THRESHOLD LIMITS FOR AIRBORNE CONTAMINANTS

Several organizations recommend limits of exposure to airborne contaminants in the workplace. These include the Occupational Safety and Health Administration (OSHA), the National Institute for Occupational Safety and Health (NIOSH), and the non-governmental organization, American Conference of Governmental Industrial Hygienists (ACGIH). The threshold limit value (TLV) for a substance is defined as the concentration level under which the majority of workers may be repeatedly exposed, day after day, without adverse effects. The TLV recommendations are given in two forms:

- Time-weighted average (TWA) concentration for a normal 8-hr workday and 40-hr workweek.
- Short-term exposure limit (STEL), which should not be exceeded for more than 15 min.

Both kinds of limits are specified for some substances.

The following table gives threshold limit values for a number of substances that may be encountered in the atmosphere of a chemical laboratory or industrial facility. All values refer to the concentration in air at 25°C and normal atmospheric pressure. Data for gases are given in parts per million by volume (ppm). Values for liquids refer to mists or aerosols, and those for solids to dusts or fumes; both are stated in mass concentration (mg/m3). A "C" preceding a value indicates a ceiling limit, which should not be exceeded even for very brief periods because of acute toxic effects of the substance.

Substances are listed by systematic name; molecular formula in the Hill format and Chemical Abstracts Service Registry Number are also given. The Notes column gives further information on the form of the substance and the basis on which the TLV is reported. This column also includes common synonyms and acronyms in brackets (e.g., [MTBE]).

References

1. *2004 TLV's and BEI's,* American Conference of Governmental Industrial Hygienists, 1330 Kemper Meadow Drive, Cincinnati, OH 45240-1634, 2004.
2. *NIOSH Pocket Guide to Chemical Hazards,* U.S. Department of Health and Human Services, National Institute for Occupational Health and Safety, U.S. Government Printing Office, Washington, DC, 1994.
3. Chemical Information Manual, U.S. Department of Labor, Occupational Safety and Health Administration, Washington, DC, 1991.

Substance	Notes	Molecular formula	CAS Reg. No.	Time-weighted average	Short-term exposure limit
Abate	[Temephos]	$C_{16}H_{20}O_6P_2S_3$	3383-96-8	10 mg/m^3	
Acetaldehyde		C_2H_4O	75-07-0		C 25 ppm
Acetic acid		$C_2H_4O_2$	64-19-7	10 ppm	15 ppm
Acetic anhydride		$C_4H_6O_3$	108-24-7	5 ppm	
Acetone	[2-Propanone]	C_3H_6O	67-64-1	500 ppm	750 ppm
Acetone cyanohydrin	as CN	C_4H_7NO	75-86-5		C 5 mg/m^3
Acetonitrile	[Methyl cyanide]	C_2H_3N	75-05-8	20 ppm	
Acetophenone	[Methyl phenyl ketone]	C_8H_8O	98-86-2	10 ppm	
2-(Acetyloxy)benzoic acid	[Aspirin]	$C_9H_8O_4$	50-78-2	5 mg/m^3	
Acrolein	[2-Propenal]	C_3H_4O	107-02-8		C 0.1 ppm
Acrylamide	[2-Propenamide]	C_3H_5NO	79-06-1	0.03 mg/m^3	
Acrylic acid	[2-Propenoic acid]	$C_3H_4O_2$	79-10-7	2 ppm	
Acrylonitrile	[Propenenitrile]	C_3H_3N	107-13-1	2 ppm	
Aldrin		$C_{12}H_8Cl_6$	309-00-2	0.25 mg/m^3	
Allyl alcohol	[2-Propen-1-ol]	C_3H_6O	107-18-6	0.5 ppm	
Allyl glycidyl ether	[AGE]	$C_6H_{10}O_2$	106-92-3	1 ppm	
Allyl propyl disulfide		$C_6H_{12}S_2$	2179-59-1	0.5 ppm	
Aluminum	metal dust	Al	7429-90-5	10 mg/m^3	
Aluminum oxide		Al_2O_3	1344-28-1	10 mg/m^3	
4-Amino-3,5,6-trichloro-2-pyridinecarboxlic acid	[Picloram]	$C_6H_3Cl_3N_2O_2$	1918-02-1	10 mg/m^3	
Ammonia		H_3N	7664-41-7	25 ppm	35 ppm
Ammonium chloride		ClH_4N	12125-02-9	10 mg/m^3	20 mg/m^3
Ammonium perfluorooctanoate		$C_8H_4F_{15}NO_2$	3825-26-1	0.01 mg/m^3	
Ammonium sulfamate		$H_6N_2O_3S$	7773-06-0	10 mg/m^3	
Aniline		C_6H_7N	62-53-3	2 ppm	
Antimony		Sb	7440-36-0	0.5 mg/m^3	
Arsenic		As	7440-38-2	0.01 mg/m^3	
Arsine		AsH_3	7784-42-1	0.05 ppm	
Atrazine		$C_8H_{14}ClN_5$	1912-24-9	5 mg/m^3	
Azinphos-methyl		$C_{10}H_{12}N_3O_3PS_2$	86-50-0	0.2 mg/m^3	
Barium	soluble compounds, as Ba	Ba	7440-39-3	0.5 mg/m^3	
Barium sulfate		BaO_4S	7727-43-7	10 mg/m^3	
Benomyl		$C_{14}H_{18}N_4O_3$	17804-35-2	10 mg/m^3	

Substance	Notes	Molecular formula	CAS Reg. No.	Time-weighted average	Short-term exposure limit
Benzene		C_6H_6	71-43-2	0.5 ppm	2.5 ppm
1,3-Benzenedimethanamine	[*m*-Xylene diamine]	$C_8H_{12}N_2$	1477-55-0		C 0.1 mg/m³
Benzenethiol	[Phenyl mercaptan]	C_6H_6S	108-98-5	0.1 ppm	
p-Benzoquinone	[Quinone]	$C_6H_4O_2$	106-51-4	0.1 ppm	
Benzoyl chloride		C_7H_5ClO	98-88-4		C 0.5 ppm
Benzoyl peroxide		$C_{14}H_{10}O_4$	94-36-0	5 mg/m³	
Benzyl acetate		$C_9H_{10}O_2$	140-11-4	10 ppm	
Beryllium	and compounds, as Be	Be	7440-41-7	0.002 mg/m³	0.01 mg/m³
Biphenyl		$C_{12}H_{10}$	92-52-4	0.2 ppm	
Bis(2-aminoethyl)amine	[Diethylenetriamine]	$C_4H_{13}N_3$	111-40-0	1 ppm	
Bis(2-chloroethyl) ether	[2,2'-Dichlorethyl ether]	$C_4H_8Cl_2O$	111-44-4	5 ppm	10 ppm
Bis(chloromethyl) ether		$C_2H_4Cl_2O$	542-88-1	0.001 ppm	
Bis(2-dimethylaminoethyl) ether	[DMAEE]	$C_8H_{20}N_2O$	3033-62-3	0.05 ppm	0.15 ppm
Bis(2-ethylhexyl) phthalate	[Di-*sec*-octyl phthalate; DEHP]	$C_{24}H_{38}O_4$	117-81-7	5 mg/m³	
Bismuth telluride		Bi_2Te_3	1304-82-1	10 mg/m³	
Boron oxide		B_2O_3	1303-86-2	10 mg/m³	
Boron tribromide		BBr_3	10294-33-4		C 1 ppm
Boron trifluoride		BF_3	7637-07-2		C 1 ppm
Bromacil	[5-Bromo-3-*sec*-butyl-6-methyluracil]	$C_9H_{13}BrN_2O_2$	314-40-9	10 mg/m³	
Bromine		Br_2	7726-95-6	0.1 ppm	0.2 ppm
Bromine pentafluoride		BrF_5	7789-30-2	0.1 ppm	
Bromochloromethane	[Halon 1011]	CH_2BrCl	74-97-5	200 ppm	
2-Bromo-2-chloro-1,1,1-trifluoroethane	[Halothane]	$C_2HBrClF_3$	151-67-7	50 ppm	
Bromoethane	[Ethyl bromide]	C_2H_5Br	74-96-4	5 ppm	
Bromoethene	[Vinyl bromide]	C_2H_3Br	593-60-2	0.5 ppm	
Bromomethane	[Methyl bromide]	CH_3Br	74-83-9	1 ppm	
Bromotrifluoromethane		$CBrF_3$	75-63-8	1000 ppm	
1,3-Butadiene		C_4H_6	106-99-0	2 ppm	
Butane		C_4H_{10}	106-97-8	1000 ppm	
1-Butanethiol	[Butyl mercaptan]	$C_4H_{10}S$	109-79-5	0.5 ppm	
1-Butanol	[Butyl alcohol]	$C_4H_{10}O$	71-36-3	20 ppm	
2-Butanol	[*sec*-Butyl alcohol]	$C_4H_{10}O$	78-92-2	100 ppm	
2-Butanone	[Methyl ethyl ketone; MEK]	C_4H_8O	78-93-3	200 ppm	300 ppm
2-Butanone peroxide	[Methyl ethyl ketone peroxide]	$C_8H_{16}O_4$	1338-23-4		C 0.2 ppm
trans-2-Butenal	[Crotonaldehyde]	C_4H_6O	4170-30-3		C 0.3 ppm
3-Buten-2-one	[Methyl vinyl ketone]	C_4H_6O	78-94-4		C 0.2 ppm
2-Butoxyethanol	[EGBE]	$C_6H_{14}O_2$	111-76-2	20 ppm	
2-Butoxyethyl acetate	[EGBEA]	$C_8H_{16}O_3$	112-07-2	20 ppm	
Butyl acetate		$C_6H_{12}O_2$	123-86-4	150 ppm	200 ppm
sec-Butyl acetate		$C_6H_{12}O_2$	105-46-4	200 ppm	
tert-Butyl acetate		$C_6H_{12}O_2$	540-88-5	200 ppm	
Butyl acrylate		$C_7H_{12}O_2$	141-32-2	2 ppm	
Butylamine		$C_4H_{11}N$	109-73-9		C 5 ppm
tert-Butyl chromate	as CrO_3	$C_8H_{18}CrO_4$	1189-85-1		C 0.1 mg/m³
tert-Butyl ethyl ether	[ETBE]	$C_6H_{14}O$	637-92-3	5 ppm	
Butyl glycidyl ether	[BGE]	$C_7H_{14}O_2$	2426-08-6	25 ppm	
Butyl lactate		$C_7H_{14}O_3$	138-22-7	5 ppm	
1-*tert*-Butyl-4-methylbenzene	[*p*-*tert*-Butyltoluene]	$C_{11}H_{16}$	98-51-1	1 ppm	
2-*sec*-Butylphenol		$C_{10}H_{14}O$	89-72-5	5 ppm	
Cadmium	metal	Cd	7440-43-9	0.01 mg/m³	
Cadmium	compounds, as Cd	Cd	7440-43-9	0.002 mg/m³	
Calcium carbonate		$CCaO_3$	1317-65-3	10 mg/m³	
Calcium chromate	as Cr	$CaCrO_4$	13765-19-0	0.001 mg/m³	
Calcium cyanamide		$CCaN_2$	156-62-7	0.5 mg/m³	
Calcium hydroxide		CaH_2O_2	1305-62-0	5 mg/m³	
Calcium metasilicate		CaO_3Si	1344-95-2	10 mg/m³	
Calcium oxide		CaO	1305-78-8	2 mg/m³	
Calcium sulfate		CaO_4S	7778-18-9	10 mg/m³	

Substance	Notes	Molecular formula	CAS Reg. No.	Time-weighted average	Short-term exposure limit
Camphor		$C_{10}H_{16}O$	76-22-2	2 ppm	3 ppm
Caprolactam		$C_6H_{11}NO$	105-60-2	5 mg/m³	
Captafol		$C_{10}H_9Cl_4NO_2S$	2425-06-1	0.1 mg/m³	
Captan		$C_9H_8Cl_3NO_2S$	133-06-2	5 mg/m³	
Carbaryl		$C_{12}H_{11}NO_2$	63-25-2	5 mg/m³	
Carbofuran		$C_{12}H_{15}NO_3$	1563-66-2	0.1 mg/m³	
Carbon black		C	1333-86-4	3.5 mg/m³	
Carbon dioxide		CO_2	124-38-9	5000 ppm	30,000 ppm
Carbon disulfide		CS_2	75-15-0	10 ppm	
Carbon monoxide		CO	630-08-0	25 ppm	
Carbonyl chloride	[Phosgene]	CCl_2O	75-44-5	0.1 ppm	
Carbonyl fluoride		CF_2O	353-50-4	2 ppm	5 ppm
Cesium hydroxide		CsHO	21351-79-1	2 mg/m³	
Chlordane		$C_{10}H_6Cl_8$	57-74-9	0.5 mg/m³	
Chlorine		Cl_2	7782-50-5	0.5 ppm	1 ppm
Chlorine dioxide		ClO_2	10049-04-4	0.1 ppm	0.3 ppm
Chlorine trifluoride		ClF_3	7790-91-2		C 0.1 ppm
Chloroacetaldehyde		C_2H_3ClO	107-20-0		C 1 ppm
Chloroacetone		C_3H_5ClO	78-95-5		C 1 ppm
α-Chloroacetophenone		C_8H_7ClO	532-27-4	0.05 ppm	
Chloroacetyl chloride		$C_2H_2Cl_2O$	79-04-9	0.05 ppm	0.15 ppm
Chlorobenzene		C_6H_5Cl	108-90-7	10 ppm	
o-Chlorobenzylidene malononitrile		$C_{10}H_5ClN_2$	2698-41-1		C 0.05 ppm
2-Chloro-1,3-butadiene	[Chloroprene]	C_4H_5Cl	126-99-8	10 ppm	
Chlorodifluoromethane		$CHClF_2$	75-45-6	1000 ppm	
Chloroethane	[Ethyl chloride]	C_2H_5Cl	75-00-3	100 ppm	
2-Chloroethanol	[Ethylene chlorohydrin]	C_2H_5ClO	107-07-3		C 1 ppm
Chloroethene	[Vinyl chloride]	C_2H_3Cl	75-01-4	1 ppm	
Chloromethane	[Methyl chloride]	CH_3Cl	74-87-3	50 ppm	100 ppm
(Chloromethyl)benzene	[Benzyl chloride]	C_7H_7Cl	100-44-7	1 ppm	
1-Chloro-4-nitrobenzene		$C_6H_4ClNO_2$	100-00-5	0.1 ppm	
1-Chloro-1-nitropropane		$C_3H_6ClNO_2$	600-25-9	2 ppm	
Chloropentafluoroethane		C_2ClF_5	76-15-3	1000 ppm	
2-Chloropropanoic acid		$C_3H_5ClO_2$	598-78-7	0.1 ppm	
2-Chloro-1-propanol		C_3H_7ClO	78-89-7	1 ppm	
1-Chloro-2-propanol		C_3H_7ClO	127-00-4	1 ppm	
3-Chloropropene	[Allyl chloride]	C_3H_5Cl	107-05-1	1 ppm	2 ppm
2-Chlorostyrene		C_8H_7Cl	2039-87-4	50 ppm	75 ppm
2-Chlorotoluene		C_7H_7Cl	95-49-8	50 ppm	
Chlorpyrifos		$C_9H_{11}Cl_3NO_3PS$	2921-88-2	0.1 mg/m³	
Chromium	metal	Cr	7440-47-3	0.5 mg/m³	
Chromium	Cr(III) compounds, as Cr	Cr	7440-47-3	0.5 mg/m³	
Chromium	soluble Cr(VI) compounds, as Cr	Cr	7440-47-3	0.05 mg/m³	
Chromium	insoluble Cr(VI) compounds, as Cr	Cr	7440-47-3	0.01 mg/m³	
Chromyl chloride		Cl_2CrO_2	14977-61-8	0.025 ppm	
Clopidol		$C_7H_7Cl_2NO$	2971-90-6	10 mg/m³	
Cobalt	metal and inorganic compounds, as Co	Co	7440-48-4	0.02 mg/m³	
Cobalt carbonyl	as Co	$C_8Co_2O_8$	10210-68-1	0.1 mg/m³	
Cobalt hydrocarbonyl	as Co	C_4HCoO_4	16842-03-8	0.1 mg/m³	
Copper	fume	Cu	7440-50-8	0.2 mg/m³	
Cresol	all isomers	C_7H_8O	1319-77-3	5 ppm	
Crufomate		$C_{12}H_{19}ClNO_3P$	299-86-5	5 mg/m³	
Cyanamide		CH_2N_2	420-04-2	2 mg/m³	
Cyanide ion [CN^-]	cyanide salts, as CN	CN	57-12-5		C 5 mg/m³
Cyanogen		C_2N_2	460-19-5	10 ppm	
Cyanogen chloride		CClN	506-77-4		C 0.3 ppm
Cyclohexane		C_6H_{12}	110-82-7	100 ppm	
Cyclohexanol		$C_6H_{12}O$	108-93-0	50 ppm	
Cyclohexanone		$C_6H_{10}O$	108-94-1	20 ppm	50 ppm

Substance	Notes	Molecular formula	CAS Reg. No.	Time-weighted average	Short-term exposure limit
Cyclohexene		C_6H_{10}	110-83-8	300 ppm	
Cyclohexylamine		$C_6H_{13}N$	108-91-8	10 ppm	
Cyclonite	[Hexahydro-1,3,5-trinitro-1,3,5-triazine]	$C_3H_6N_6O_6$	121-82-4	0.5 mg/m³	
1,3-Cyclopentadiene		C_5H_6	542-92-7	75 ppm	
Cyclopentane		C_5H_{10}	287-92-3	600 ppm	
Cyhexatin		$C_{18}H_{34}OSn$	13121-70-5	5 mg/m³	
Decaborane(14)		$B_{10}H_{14}$	17702-41-9	0.05 ppm	0.15 ppm
Demeton-*S*-methyl		$C_6H_{15}O_3PS_2$	919-86-8	0.05 mg/m³	
Diacetone alcohol		$C_6H_{12}O_2$	123-42-2	50 ppm	
4,4'-Diaminodiphenylmethane	[4,4-Methylene dianiline]	$C_{13}H_{14}N_2$	101-77-9	0.1 ppm	
Diazinon		$C_{12}H_{21}N_2O_3PS$	333-41-5	0.01 mg/m³	
Diazomethane		CH_2N_2	334-88-3	0.2 ppm	
Diborane		B_2H_6	19287-45-7	0.1 ppm	
Dibromodifluoromethane		CBr_2F_2	75-61-6	100 ppm	
2-Dibutylaminoethanol		$C_{10}H_{23}NO$	102-81-8	0.5 ppm	
2,6-Di-*tert*-butyl-4-methylphenol	[Butylated hydroxytoluene; BHT]	$C_{15}H_{24}O$	128-37-0	2 mg/m³	
Dibutylphenyl phosphate		$C_{14}H_{23}O_4P$	2528-36-1	0.3 ppm	
Dibutyl phosphate		$C_8H_{19}O_4P$	107-66-4	1 ppm	2 ppm
Dibutyl phthalate		$C_{16}H_{22}O_4$	84-74-2	5 mg/m³	
Dichloroacetylene		C_2Cl_2	7572-29-4		C 0.1 ppm
o-Dichlorobenzene		$C_6H_4Cl_2$	95-50-1	25 ppm	50 ppm
p-Dichlorobenzene		$C_6H_4Cl_2$	106-46-7	10 ppm	
1,4-Dichloro-2-butene	both isomers	$C_4H_6Cl_2$	764-41-0	0.005 ppm	
Dichlorodifluoromethane		CCl_2F_2	75-71-8	1000 ppm	
1,3-Dichloro-5,5-dimethyl hydantoin		$C_5H_6Cl_2N_2O_2$	118-52-5	0.2 mg/m³	0.4 mg/m³
Dichlorodiphenyltrichloroethane	[DDT]	$C_{14}H_9Cl_5$	50-29-3	1 mg/m³	
1,1-Dichloroethane	[Ethylidene dichloride]	$C_2H_4Cl_2$	75-34-3	100 ppm	
1,2-Dichloroethane	[Ethylene dichloride]	$C_2H_4Cl_2$	107-06-2	10 ppm	
1,1-Dichloroethene	[Vinylidene chloride]	$C_2H_2Cl_2$	75-35-4	5 ppm	
1,2-Dichloroethene	both isomers	$C_2H_2Cl_2$	540-59-0	200 ppm	
Dichlorofluoromethane		$CHCl_2F$	75-43-4	10 ppm	
Dichloromethane	[Methylene chloride]	CH_2Cl_2	75-09-2	50 ppm	
1,1-Dichloro-1-nitroethane		$C_2H_3Cl_2NO_2$	594-72-9	2 ppm	
(2,4-Dichlorophenoxy)acetic acid	[2,4-D]	$C_8H_6Cl_2O_3$	94-75-7	10 mg/m³	
1,2-Dichloropropane		$C_3H_6Cl_2$	78-87-5	75 ppm	110 ppm
2,2-Dichloropropanoic acid		$C_3H_4Cl_2O_2$	75-99-0	5 mg/m³	
1,3-Dichloropropene	both isomers	$C_3H_4Cl_2$	542-75-6	1 ppm	
1,2-Dichloro-1,1,2,2-tetrafluoroethane		$C_2Cl_2F_4$	76-14-2	1000 ppm	
Dichlorvos		$C_4H_7Cl_2O_4P$	62-73-7	0.1 mg/m³	
Dicrotophos		$C_8H_{16}NO_5P$	141-66-2	0.05 mg/m³	
m-Dicyanobenzene	[*m*-Phthalodinitrile]	$C_8H_4N_2$	626-17-5	5 mg/m³	
Dicyclopentadiene		$C_{10}H_{12}$	77-73-6	5 ppm	
Dieldrin		$C_{12}H_8Cl_6O$	60-57-1	0.25 mg/m³	
Diethanolamine	[Bis(2-hydroxyethyl)amine]	$C_4H_{11}NO_2$	111-42-2	2 mg/m³	
Diethylamine		$C_4H_{11}N$	109-89-7	5 ppm	15 ppm
2-Diethylaminoethanol		$C_6H_{15}NO$	100-37-8	2 ppm	
Diethyl ether	[Ethyl ether]	$C_4H_{10}O$	60-29-7	400 ppm	500 ppm
Diethyl phthalate		$C_{12}H_{14}O_4$	84-66-2	5 mg/m³	
1,1-Difluoroethene		$C_2H_2F_2$	75-38-7	500 ppm	
Diglycidyl ether		$C_6H_{10}O_3$	2238-07-5	0.1 ppm	
Diisopropylamine		$C_6H_{15}N$	108-18-9	5 ppm	
Diisopropyl ether		$C_6H_{14}O$	108-20-3	250 ppm	310 ppm
Dimethoxymethane	[Methylal]	$C_3H_8O_2$	109-87-5	1000 ppm	
N,N-Dimethylacetamide		C_4H_9NO	127-19-5	10 ppm	

Substance	Notes	Molecular formula	CAS Reg. No.	Time-weighted average	Short-term exposure limit
Dimethylamine		C_2H_7N	124-40-3	5 ppm	15 ppm
N,N-Dimethylaniline		$C_8H_{11}N$	121-69-7	5 ppm	10 ppm
2,2-Dimethylbutane	[Neohexane]	C_6H_{14}	75-83-2	500 ppm	1000 ppm
2,3-Dimethylbutane		C_6H_{14}	79-29-8	500 ppm	1000 ppm
N,N-Dimethylformamide	[DMF]	C_3H_7NO	68-12-2	10 ppm	
2,6-Dimethyl-4-heptanone	[Diisobutyl ketone]	$C_9H_{18}O$	108-83-8	25 ppm	
1,1-Dimethylhydrazine		$C_2H_8N_2$	57-14-7	0.01 ppm	
Dimethyl mercury		C_2H_6Hg	593-74-8	0.01 mg/m^3	
Dimethyl phthalate		$C_{10}H_{10}O_4$	131-11-3	5 mg/m^3	
2,2-Dimethyl-1-propanol acetate		$C_7H_{14}O_2$	926-41-0	50 ppm	100 ppm
Dimethyl sulfate		$C_2H_6O_4S$	77-78-1	0.1 ppm	
Dimethyl sulfide		C_2H_6S	75-18-3	10 ppm	
Dinitrobenzene	all isomers	$C_6H_4N_2O_4$	25154-54-5	0.15 ppm	
Dinitrotoluene	all isomers	$C_7H_6N_2O_4$	25321-14-6	0.2 mg/m^3	
1,4-Dioxane		$C_4H_8O_2$	123-91-1	20 ppm	
Dioxathion		$C_{12}H_{26}O_6P_2S_4$	78-34-2	0.1 mg/m^3	
1,3-Dioxolane		$C_3H_6O_2$	646-06-0	20 ppm	
Diphenylamine		$C_{12}H_{11}N$	122-39-4	10 mg/m^3	
Diphenyl ether		$C_{12}H_{10}O$	101-84-8	1 ppm	2 ppm
4,4′-Diphenylmethane diisocyanate	[Methylene diphenyl isocyanate; MDI]	$C_{15}H_{10}N_2O_2$	101-68-8	0.005 ppm	
Diquat		$C_{12}H_{12}N_2$	231-36-7	0.5 mg/m^3	
Disulfiram		$C_{10}H_{20}N_2S_4$	97-77-8	2 mg/m^3	
Disulfoton		$C_8H_{19}O_2PS_3$	298-04-4	0.05 mg/m^3	
Diuron		$C_9H_{10}Cl_2N_2O$	330-54-1	10 mg/m^3	
Divinyl benzene	all isomers	$C_{10}H_{10}$	1321-74-0	10 ppm	
1-Dodecanethiol		$C_{12}H_{26}S$	112-55-0	0.1 ppm	
Endosulfan		$C_9H_6Cl_6O_3S$	115-29-7	0.1 mg/m^3	
Endrin		$C_{12}H_8Cl_6O$	72-20-8	0.1 mg/m^3	
Enflurane		$C_3H_2ClF_5O$	13838-16-9	75 ppm	
Epichlorohydrin	[(Chloromethyl)oxirane]	C_3H_5ClO	106-89-8	0.5 ppm	
1,2-Epoxy-4-(epoxyethyl)cyclohexane	[Vinylcyclohexene dioxide]	$C_8H_{12}O_2$	106-87-6	0.1 ppm	
Ethane		C_2H_6	74-84-0	1000 ppm	
1,2-Ethanediamine	[Ethylenediamine]	$C_2H_8N_2$	107-15-3	10 ppm	
1,2-Ethanediol	[Ethylene glycol]	$C_2H_6O_2$	107-21-1		C 100 mg/m^3
1,2-Ethanediol, dinitrate	[Ethylene glycol dinitrate; EGDN]	$C_2H_4N_2O_6$	628-96-6	0.05 ppm	
Ethanethiol	[Ethyl mercaptan]	C_2H_6S	75-08-1	0.5 ppm	
Ethanol	[Ethyl alcohol]	C_2H_6O	64-17-5	1000 ppm	
Ethanolamine		C_2H_7NO	141-43-5	3 ppm	6 ppm
Ethion		$C_9H_{22}O_4P_2S_4$	563-12-2	0.05 mg/m^3	
Ethoxydimethylsilane		$C_4H_{12}OSi$	14857-34-2	0.5 ppm	1.5 ppm
2-Ethoxyethanol	[Ethylene glycol monoethyl ether; EGEE]	$C_4H_{10}O_2$	110-80-5	5 ppm	
2-Ethoxyethyl acetate	[Ethylene glycol monoethyl ether acetate; EGEEA]	$C_6H_{12}O_3$	111-15-9	5 ppm	
Ethyl acetate		$C_4H_8O_2$	141-78-6	400 ppm	
Ethyl acrylate	[Ethyl propenoate]	$C_5H_8O_2$	140-88-5	5 ppm	15 ppm
Ethylamine		C_2H_7N	75-04-7	5 ppm	15 ppm
Ethylbenzene		C_8H_{10}	100-41-4	100 ppm	125 ppm
Ethyl 2-cyanoacrylate	[Ethyl 2-cyano-2-propenoate]	$C_6H_7NO_2$	7085-85-0	0.2 ppm	
Ethyleneimine	[Aziridine]	C_2H_5N	151-56-4	0.5 ppm	
Ethyl formate		$C_3H_6O_2$	109-94-4	100 ppm	
2-Ethylhexanoic acid		$C_8H_{16}O_2$	149-57-5	5 mg/m^3	
5-Ethylidene-2-norbornene		C_9H_{12}	16219-75-3		C 5 ppm
N-Ethylmorpholine		$C_6H_{13}NO$	100-74-3	5 ppm	
Ethyl *p*-nitrophenyl benzenethiophosphate	[EPN]	$C_{14}H_{14}NO_4PS$	2104-64-5	0.1 mg/m^3	
Ethyl silicate		$C_8H_{20}O_4Si$	78-10-4	10 ppm	
Fenamiphos		$C_{13}H_{22}NO_3PS$	22224-92-6	0.1 mg/m^3	

Substance	Notes	Molecular formula	CAS Reg. No.	Time-weighted average	Short-term exposure limit
Fensulfothion		$C_{11}H_{17}O_4PS_2$	115-90-2	0.1 mg/m³	
Fenthion		$C_{10}H_{15}O_3PS_2$	55-38-9	0.2 mg/m³	
Ferbam		$C_9H_{18}FeN_3S_6$	14484-64-1	10 mg/m³	
Ferrocene	[Dicyclopentadienyl iron]	$C_{10}H_{10}Fe$	102-54-5	10 mg/m³	
Fluoride ion [F^-]	fluoride salts, as F	F	16984-48-8	2.5 mg/m³	
Fluorine		F_2	7782-41-4	1 ppm	2 ppm
Fluorine monoxide	[Oxygen difluoride]	F_2O	7783-41-7		C 0.05 ppm
Fluoroethene	[Vinyl fluoride]	C_2H_3F	75-02-5	1 ppm	
Fonofos		$C_{10}H_{15}OPS_2$	944-22-9	0.1 mg/m³	
Formaldehyde		CH_2O	50-00-0		C 0.3 ppm
Formamide		CH_3NO	75-12-7	10 ppm	
Formic acid		CH_2O_2	64-18-6	5 ppm	10 ppm
Furfural	[2-Furaldehyde]	$C_5H_4O_2$	98-01-1	2 ppm	
Furfuryl alcohol	[2-Furanmethanol]	$C_5H_6O_2$	98-00-0	10 ppm	15 ppm
Germane	[Germanium tetrahydride]	GeH_4	7782-65-2	0.2 ppm	
Glycerol	[1,2,3-Propanetriol]	$C_3H_8O_3$	56-81-5	10 mg/m³	
Glyoxal		$C_2H_2O_2$	107-22-2	0.1 mg/m³	
Graphite	except fibers	C	7440-44-0	2 mg/m³	
Hafnium	metal and compounds, as Hf	Hf	7440-58-6	0.5 mg/m³	
Heptachlor		$C_{10}H_5Cl_7$	76-44-8	0.05 mg/m³	
Heptachlor epoxide		$C_{10}H_5Cl_7O$	1024-57-3	0.05 mg/m³	
Heptane		C_7H_{16}	142-82-5	400 ppm	500 ppm
2-Heptanone	[Methyl pentyl ketone]	$C_7H_{14}O$	110-43-0	50 ppm	
3-Heptanone	[Ethyl butyl ketone]	$C_7H_{14}O$	106-35-4	50 ppm	75 ppm
4-Heptanone	[Dipropyl ketone]	$C_7H_{14}O$	123-19-3	50 ppm	
Hexachlorobenzene		C_6Cl_6	118-74-1	0.002 mg/m³	
Hexachloro-1,3-butadiene		C_4Cl_6	87-68-3	0.02 ppm	
1,2,3,4,5,6-Hexachlorocyclohexane	[Lindane]	$C_6H_6Cl_6$	58-89-9	0.5 mg/m³	
Hexachloro-1,3-cyclopentadiene		C_5Cl_6	77-47-4	0.01 ppm	
Hexachloroethane	[Perchloroethane]	C_2Cl_6	67-72-1	1 ppm	
Hexachloronaphthalene	all isomers	$C_{10}H_2Cl_6$	1335-87-1	0.2 mg/m³	
Hexahydro-1,3-isobenzofurandione	[Hexahydrophthalic anhydride]	$C_8H_{10}O_3$	85-42-7		C 0.005 mg/m³
Hexamethylene diisocyanate		$C_8H_{12}N_2O_2$	822-06-0	0.005 ppm	
Hexane		C_6H_{14}	110-54-3	50 ppm	
1,6-Hexanediamine	[Hexamethylenediamine]	$C_6H_{16}N_2$	124-09-4	0.5 ppm	
Hexanedinitrile	[Adiponitrile]	$C_6H_8N_2$	111-69-3	2 ppm	
1,6-Hexanedioic acid	[Adipic acid]	$C_6H_{10}O_4$	124-04-9	5 mg/m³	
2-Hexanone	[Butyl methyl ketone]	$C_6H_{12}O$	591-78-6	5 ppm	10 ppm
1-Hexene		C_6H_{12}	592-41-6	50 ppm	
sec-Hexyl acetate		$C_8H_{16}O_2$	108-84-9	50 ppm	
Hydrazine		H_4N_2	302-01-2	0.01 ppm	
Hydrazoic acid		HN_3	7782-79-8		C 0.11 ppm
Hydrogen bromide		BrH	10035-10-6		C 2 ppm
Hydrogen chloride		ClH	7647-01-0		C 2 ppm
Hydrogen cyanide		CHN	74-90-8		C 4.7 ppm
Hydrogen fluoride		FH	7664-39-3		C 3 ppm
Hydrogen peroxide		H_2O_2	7722-84-1	1 ppm	
Hydrogen selenide		H_2Se	7783-07-5	0.05 ppm	
Hydrogen sulfide		H_2S	7783-06-4	10 ppm	15 ppm
p-Hydroquinone	[1,4-Benzenediol]	$C_6H_6O_2$	123-31-9	2 mg/m³	
2-Hydroxypropyl acrylate		$C_6H_{10}O_3$	999-61-1	0.5 ppm	
Indene		C_9H_8	95-13-6	10 ppm	
Indium	metal and compounds, as In	In	7440-74-6	0.1 mg/m³	
Iodine		I_2	7553-56-2		C 0.1 ppm
Iodomethane	[Methyl iodide]	CH_3I	74-88-4	2 ppm	
Iron ion [Fe^{+2}]	soluble ferrous salts, as Fe	Fe	15438-31-0	1 mg/m³	
Iron ion [Fe^{+3}]	soluble ferric salts, as Fe	Fe	20074-52-6	1 mg/m³	

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Iron(III) oxide	dust and fume, as Fe	Fe_2O_3	1309-37-1	5 mg/m³	
Iron pentacarbonyl		C_5FeO_5	13463-40-6	0.1 ppm	0.2 ppm
Isobutane	[2-Methylpropane]	C_4H_{10}	75-28-5	1000 ppm	
Isobutyl acetate		$C_6H_{12}O_2$	110-19-0	150 ppm	
Isobutyl nitrite		$C_4H_9NO_2$	542-56-3		C 1 ppm
Isopentane	[2-Methylbutane]	C_5H_{12}	78-78-4	600 ppm	
Isopentyl acetate	[Isoamyl acetate]	$C_7H_{14}O_2$	123-92-2	50 ppm	100 ppm
Isophorone		$C_9H_{14}O$	78-59-1		C 5 ppm
Isophorone diisocyanate		$C_{12}H_{18}N_2O_2$	4098-71-9	0.005 ppm	
Isopropenylbenzene	[α-Methyl styrene]	C_9H_{10}	98-83-9	50 ppm	100 ppm
2-Isopropoxyethanol		$C_5H_{12}O_2$	109-59-1	25 ppm	
Isopropyl acetate		$C_5H_{10}O_2$	108-21-4	100 ppm	200 ppm
Isopropylamine		C_3H_9N	75-31-0	5 ppm	10 ppm
N-Isopropylaniline		$C_9H_{13}N$	768-52-5	2 ppm	
Isopropylbenzene	[Cumene]	C_9H_{12}	98-82-8	50 ppm	
Isopropyl glycidyl ether	[IGE]	$C_6H_{12}O_2$	4016-14-2	50 ppm	75 ppm
Kaolin			1332-58-7	2 mg/m³	
Ketene		C_2H_2O	463-51-4	0.5 ppm	1.5 ppm
Lead	metal and compounds, as Pb	Pb	7439-92-1	0.05 mg/m³	
Lead(II) arsenate		$As_2O_8Pb_3$	7784-40-9	0.15 mg/m³	
Lead(II) chromate	as Pb	CrO_4Pb	7758-97-6	0.05 mg/m³	
Lithium hydride		HLi	7580-67-8	0.025 mg/m³	
Magnesium carbonate	[Magnesite]	$CMgO_3$	546-93-0	10 mg/m³	
Magnesium oxide		MgO	1309-48-4	10 mg/m³	
Malathion		$C_{10}H_{19}O_6PS_2$	121-75-5	1 mg/m³	
Maleic anhydride		$C_4H_2O_3$	108-31-6	0.1 ppm	
Manganese	metal and inorganic compounds, as Mn	Mn	7439-96-5	0.2 mg/m³	
Manganese cyclopentadienyl tricarbonyl	as Mn	$C_8H_5MnO_3$	12079-65-1	0.1 mg/m³	
Manganese 2-methylcyclopentadienyl tricarbonyl	as Mn	$C_9H_7MnO_3$	12108-13-3	0.2 mg/m³	
Mercury	metal and inorganic compounds, as Hg	Hg	7439-97-6	0.025 mg/m³	
Mercury	alkyl compounds, as Hg	Hg	7439-97-6	0.01 mg/m³	0.03 mg/m³
Mercury	aryl compounds, as Hg	Hg	7439-97-6	0.1 mg/m³	
Mesityl oxide	[Isobutenyl methyl ketone]	$C_6H_{10}O$	141-79-7	15 ppm	25 ppm
Methacrylic acid	[2-Methylpropenoic acid]	$C_4H_6O_2$	79-41-4	20 ppm	
Methane		CH_4	74-82-8	1000 ppm	
Methanethiol	[Methyl mercaptan]	CH_4S	74-93-1	0.5 ppm	
Methanol	[Methyl alcohol]	CH_4O	67-56-1	200 ppm	250 ppm
Methomyl		$C_5H_{10}N_2O_2S$	16752-77-5	2.5 mg/m³	
2-Methoxyaniline	[*o*-Anisidine]	C_7H_9NO	90-04-0	0.5 mg/m³	
4-Methoxyaniline	[*p*-Anisidine]	C_7H_9NO	104-94-9	0.5 mg/m³	
Methoxychlor		$C_{16}H_{15}Cl_3O_2$	72-43-5	10 mg/m³	
2-Methoxyethanol	[Ethylene glycol monomethyl ether; EGME]	$C_3H_8O_2$	109-86-4	5 ppm	
2-Methoxyethyl acetate	[Ethylene glycol monomethyl ether acetate; EGMEA]	$C_5H_{10}O_3$	110-49-6	5 ppm	
2-Methoxy-2-methylbutane	[Methyl *tert*-pentyl ether; TAME]	$C_6H_{14}O$	994-05-8	20 ppm	
4-Methoxyphenol		$C_7H_8O_2$	150-76-5	5 mg/m³	
1-Methoxy-2-propanol	[1,2-Propylene glycol monomethyl ether; PGME]	$C_4H_{10}O_2$	107-98-2	100 ppm	150 ppm
Methyl acetate		$C_3H_6O_2$	79-20-9	200 ppm	250 ppm
Methyl acrylate	[Methyl propenoate]	$C_4H_6O_2$	96-33-3	2 ppm	
2-Methylacrylonitrile	[2-Methylpropenenitrile]	C_4H_5N	126-98-7	1 ppm	
Methylamine		CH_5N	74-89-5	5 ppm	15 ppm
2-Methylaniline	[*o*-Toluidine]	C_7H_9N	95-53-4	2 ppm	
3-Methylaniline	[*m*-Toluidine]	C_7H_9N	108-44-1	2 ppm	
4-Methylaniline	[*p*-Toluidine]	C_7H_9N	106-49-0	2 ppm	
N-Methylaniline		C_7H_9N	100-61-8	0.5 ppm	

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3-Methyl-1-butanol	[Isoamyl alcohol]	$C_5H_{12}O$	123-51-3	100 ppm	125 ppm
2-Methyl-1-butanol acetate		$C_7H_{14}O_2$	624-41-9	50 ppm	100 ppm
3-Methyl-2-butanol acetate		$C_7H_{14}O_2$	5343-96-4	50 ppm	100 ppm
3-Methyl-2-butanone	[Methyl isopropyl ketone]	$C_5H_{10}O$	563-80-4	200 ppm	
Methyl *tert*-butyl ether	[MTBE]	$C_5H_{12}O$	1634-04-4	50 ppm	
Methyl 2-cyanoacrylate	[Mecrylate]	$C_5H_5NO_2$	137-05-3	0.2 ppm	
Methylcyclohexane		C_7H_{14}	108-87-2	400 ppm	
Methylcyclohexanol	all isomers	$C_7H_{14}O$	25639-42-3	50 ppm	
2-Methylcyclohexanone		$C_7H_{12}O$	583-60-8	50 ppm	75 ppm
Methyl demeton		$C_6H_{15}O_3PS_2$	8022-00-2	0.5 mg/m³	
2-Methyl-3,5-dinitrobenzamide	[Dinitolmide]	$C_8H_7N_3O_5$	148-01-6	5 mg/m³	
2-Methyl-4,6-dinitrophenol	[Dinitro-*o*-cresol]	$C_7H_6N_2O_5$	534-52-1	0.2 mg/m³	
4,4'-Methylenebis[2-chloroaniline]	[MBOCA]	$C_{13}H_{12}Cl_2N_2$	101-14-4	0.01 ppm	
Methylenebis(4-cyclohexylisocyanate)		$C_{15}H_{22}N_2O_2$	5124-30-1	0.005 ppm	
Methyl formate		$C_2H_4O_2$	107-31-3	100 ppm	150 ppm
6-Methyl-1-heptanol	[Isooctyl alcohol]	$C_8H_{18}O$	26952-21-6	50 ppm	
5-Methyl-3-heptanone		$C_8H_{16}O$	541-85-5	25 ppm	
5-Methyl-2-hexanone	[Methyl isopentyl ketone]	$C_7H_{14}O$	110-12-3	50 ppm	
Methylhydrazine		CH_6N_2	60-34-4	0.01 ppm	
Methyl isocyanate		C_2H_3NO	624-83-9	0.02 ppm	
Methyl methacrylate	[Methyl 2-methyl-2-propenoate]	$C_5H_8O_2$	80-62-6	50 ppm	100 ppm
Methyloxirane	[1,2-Propylene oxide]	C_3H_6O	75-56-9	2 ppm	
Methyl parathion		$C_8H_{10}NO_5PS$	298-00-0	0.2 mg/m³	
2-Methylpentane	[Isohexane]	C_6H_{14}	107-83-5	500 ppm	1000 ppm
3-Methylpentane		C_6H_{14}	96-14-0	500 ppm	1000 ppm
2-Methyl-2,4-pentanediol	[Hexylene glycol]	$C_6H_{14}O_2$	107-41-5		C 25 ppm
4-Methyl-2-pentanol	[Methyl isobutyl carbinol]	$C_6H_{14}O$	108-11-2	25 ppm	40 ppm
4-Methyl-2-pentanone	[Isobutyl methyl ketone]	$C_6H_{12}O$	108-10-1	50 ppm	75 ppm
2-Methyl-1-propanol	[Isobutyl alcohol]	$C_4H_{10}O$	78-83-1	50 ppm	
2-Methyl-2-propanol	[*tert*-Butyl alcohol]	$C_4H_{10}O$	75-65-0	100 ppm	
Methylstyrene	all isomers	C_9H_{10}	25013-15-4	50 ppm	100 ppm
N-Methyl-*N*,2,4,6-tetranitroaniline	[Tetryl]	$C_7H_5N_5O_8$	479-45-8	1.5 mg/m³	
Metribuzin		$C_8H_{14}N_4OS$	21087-64-9	5 mg/m³	
Mevinphos		$C_7H_{13}O_6P$	7786-34-7	0.01 ppm	
Mica			12001-26-2	3 mg/m³	
Molybdenum	metal and insoluble compounds, as Mo	Mo	7439-98-7	10 mg/m³	
Molybdenum	soluble compounds, as Mo	Mo	7439-98-7	0.5 mg/m³	
Monocrotophos		$C_7H_{14}NO_5P$	6923-22-4	0.05 mg/m³	
Morpholine		C_4H_9NO	110-91-8	20 ppm	
Naled		$C_4H_7Br_2Cl_2O_4P$	300-76-5	0.1 mg/m³	
Naphthalene		$C_{10}H_8$	91-20-3	10 ppm	15 ppm
1-Naphthalenylthiourea	[ANTU]	$C_{11}H_{10}N_2S$	86-88-4	0.3 mg/m³	
Neopentane	[2,2-Dimethylpropane]	C_5H_{12}	463-82-1	600 ppm	
Nickel	metal	Ni	7440-02-0	1.5 mg/m³	
Nickel	soluble compounds, as Ni	Ni	7440-02-0	0.1 mg/m³	
Nickel	insoluble compounds, as Ni	NI	7440-02-0	0.2 mg/m³	
Nickel carbonyl	as Ni	C_4NiO_4	13463-39-3	0.05 ppm	
Nickel(III) sulfide	as Ni	Ni_3S_2	12035-72-2	0.1 mg/m³	
Nicotine		$C_{10}H_{14}N_2$	54-11-5	0.5 mg/m³	
Nitrapyrin		$C_6H_3Cl_4N$	1929-82-4	10 mg/m³	
Nitric acid		HNO_3	7697-37-2	2 ppm	4 ppm
Nitric oxide		NO	10102-43-9	25 ppm	
4-Nitroaniline		$C_6H_6N_2O_2$	100-01-6	3 mg/m³	
Nitrobenzene		$C_6H_5NO_2$	98-95-3	1 ppm	
Nitroethane		$C_2H_5NO_2$	79-24-3	100 ppm	
Nitrogen dioxide		NO_2	10102-44-0	3 ppm	5 ppm

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Nitrogen trifluoride		F_3N	7783-54-2	10 ppm	
Nitromethane		CH_3NO_2	75-52-5	20 ppm	
1-Nitropropane		$C_3H_7NO_2$	108-03-2	25 ppm	
2-Nitropropane		$C_3H_7NO_2$	79-46-9	10 ppm	
Nitrotoluene	all isomers	$C_7H_7NO_2$	1321-12-6	2 ppm	
Nitrous oxide		N_2O	10024-97-2	50 ppm	
Nonane	all isomers	C_9H_{20}	111-84-2	200 ppm	
Octachloronaphthalene		$C_{10}Cl_8$	2234-13-1	0.1 mg/m³	
Octane	all isomers	C_8H_{18}	111-65-9	300 ppm	375 ppm
Osmium(VIII) oxide	[Osmium tetroxide]	O_4Os	20816-12-0	0.0002 ppm	0.0006 ppm
Oxalic acid		$C_2H_2O_4$	144-62-7	1 mg/m³	2 mg/m³
2-Oxetanone	[β-Propiolactone]	$C_3H_4O_2$	57-57-8	0.5 ppm	
Oxirane	[Ethylene oxide]	C_2H_4O	75-21-8	1 ppm	
Oxiranemethanol	[Glycidol]	$C_3H_6O_2$	556-52-5	2 ppm	
4,4'-Oxybis(benzenesulfonyl hydrazide)		$C_{12}H_{14}N_4O_5S_2$	80-51-3	0.1 mg/m³	
Ozone	depends on workload	O_3	10028-15-6	0.1 ppm	
Paraquat		$C_{12}H_{14}N_2$	4685-14-7	0.5 mg/m³	
Parathion		$C_{10}H_{14}NO_5PS$	56-38-2	0.05 mg/m³	
Pentaborane(9)		B_5H_9	19624-22-7	0.005 ppm	0.015 ppm
Pentachloronaphthalene	all isomers	$C_{10}H_3Cl_5$	1321-64-8	0.5 mg/m³	
Pentachloronitrobenzene		$C_6Cl_5NO_2$	82-68-8	0.5 mg/m³	
Pentachlorophenol		C_6HCl_5O	87-86-5	0.5 mg/m³	
Pentaerythritol		$C_5H_{12}O_4$	115-77-5	10 mg/m³	
Pentanal	[Valeraldehyde]	$C_5H_{10}O$	110-62-3	50 ppm	
Pentane		C_5H_{12}	109-66-0	600 ppm	750 ppm
Pentanedial	[Glutaraldehyde]	$C_5H_8O_2$	111-30-8		C 0.05 ppm
3-Pentanol acetate		$C_7H_{14}O_2$	620-11-1	50 ppm	100 ppm
2-Pentanone	[Methyl propyl ketone]	$C_5H_{10}O$	107-87-9	200 ppm	250 ppm
3-Pentanone	[Diethyl ketone]	$C_5H_{10}O$	96-22-0	200 ppm	300 ppm
Pentyl acetate	[Amyl acetate]	$C_7H_{14}O_2$	628-63-7	50 ppm	100 ppm
sec-Pentyl acetate		$C_7H_{14}O_2$	626-38-0	50 ppm	100 ppm
Perchloryl fluoride		$ClFO_3$	7616-94-6	3 ppm	6 ppm
Perfluoroacetone	[Hexafluoroacetone]	C_3F_6O	684-16-2	0.1 ppm	
Perfluoroisobutene		C_4F_8	382-21-8		C 0.01 ppm
Phenol		C_6H_6O	108-95-2	5 ppm	
10*H*-Phenothiazine	[Thiodiphenylamine]	$C_{12}H_9NS$	92-84-2	5 mg/m³	
Phenylenediamine	all isomers	$C_6H_8N_2$	25265-76-3	0.1 mg/m³	
Phenyl glycidyl ether	[PGE]	$C_9H_{10}O_2$	122-60-1	0.1 ppm	
Phenylhydrazine		$C_6H_8N_2$	100-63-0	0.1 ppm	
Phenylphosphine		C_6H_7P	638-21-1		C 0.05 ppm
Phorate		$C_7H_{17}O_2PS_3$	298-02-2	0.05 mg/m³	0.2 mg/m³
Phosphine		H_3P	7803-51-2	0.3 ppm	1 ppm
Phosphoric acid		H_3O_4P	7664-38-2	1 mg/m³	3 mg/m³
Phosphorus (yellow)	[White phosphorus]	P	7723-14-0	0.1 mg/m³	
Phosphorus(III) chloride	[Phosphorus trichloride]	Cl_3P	7719-12-2	0.2 ppm	0.5 ppm
Phosphorus(V) chloride	[Phosphorus pentachloride]	Cl_5P	10026-13-8	0.1 ppm	
Phosphorus(V) sulfide		P_2S_5	1314-80-3	1 mg/m³	3 mg/m³
Phosphoryl chloride	[Phosphorus(V) oxychloride]	Cl_3OP	10025-87-3	0.1 ppm	
Phthalic anhydride		$C_8H_4O_3$	85-44-9	1 ppm	
Piperazine dihydrochloride		$C_4H_{12}Cl_2N_2$	142-64-3	5 mg/m³	
2-Pivaloyl-1,3-indandione	[Pindone]	$C_{14}H_{14}O_3$	83-26-1	0.1 mg/m³	
Platinum		Pt	7440-06-4	1 mg/m³	
Platinum	soluble salts, as Pt	Pt	7440-06-4	0.002 mg/m³	
Potassium hydroxide		HKO	1310-58-3		C 2 mg/m³
Propanal	[Propionaldehyde]	C_3H_6O	123-38-6	20 ppm	
Propane		C_3H_8	74-98-6	1000 ppm	
Propanoic acid		$C_3H_6O_2$	79-09-4	10 ppm	
1-Propanol	[Propyl alcohol]	C_3H_8O	71-23-8	200 ppm	400 ppm
2-Propanol	[Isopropyl alcohol]	C_3H_8O	67-63-0	200 ppm	400 ppm

Substance	Notes	Molecular formula	CAS Reg. No.	Time-weighted average	Short-term exposure limit
Propargyl alcohol	[2-Propyn-1-ol]	C_3H_4O	107-19-7	1 ppm	
Propoxur		$C_{11}H_{15}NO_3$	114-26-1	0.5 mg/m³	
Propyl acetate		$C_5H_{10}O_2$	109-60-4	200 ppm	250 ppm
1,2-Propylene glycol dinitrate		$C_3H_6N_2O_6$	6423-43-4	0.05 ppm	
Propyleneimine		C_3H_7N	75-55-8	2 ppm	
Propyl nitrate		$C_3H_7NO_3$	627-13-4	25 ppm	40 ppm
Propyne	[Methylacetylene]	C_3H_4	74-99-7	1000 ppm	
2-Pyridinamine	[2-Aminopyridine]	$C_5H_6N_2$	504-29-0	0.5 ppm	
Pyridine		C_5H_5N	110-86-1	1 ppm	
Pyrocatechol	[Catechol]	$C_6H_6O_2$	120-80-9	5 ppm	
Resorcinol	[1,3-Benzenediol]	$C_6H_6O_2$	108-46-3	10 ppm	20 ppm
Rhodium	metal and insoluble compounds, as Rh	Rh	7440-16-6	1 mg/m³	
Rhodium	soluble compounds, as Rh	Rh	7440-16-6	0.01 mg/m³	
Ronnel		$C_8H_8Cl_3O_3PS$	299-84-3	10 mg/m³	
Rotenone		$C_{23}H_{22}O_6$	83-79-4	5 mg/m³	
Selenium	element and compounds, as Se	Se	7782-49-2	0.2 mg/m³	
Selenium hexafluoride		F_6Se	7783-79-1	0.05 ppm	
Sesone		$C_8H_7Cl_2NaO_5S$	136-78-7	10 mg/m³	
Silane		H_4Si	7803-62-5	5 ppm	
Silicon		Si	7440-21-3	10 mg/m³	
Silicon carbide		CSi	409-21-2	10 mg/m³	
Silicon dioxide (α-quartz)		O_2Si	14808-60-7	0.05 mg/m³	
Silicon dioxide (tridymite)		O_2Si	15468-32-3	0.05 mg/m³	
Silicon dioxide (cristobalite)		O_2Si	14464-46-1	0.05 mg/m³	
Silicon dioxide (vitreous)	[Fused silica]	O_2Si	60676-86-0	0.1 mg/m³	
Silver		Ag	7440-22-4	0.1 mg/m³	
Silver	soluble compounds, as Ag	Ag	7440-22-4	0.01 mg/m³	
Sodium azide		N_3Na	26628-22-8		C 0.29 mg/m³
Sodium fluoroacetate		$C_2H_2FNaO_2$	62-74-8	0.05 mg/m³	
Sodium hydrogen sulfite		$HNaO_3S$	7631-90-5	5 mg/m³	
Sodium hydroxide		HNaO	1310-73-2		C 2 mg/m³
Sodium metabisulfite		$Na_2O_5S_2$	7681-57-4	5 mg/m³	
Sodium pyrophosphate		$Na_4O_7P_2$	7722-88-5	5 mg/m³	
Sodium tetraborate decahydrate	[Borax]	$B_4H_{20}Na_2O_{17}$	1303-96-4	5 mg/m³	
Stibine		H_3Sb	7803-52-3	0.1 ppm	
Strontium chromate	as Cr	CrO_4Sr	7789-06-2	0.0005 mg/m³	
Strychnine		$C_{21}H_{22}N_2O_2$	57-24-9	0.15 mg/m³	
Styrene	[Vinylbenzene]	C_8H_8	100-42-5	20 ppm	40 ppm
Sucrose		$C_{12}H_{22}O_{11}$	57-50-1	10 mg/m³	
Sulfotep	[Tetraethyl thiodiphosphate; TEDP]	$C_8H_{20}O_5P_2S_2$	3689-24-5	0.2 mg/m³	
Sulfur chloride		Cl_2S_2	10025-67-9		C 1 ppm
Sulfur decafluoride		$F_{10}S_2$	5714-22-7		C 0.01 ppm
Sulfur dioxide		O_2S	7446-09-5	2 ppm	5 ppm
Sulfur hexafluoride		F_6S	2551-62-4	1000 ppm	
Sulfuric acid		H_2O_4S	7664-93-9	0.2 mg/m³	
Sulfur tetrafluoride		F_4S	7783-60-0		C 0.1 ppm
Sulfuryl fluoride		F_2O_2S	2699-79-8	5 ppm	10 ppm
Sulprofos		$C_{12}H_{19}O_2PS_3$	35400-43-2	1 mg/m³	
Talc			14807-96-6	2 mg/m³	
Tantalum	dust	Ta	7440-25-7	5 mg/m³	
Tantalum(V) oxide	dust, as Ta	O_5Ta_2	1314-61-0	5 mg/m³	
Tellurium	and compounds, as Te (except H_2Te)	Te	13494-80-9	0.1 mg/m³	
Tellurium hexafluoride		F_6Te	7783-80-4	0.02 ppm	
Terbufos		$C_9H_{21}O_2PS_3$	13071-79-9	0.01 mg/m³	
Terephthalic acid	[1,4-Benzenedicarboxylic acid]	$C_8H_6O_4$	100-21-0	10 mg/m³	
Terphenyl	all isomers	$C_{18}H_{14}$	26140-60-3		5 mg/m³
1,1,2,2-Tetrabromoethane	[Acetylene tetrabromide]	$C_2H_2Br_4$	79-27-6	1 ppm	
Tetrabromomethane	[Carbon tetrabromide]	CBr_4	558-13-4	0.1 ppm	0.3 ppm

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1,1,1,2-Tetrachloro-2,2-difluoroethane		$C_2Cl_4F_2$	76-11-9	500 ppm	
1,1,2,2-Tetrachloro-1,2-difluoroethane		$C_2Cl_4F_2$	76-12-0	500 ppm	
1,1,2,2-Tetrachloroethane		$C_2H_2Cl_4$	79-34-5	1 ppm	
Tetrachloroethene	[Perchloroethylene]	C_2Cl_4	127-18-4	25 ppm	100 ppm
Tetrachloromethane	[Carbon tetrachloride]	CCl_4	56-23-5	5 ppm	10 ppm
Tetrachloronaphthalene	all isomers	$C_{10}H_4Cl_4$	1335-88-2	2 mg/m³	
Tetraethyl lead	as Pb	$C_8H_{20}Pb$	78-00-2	0.1 mg/m³	
Tetraethyl pyrophosphate	[TEPP]	$C_8H_{20}O_7P_2$	107-49-3	0.05 mg/m³	
Tetrafluoroethene		C_2F_4	116-14-3	2 ppm	
Tetrahydrofuran	[Oxolane]	C_4H_8O	109-99-9	200 ppm	250 ppm
Tetramethyl lead	as Pb	$C_4H_{12}Pb$	75-74-1	0.15 mg/m³	
Tetramethyl silicate		$C_4H_{12}O_4Si$	681-84-5	1 ppm	
Tetramethylsuccinonitrile		$C_8H_{12}N_2$	3333-52-6	0.5 ppm	
Tetranitromethane		CN_4O_8	509-14-8	0.005 ppm	
Thallium	and soluble compounds, as Tl	Tl	7440-28-0	0.1 mg/m³	
4,4'-Thiobis(6-*tert*-butyl-*m*-cresol)		$C_{22}H_{30}O_2S$	96-69-5	10 mg/m³	
Thioglycolic acid		$C_2H_4O_2S$	68-11-1	1 ppm	
Thionyl chloride		Cl_2OS	7719-09-7		C 1 ppm
Thiram		$C_6H_{12}N_2S_4$	137-26-8	1 mg/m³	
Tin		Sn	7440-31-5	2 mg/m³	
Tin	inorganic compounds, as Sn	Sn	7440-31-5	2 mg/m³	
Tin	organic compounds, as Sn	Sn	7440-31-5	0.1 mg/m³	
Titanium(IV) oxide	[Titanium dioxide]	O_2Ti	13463-67-7	10 mg/m³	
Toluene		C_7H_8	108-88-3	50 ppm	
Toluene-2,4-diisocyanate		$C_9H_6N_2O_2$	584-84-9	0.005 ppm	0.02 ppm
Toluene-2,6-diisocyanate		$C_9H_6N_2O_2$	91-08-7	0.005 mg/m³	0.02 ppm
1*H*-1,2,4-Triazol-3-amine	[Amitrole]	$C_2H_4N_4$	61-82-5	0.2 mg/m³	
Tribromomethane	[Bromoform]	$CHBr_3$	75-25-2	0.5 ppm	
Tributyl phosphate		$C_{12}H_{27}O_4P$	126-73-8	0.2 ppm	
Trichlorfon		$C_4H_8Cl_3O_4P$	52-68-6	1 mg/m³	
Trichloroacetic acid		$C_2HCl_3O_2$	76-03-9	1 ppm	
1,2,4-Trichlorobenzene		$C_6H_3Cl_3$	120-82-1		C 5 ppm
1,1,1-Trichloroethane	[Methyl chloroform]	$C_2H_3Cl_3$	71-55-6	350 ppm	450 ppm
1,1,2-Trichloroethane		$C_2H_3Cl_3$	79-00-5	10 ppm	
Trichloroethene		C_2HCl_3	79-01-6	50 ppm	100 ppm
Trichlorofluoromethane		CCl_3F	75-69-4		C 1000 ppm
Trichloromethane	[Chloroform]	$CHCl_3$	67-66-3	10 ppm	
Trichloromethanesulfenyl chloride	[Perchloromethyl mercaptan]	CCl_4S	594-42-3	0.1 ppm	
(Trichloromethyl)benzene	[Benzotrichloride]	$C_7H_5Cl_3$	98-07-7		C 0.1 ppm
Trichloronaphthalene	all isomers	$C_{10}H_5Cl_3$	1321-65-9	5 mg/m³	
Trichloronitromethane	[Chloropicrin]	CCl_3NO_2	76-06-2	0.1 ppm	
2,4,5-Trichlorophenoxyacetic acid	[2,4,5-T]	$C_8H_5Cl_3O_3$	93-76-5	10 mg/m³	
1,2,3-Trichloropropane		$C_3H_5Cl_3$	96-18-4	10 ppm	
1,1,2-Trichloro-1,2,2-trifluoroethane		$C_2Cl_3F_3$	76-13-1	1000 ppm	1250 ppm
Tri-*o*-cresyl phosphate		$C_{21}H_{21}O_4P$	78-30-8	0.1 mg/m³	
Triethanolamine	[Tris(2-hydroxyethyl)amine]	$C_6H_{15}NO_3$	102-71-6	5 mg/m³	
Triethylamine		$C_6H_{15}N$	121-44-8	1 ppm	3 ppm
1,3,5-Triglycidyl-*s*-triazinetrione		$C_{12}H_{15}N_3O_6$	2451-62-9	0.05 mg/m³	
Triiodomethane	[Iodoform]	CHI_3	75-47-8	0.6 ppm	
Trimellitic anhydride	[1,2,4-Benzenetricarboxylic anhydride]	$C_9H_4O_5$	552-30-7		C 0.04 mg/m³
Trimethylamine		C_3H_9N	75-50-3	5 ppm	15 ppm
Trimethylbenzene	all isomers	C_9H_{12}	25551-13-7	25 ppm	
Trimethyl phosphite		$C_3H_9O_3P$	121-45-9	2 ppm	

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Trinitroglycerol	[Nitroglycerin; NG]	$C_3H_5N_3O_9$	55-63-0	0.05 ppm	
2,4,6-Trinitrophenol	[Picric acid]	$C_6H_3N_3O_7$	88-89-1	0.1 mg/m³	
2,4,6-Trinitrotoluene	[TNT]	$C_7H_5N_3O_6$	118-96-7	0.1 mg/m³	
Triphenylamine		$C_{18}H_{15}N$	603-34-9	5 mg/m³	
Triphenyl phosphate		$C_{18}H_{15}O_4P$	115-86-6	3 mg/m³	
Tungsten	metal and insoluble compounds, as W	W	7440-33-7	5 mg/m³	10 mg/m³
Tungsten	soluble compounds, as W	W	7440-33-7	1 mg/m³	3 mg/m³
Uranium	metal and compounds, as U	U	7440-61-1	0.2 mg/m³	
Vanadium(V) oxide	dust or fume; [Vanadium pentoxide]	O_5V_2	1314-62-1	0.05 mg/m³	
Vinyl acetate		$C_4H_6O_2$	108-05-4	10 ppm	15 ppm
4-Vinylcyclohexene		C_8H_{12}	100-40-3	0.1 ppm	
1-Vinyl-2-pyrrolidinone		C_6H_9NO	88-12-0	0.05 ppm	
Warfarin	[Coumadin]	$C_{19}H_{16}O_4$	81-81-2	0.1 mg/m³	
Xylene	all isomers	C_8H_{10}	1330-20-7	100 ppm	150 ppm
Xylidine	all isomers	$C_8H_{11}N$	1300-73-8	0.5 ppm	
Yttrium	metal and compounds, as Y	Y	7440-65-5	1 mg/m³	
Zinc chloride		Cl_2Zn	7646-85-7	1 mg/m³	2 mg/m³
Zinc chromate hydroxide	as Cr	$CrH_2O_6Zn_2$	13530-65-9	0.01 mg/m³	
Zinc oxide		OZn	1314-13-2	2 mg/m³	10 mg/m³
Zirconium	metal and compounds, as Zr	Zr	7440-67-7	5 mg/m³	10 mg/m³