8							
Propionic acid	79-09-4	10	30	—	—	—	—	—
Propoxur (Baygon)	114-26-1	—	0.5	—	—	—	—	—
n-Propyl acetate	109-60-40	200	840	250	1050	—	—	—
n-propyl alcohol	71-23-8	200	500	250	625	—	—	—
n-Propyl nitrate	627-13-4	25	105	40	170	—	—	—
Propylene dichloride	78-87-5	75	360	110	510	—	—	—
Propylene glycol dinitrate	6423-43-4	0.05	0.3	—	—	—	—	—
Propylene glycol monomethyl ether	107-98-2	100	380	150	540	—	—	—
Propylene imine	75-55-8	2	5	—	—	—	—	X
Propylene oxide	75-56-9	20	50	—	—	—	—	—
Propyne; see Methyl acetylene								
Pyrethrum	8003-34-7	—	5	—	—	—	—	—
Pyridine	110-86-1	5	15	—	—	—	—	—
Quinone	106-51-4	0.1	0.4	—	—	—	—	—
Resorcinol	108-46-3	10	45	20	90	—	—	—
Rhodium (as Rh), metal fume and insoluble compounds	7440-16-6	—	0.1	—	—	—	—	—

Substance	CAS No.	TWA		STEL		Ceiling		Skin designation
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Rhodium (as Rh), soluble compounds	744-16-6	—	0.001	—	—	—	—	—
Ronnel	299-84-3	—	10	—	—	—	—	—
Rosin core solder pyrolysis products, as formaldehyde	—	—	0.1	—	—	—	—	—
Rotenone	83-79-4	—	5	—	—	—	—	—
Rouge								
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Selenium compounds (as Se)	7782-49-2	—	0.2	—	—	—	—	—
Selenium hexafluoride (as Se)	7783-79-1	0.05	0.4	—	—	—	—	—
Silica, amorphous, precipitated and gel	112926-00-8	—	6	—	—	—	—	—
Silica, amorphous, diatomaceous earth, containing less than 1% crystalline silica	61790-53-2	—	6	—	—	—	—	—
Silica, crystalline cristobalite, respirable dust	14464-46-1	—	0.05	—	—	—	—	—
Silica, crystalline quartz, respirable dust	14808-60-7	—	0.1	—	—	—	—	—
Silica, crystalline tripoli (as quartz), respirable dust	1317-95-9	—	0.1	—	—	—	—	—
Silica, crystalline tridmite, respirable dust	15468-32-3	—	0.05	—	—	—	—	—
Silica, fused, respirable dust	60676-86-0	—	0.1	—	—	—	—	—
Silicates (less than 1% (crystalline silica))								
Mica (respirable dust)	12001-26-2	—	3	—	—	—	—	—
Soapstone, total dust	—	—	6	—	—	—	—	—
Soapstone, respirable dust	—	—	3	—	—	—	—	—
Talc (containing asbestos); use asbestos limit See 29 CFR 1910.1001								
Talc (containing no asbestos); Respirable dust	14807-96-6	—	2	—	—	—	—	—
Tremolite (use asbestos limit); See 29 CFR 1910.1001								
Silicon	7440-21-3							
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Silicon carbide	409-21-2							
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Silicon tetrahydride	7803-62-5	5	7	—	—	—	—	—
Silver, metal and soluble compounds (as Ag)	7440-22-4	—	0.01	—	—	—	—	—
Soapstone; see Silicates								
Sodium azide	26628-22-8							
(as HN <sub>3</sub> )	—	—	—	—	—	0.1	—	X
(as NaN <sub>3</sub> )	—	—	—	—	—	—	0.3	X
Sodium bisulfite	7631-90-5	—	5	—	—	—	—	—
Sodium fluoroacetate	62-74-8	—	0.05	—	0.15	—	—	X
Sodium hydroxide	1310-73-2	—	—	—	—	—	2	—
Sodium metabisulphite	7681-57-4	—	5	—	—	—	—	—
Starch	9005-25-8							
Total dust	—	—	15	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Stibine	7803-52-3	0.1	0.5	—	—	—	—	—

Substance	CAS No.	TWA		STEL		Ceiling		Skin designation
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Stoddard solvent	8052-41-3	100	525	—	—	—	—	—
Strychnine	57-24-9	—	0.15	—	—	—	—	—
Styrene	100-42-5	50	215	100	425	—	—	—
Subtilisins (Protolytic enzymes) sample 600-800 lpm for at least 60 minutes	9014-01-1	—	—	—	0.00006	—	—	—
Sucrose	57-50-1	—	—	—	—	—	—	—
Total dust	—	—	15	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Sulfur dioxide	7446-09-5	2	5	5	10	—	—	—
Sulfur hexafluoride	2551-62-4	1000	6000	—	—	—	—	—
Sulfuric acid	7664-93-9	—	1	—	—	—	—	—
Sulfur monochloride	10025-67-9	—	—	—	—	1	6	—
Sulfur pentafluoride	5714-22-7	—	—	—	—	0.01	0.1	—
Sulfur tetrafluoride	7783-60-0	—	—	—	—	0.1	0.4	—
Sulfuryl fluoride	2699-79-8	5	20	10	40	—	—	—
Sulprofos	35400-43-2	—	1	—	—	—	—	—
Systox®, see Demeton								
2,4,5-T	93-76-5	—	10	—	—	—	—	—
Talc; see Silicates								
Tantalum, metal and oxide dust	7440-25-7	—	5	—	—	—	—	—
TEDP (Sulfotep)	3689-24-5	—	0.2	—	—	—	—	X
Tellurium and compounds (as Te)	13494-80-9	—	0.1	—	—	—	—	—
Tellurium hexafluoride (as Te)	7783-80-4	0.02	0.2	—	—	—	—	—
Temphos	3383-96-8							
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
TEPP	107-49-3	—	0.05	—	—	—	—	X
Terphenyls	26140-60-3	—	—	—	—	0.5	5	—
1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	500	4170	—	—	—	—	—
1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0	500	0	—	—	—	—	—
1,1,2,2-Tetrachloroethane	79-34-5	1	7	—	—	—	—	X
Tetrachoroethylene; see Perchloroethylene								
Tetrachloromethane; see Carbon tetrachloride								
Tetrachloronaphthalene	1335-88-2	—	2	—	—	—	—	X
Tetraethyl lead (as Pb)	78-00-2	—	0.075	—	—	—	—	X
Tetrahydrofuran	109-99-9	200	590	250	735	—	—	—
Tetramethyl lead, (as Pb)	75-74-1	—	0.75	—	—	—	—	X
Tetramethyl succinonitrile	3333-52-6	0.5	3	—	—	—	—	X
Tetranitromethane	509-14-8	1	8	—	—	—	—	—
Tetrasodium pyrophosphate	7722-88-5	—	5	—	—	—	—	—
Tetryl (2,4,6-Trinitrophenyl-methyl-nitramine)	479-45-8	—	1.5	—	—	—	—	X
Thalium, Soluble compounds (as Tl)	7440-28-0	—	0.1	—	—	—	—	X
4,4'-Thiobis(6-tert, Butyl-m-cresol)	96-69-5	—	—	—	—	—	—	—
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Thioglycolic acid	68-11-1	1	4	—	—	—	—	X
Thionyl chloride	7719-09-7	—	—	—	—	1	5	—
Thiram	137-26-8	—	5	—	—	—	—	—
Tin, inorganic compounds (except oxides) (as Sn)	7440-31-5	—	2	—	—	—	—	—





Substance	CAS No.	TWA		STEL		Ceiling		Skin designation
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Vinyl cyclohexene dioxide	106-87-6	10	60	—	—	—	—	X
Vinylidene chloride (1,1-Dichloro-ethylene)	75-35-4	1	4	—	—	—	—	—
Vinyl toluene	24994	100	480	—	—	—	—	—
VM & P Naphtha	8032-32-4	300	1350	400	1800	—	—	—
Warfarin	81-81-2	—	0.1	—	—	—	—	—
Welding fumes (total particulate)	—	—	5	—	—	—	—	—
Wood dust, all soft and hard woods, except Western red cedar	—	—	5	—	10	—	—	—
Wood dust, Western red cedar	—	—	5	—	10	—	—	—
Xylenes (o-, m-, p- isomers)	1330-20-7	100	435	150	655	—	—	—
m-Xylene alpha, alpha-diamine	1477-55-0	—	—	—	—	—	0.1	X
Xylidine	1300-73-8	2	10	—	—	—	—	X
Yttrium	7440-65-5	—	1	—	—	—	—	—
Zinc chloride fume	7646-85-7	—	1	—	2	—	—	—
Zinc chromate (as CrO <sub>3</sub> )	Varies with compound	—	—	—	—	—	0.1	—
Zinc oxide fume	1314-13-2	—	5	—	10	—	—	—
Zinc oxide	1314-13-2	—	—	—	—	—	—	—
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Zinc stearate	557-05-1	—	—	—	—	—	—	—
Total dust	—	—	10	—	—	—	—	—
Respirable fraction	—	—	5	—	—	—	—	—
Zirconium compounds (as Zr)	7440-67-7	—	5	—	10	—	—	—