

## Occupational Exposure Limits (OELs) for Ontario Workplaces

The following table contains information found in the Ontario Table in Regulation 833 ("Regulation") and the ACGIH Table that is referenced in the Regulation.

In addition, the table includes listings (i.e. Petroleum ether, Rubber solvent and VM&P Naphtha) not included in either the Ontario Table or the ACGIH Table. The Ministry recommends that OELs for those substances be calculated using the recommended method referenced.

An employer has a duty and shall take all measures reasonably necessary in the circumstances to protect workers from exposure to a hazardous biological or chemical agent.

This table should not be solely relied upon to determine the exposure limits for substances. In order to determine all exposure limits, including excursion limits for a substance, please refer to the official version of the Regulation.

Ontario Table Listings	Agent [CAS No.]	Time-Weighted Average Limit (TWA), Short-Term Exposure Limit (STEL), Ceiling Limit (C) and Notations		
		TWA	STEL/C	Notations
	Acetaldehyde [75-07-0]		C 25 ppm	
	Acetic acid [64-19-7]	10 ppm	15 ppm	
◇	Acetic anhydride [108-24-7]		C 5 ppm C 21 mg/m <sup>3</sup>	
	Acetone [67-64-1]	500 ppm	750 ppm	
	Acetone cyanohydrin [75-86-5], as CN		C 5 mg/m <sup>3</sup>	Skin
	Acetonitrile [75-05-8]	20 ppm		Skin
	Acetophenone [98-86-2]	10 ppm		
	Acetylene [74-86-2]	Simple asphyxiant		
	Acetylsalicylic acid (Aspirin) [50-78-2]	5 mg/m <sup>3</sup>		
	Acrolein [107-02-8]		C 0.1 ppm	Skin
	Acrylamide [79-06-1]	0.03 mg/m <sup>3</sup> (IFV)		Skin
	Acrylic acid [79-10-7]	2 ppm		Skin
◇ *	Acrylonitrile [107-13-1]	2 ppm	C 10 ppm	Skin
	Adipic acid [124-04-9]	5 mg/m <sup>3</sup>		
	Adiponitrile [111-69-3]	2 ppm		Skin
	Alachlor [15972-60-8]	1 mg/m <sup>3</sup> (IFV)		
	Aldrin [309-00-2]	0.05 mg/m <sup>3</sup> (IFV)		Skin
◇	Aliphatic hydrocarbon gases Alkane [C <sub>1</sub> -C <sub>4</sub> ], except Butane, All isomers Butane, All isomers [106-97-8]; [75-28-5]	1,000 ppm 800 ppm		
	Allyl alcohol [107-18-6]	0.5 ppm		Skin
	Allyl chloride [107-05-1]	1 ppm	2 ppm	
	Allyl glycidyl ether (AGE) [106-92-3]	1 ppm		
	Allyl propyl disulfide [2179-59-1]	0.5 ppm		
	Aluminum metal [7429-90-5] and insoluble compounds	1 mg/m <sup>3</sup> (R)		
	4-Aminodiphenyl [92-67-1]	(L)		Skin
	2-Aminopyridine [504-29-0]	0.5 ppm		
	Amitrole [61-82-5]	0.2 mg/m <sup>3</sup>		
	Ammonia [7664-41-7]	25 ppm	35 ppm	

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	Ammonium chloride fume [12125-02-9]	10 mg/m <sup>3</sup>	20 mg/m <sup>3</sup>	
	Ammonium perfluorooctanoate [3825-26-1]	0.01 mg/m <sup>3</sup>		Skin
	Ammonium sulfamate [7773-06-0]	10 mg/m <sup>3</sup>		
	tert-Amyl methyl ether (TAME) [994-05-8]	20 ppm		
	Aniline [62-53-3]	2 ppm		Skin
	o-Anisidine [90-04-0]	0.5 mg/m <sup>3</sup>		Skin
	p-Anisidine [104-94-9]	0.5 mg/m <sup>3</sup>		Skin
	Antimony [7440-36-0] and compounds, as Sb	0.5 mg/m <sup>3</sup>		
	Antimony hydride [7803-52-3]	0.1 ppm		
	Antimony trioxide [1309-64-4] production	(L)		
	ANTU [86-88-4]	0.3 mg/m <sup>3</sup>		Skin
	Argon [7440-37-1]	Simple asphyxiant		
◇ *	Arsenic, elemental arsenic and inorganic compounds [7440-38-2], and organic compounds (only where both inorganic and organic compounds are present), as As.	0.01 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>	
	Arsine [7784-42-1]	0.005 ppm		
◇ *	Asbestos - All forms [1332-21-4] Actinolite [77536-66-4] Amosite [12172-73-5] Anthophyllite [77536-67-5] Chrysotile [132207-32-0] Crocidolite [12001-28-4] Tremolite [77536-68-6]	0.1 f/cc (a) 0.1 f/cc (a) 0.1 f/cc (a) 0.1 f/cc (a) 0.1 f/cc (a) 0.1 f/cc (a) 0.1 f/cc (a)		
	Asphalt (Bitumen) fume [8052-42-4], as benzene-soluble aerosol	0.5 mg/m <sup>3</sup> (I)		
	Atrazine [1912-24-9]	5 mg/m <sup>3</sup>		
	Azinphos-methyl [86-50-0]	0.2 mg/m <sup>3</sup> (IFV)		Skin
	Barium [7440-39-3] and soluble compounds, as Ba	0.5 mg/m <sup>3</sup>		
	Barium sulfate [7727-43-7]	10 mg/m <sup>3</sup>		
	Benomyl [17804-35-2]	1 mg/m <sup>3</sup> (I)		
	Benz[a]anthracene [56-55-3]	(L)		
◇	Benzaldehyde [100-52-7]		4 ppm 17 mg/m <sup>3</sup>	
◇ *	Benzene [71-43-2]	0.5 ppm	2.5 ppm	Skin
	Benzidine [92-87-5]	(L)		Skin
	Benzo[b]fluoranthene [205-99-2]	(L)		
	Benzo[a]pyrene [50-32-8]	(L)		
	Benzotrichloride [98-07-7]		C 0.1 ppm	Skin
	Benzoyl chloride [98-88-4]		C 0.5 ppm	
	Benzoyl peroxide [94-36-0]	5 mg/m <sup>3</sup>		
	Benzyl acetate [140-11-4]	10 ppm		
	Benzyl chloride [100-44-7]	1 ppm		
◇	Beryllium and its compounds, as Be [7440-41-7]	0.002 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup>	
	Biphenyl [92-52-4]	0.2 ppm		
	Bis(2-dimethylaminoethyl) ether (DMAEE) [3033-62-3]	0.05 ppm	0.15 ppm	Skin
	Bismuth telluride Undoped [1304-82-1] Se-doped, as Bi <sub>2</sub> Te <sub>3</sub>	10 mg/m <sup>3</sup> 5 mg/m <sup>3</sup>		
	Borate compounds, Inorganic [1330-43-4; 1303-96-4; 10043-35-3; 12179-04-3]	2 mg/m <sup>3</sup> (I)	6 mg/m <sup>3</sup> (I)	
	Boron oxide [1303-86-2]	10 mg/m <sup>3</sup>		
	Boron tribromide [10294-33-4]		C 1 ppm	
	Boron trifluoride [7637-07-2]		C 1 ppm	

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	Bromacil [314-40-9]	10 mg/m <sup>3</sup>		
	Bromine [7726-95-6]	0.1 ppm	0.2 ppm	
	Bromine pentafluoride [7789-30-2]	0.1 ppm		
	Bromoform [75-25-2]	0.5 ppm		
	1-Bromopropane [106-94-5]	10 ppm		
	1,3-Butadiene [106-99-0]	2 ppm		
	Butane, All isomers [106-97-8; 75-28-5]	See Aliphatic Hydrocarbon gases		
	n-Butanol [71-36-3]	20 ppm		
◇	sec-Butanol [78-92-2]	100 ppm	150 ppm	
◇	tert-Butanol [75-65-0]	100 ppm	150 ppm	
	Butenes, All isomers [106-98-9; 107-01-7; 590-18-1; 624-64-6; 25167-67-3]	250 ppm		
	Isobutene [115-11-7]	250 ppm		
	2-Butoxyethanol (EGBE) [111-76-2]	20 ppm		
	2-Butoxyethyl acetate (EGBEA) [112-07-2]	20 ppm		
	n-Butyl acetate [123-86-4]	150 ppm	200 ppm	
	sec-Butyl acetate [105-46-4]	200 ppm		
	tert-Butyl acetate [540-88-5]	200 ppm		
	n-Butyl acrylate [141-32-2]	2 ppm		
	n-Butylamine [109-73-9]		C 5 ppm	Skin
	Butylated hydroxytoluene (BHT) [128-37-0]	2 mg/m <sup>3</sup> (IFV)		
	tert-Butyl chromate, as CrO <sub>3</sub> [1189-85-1]		C 0.1 mg/m <sup>3</sup>	Skin
	n-Butyl glycidyl ether (BGE) [2426-08-6]	3 ppm		Skin
	n-Butyl lactate [138-22-7]	5 ppm		
	n-Butyl mercaptan [109-79-5]	0.5 ppm		
	o-sec-Butylphenol [89-72-5]	5 ppm		Skin
	p-tert-Butyl toluene [98-51-1]	1 ppm		
	Cadmium [7440-43-9] and compounds, as Cd	0.01 mg/m <sup>3</sup> 0.002 mg/m <sup>3</sup> (R)		
◇	Calcium chloride [10043-52-4]	5 mg/m <sup>3</sup>		
	Calcium chromate [13765-19-0], as Cr	0.001 mg/m <sup>3</sup>		
	Calcium cyanamide [156-62-7]	0.5 mg/m <sup>3</sup>		
	Calcium hydroxide [1305-62-0]	5 mg/m <sup>3</sup>		
	Calcium oxide [1305-78-8]	2 mg/m <sup>3</sup>		
	Calcium silicate - synthetic nonfibrous [1344-95-2]	10 mg/m <sup>3</sup> (E)		
	Calcium sulfate [7778-18-9; 10034-76-1; 10101-41-4; 13397-24-5]	10 mg/m <sup>3</sup> (I)		
	Camphor, synthetic [76-22-2]	2 ppm	3 ppm	
	Caprolactam [105-60-2]	5 mg/m <sup>3</sup> (IFV)		
	Captafol [2425-06-1]	0.1 mg/m <sup>3</sup>		Skin
	Captan [133-06-2]	5 mg/m <sup>3</sup> (I)		
	Carbaryl [63-25-2]	0.5 mg/m <sup>3</sup> (IFV)		Skin
	Carbofuran [1563-66-2]	0.1 mg/m <sup>3</sup> (IFV)		
	Carbon black [1333-86-4]	3.5 mg/m <sup>3</sup>		
	Carbon dioxide [124-38-9]	5,000 ppm	30,000 ppm	
	Carbon disulfide [75-15-0]	1 ppm		Skin
◇	Carbon monoxide [630-08-0]	25 ppm	100 ppm	
	Carbon tetrabromide [558-13-4]	0.1 ppm	0.3 ppm	
◇	Carbon tetrachloride [56-23-5]	2 ppm	3 ppm	Skin
	Carbonyl fluoride [353-50-4]	2 ppm	5 ppm	
	Catechol [120-80-9]	5 ppm		Skin
	Cellulose [9004-34-6]	10 mg/m <sup>3</sup>		
	Cesium hydroxide [21351-79-1]	2 mg/m <sup>3</sup>		

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◇	Charcoal, except activated [16291-96-6]	10 mg/m <sup>3</sup>		
◇	Chlordane [57-74-9]	0.5 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	Skin
	Chlorinated camphene [8001-35-2]	0.5 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>	Skin
◇	Chlorinated diphenyl oxides [55720-99-5]	0.5 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	
	Chlorine [7782-50-5]	0.5 ppm	1 ppm	
	Chlorine dioxide [10049-04-4]	0.1 ppm	0.3 ppm	
	Chlorine trifluoride [7790-91-2]		C 0.1 ppm	
	Chloroacetaldehyde [107-20-0]		C 1 ppm	
	Chloroacetone [78-95-5]		C 1 ppm	Skin
	2-Chloroacetophenone [532-27-4]	0.05 ppm		
	Chloroacetyl chloride [79-04-9]	0.05 ppm	0.15 ppm	Skin
	Chlorobenzene [108-90-7]	10 ppm		
◇	o-Chlorobenzaldehyde [89-98-5]		4 ppm 23 mg/m <sup>3</sup>	
	o-Chlorobenzylidene malononitrile [2698-41-1]		C 0.05 ppm	Skin
◇	Chlorobromomethane [74-97-5]	200 ppm	250 ppm	
◇	Chlorodifluoromethane [75-45-6]	1,000 ppm	1,250 ppm	
◇	Chlorodiphenyl (42% chlorine) [53469-21-9] Chlorodiphenyl (54% chlorine) [11097-69-1]	See Polychlorinated Biphenyls (PCBs)		
	Chloroform [67-66-3]	10 ppm		
	bis(Chloromethyl) ether [542-88-1]	0.001 ppm		
	Chloromethyl methyl ether [107-30-2]	(L)		
	1-Chloro-1-nitropropane [600-25-9]	2 ppm		
	Chloropentafluoroethane [76-15-3]	1,000 ppm		
◇	Chloropicrin [76-06-2]	0.1 ppm	0.3 ppm	
	1-Chloro-2-propanol [127-00-4] and 2-Chloro-1-propanol [78-89-7]	1 ppm		Skin
	β-Chloroprene [126-99-8]	10 ppm		Skin
	2-Chloropropionic acid [598-78-7]	0.1 ppm		Skin
	o-Chlorostyrene [2039-87-4]	50 ppm	75 ppm	
◇	o-Chlorotoluene [95-49-8]	50 ppm	75 ppm	
	Chlorpyrifos [2921-88-2]	0.1 mg/m <sup>3</sup> (IFV)		Skin
	Chromite ore processing (Chromate), as Cr	0.05 mg/m <sup>3</sup>		
	Chromium [7440-47-3] and inorganic compounds, as Cr Metal and Cr III compounds Water- soluble Cr VI compounds Insoluble Cr VI compounds	0.5 mg/m <sup>3</sup> 0.05 mg/m <sup>3</sup> 0.01 mg/m <sup>3</sup>		
	Chromyl chloride [14977-61-8]	0.025 ppm		
	Chrysene [218-01-9]	(L)		
◇	Clopidol [2971-90-6]	10 mg/m <sup>3</sup>	20 mg/m <sup>3</sup>	
	Coal dust Anthracite Bituminous	0.4 mg/m <sup>3</sup> (R) 0.9 mg/m <sup>3</sup> (R)		
	Coal tar pitch volatiles [65996-93-2], as benzene soluble aerosol	0.2 mg/m <sup>3</sup>		
	Cobalt [7440-48-4] and inorganic compounds, as Co	0.02 mg/m <sup>3</sup>		
	Cobalt carbonyl [10210-68-1], as Co	0.1 mg/m <sup>3</sup>		
	Cobalt hydrocarbonyl [16842-03-8], as Co	0.1 mg/m <sup>3</sup>		
◇	N-Cocomorpoline [1541-81-7]	5 ppm 52 mg/m <sup>3</sup>		Skin
◇*	Coke Oven Emissions <sup>1</sup>	0.15 mg/m <sup>3</sup>		
	Copper [7440-50-8] Fume	0.2 mg/m <sup>3</sup>		

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	Dusts and mists, as Cu	1 mg/m <sup>3</sup>		
◇	Cotton dust, fabric knitting Cotton dust, raw Cotton dust, slashing and weaving Cotton dust, waste	0.5 mg/m <sup>3</sup> 0.2 mg/m <sup>3</sup> (G) 0.75 mg/m <sup>3</sup> (G) 0.5 mg/m <sup>3</sup> (G)		
	Coumaphos [56-72-4]	0.05 mg/m <sup>3</sup> (IFV)		Skin
◇	Coumarone-Indene Resins (total dust) [63393-89-5]	5 mg/m <sup>3</sup>		
	Cresol, All isomers [1319-77-3; 95-48-7; 108-39-4; 106-44-5]	5 ppm		Skin
	Crotonaldehyde [4170-30-3]		C 0.3 ppm	Skin
◇	Cruformate [299-86-5]	5 mg/m <sup>3</sup>	20 mg/m <sup>3</sup>	
	Cumene [98-82-8]	50 ppm		
	Cyanamide [420-04-2]	2 mg/m <sup>3</sup>		
	Cyanogen [460-19-5]	10 ppm		
	Cyanogen chloride [506-77-4]		C 0.3 ppm	
	Cyclohexane [110-82-7]	100 ppm		
	Cyclohexanol [108-93-0]	50 ppm		Skin
	Cyclohexanone [108-94-1]	20 ppm	50 ppm	Skin
	Cyclohexene [110-83-8]	300 ppm		
	Cyclohexylamine [108-91-8]	10 ppm		
	Cyclonite [121-82-4]	0.5 mg/m <sup>3</sup>		Skin
	Cyclopentadiene [542-92-7]	75 ppm		
	Cyclopentane [287-92-3]	600 ppm		
	Cyhexatin [13121-70-5]	5 mg/m <sup>3</sup>		
◇	Cymene (sum of o-,m-and p-isomers) [25155-15-1]	50 ppm 274 mg/m <sup>3</sup>		Skin
	2,4-D [94-75-7]	10 mg/m <sup>3</sup>		
	DDT [50-29-3]	1 mg/m <sup>3</sup>		
	Decaborane [17702-41-9]	0.05 ppm	0.15 ppm	Skin
	Demeton [8065-48-3]	0.05 mg/m <sup>3</sup> (IFV)		Skin
	Demeton-S-methyl [919-86-8]	0.05 mg/m <sup>3</sup> (IFV)		Skin
◇	Diacetone alcohol [123-42-2]	50 ppm 240 mg/m <sup>3</sup>	75 ppm 360 mg/m <sup>3</sup>	
◇	Diatomaceous earth (uncalcined) [61790-53-2]	10 mg/m <sup>3</sup> (I)(E) 3 mg/m <sup>3</sup> (R)(E)		
	Diazinon [333-41-5]	0.01 mg/m <sup>3</sup> (IFV)		Skin
	Diazomethane [334-88-3]	0.2 ppm		
	Diborane [19287-45-7]	0.1 ppm		
	2-N-Dibutylaminoethanol [102-81-8]	0.5 ppm		Skin
	Dibutyl phenyl phosphate [2528-36-1]	0.3 ppm		Skin
	Dibutyl phosphate [107-66-4]	5 mg/m <sup>3</sup> (IFV)		Skin
	Dibutyl phthalate [84-74-2]	5 mg/m <sup>3</sup>		
	Dichloroacetic acid [79-43-6]	0.5 ppm		Skin
	Dichloroacetylene [7572-29-4]		C 0.1 ppm	
	o-Dichlorobenzene [95-50-1]	25 ppm	50 ppm	
	p-Dichlorobenzene [106-46-7]	10 ppm		
	3,3'-Dichlorobenzidine [91-94-1]	(L)		Skin
	1,4-Dichloro-2-butene [764-41-0]	0.005 ppm		Skin
	Dichlorodifluoromethane [75-71-8]	1,000 ppm		
	1,3-Dichloro-5,5-dimethyl hydantoin [118-52-5]	0.2 mg/m <sup>3</sup>	0.4 mg/m <sup>3</sup>	
◇	1,3-Dichloro-2-Propanol [96-23-1]		1 ppm 5 mg/m <sup>3</sup>	Skin

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	1,1-Dichloroethane [75-34-3]	100 ppm		
◇	1,2-Dichloroethylene, All isomers [540-59-0; 156-59-2; 156-60-5]	200 ppm 790 mg/m <sup>3</sup>	250 ppm 990 mg/m <sup>3</sup>	
	Dichloroethyl ether [111-44-4]	5 ppm	10 ppm	Skin
	Dichlorofluoromethane [75-43-4]	10 ppm		
	Dichloromethane [75-09-2]	50 ppm		
	1,1-Dichloro-1-nitroethane [594-72-9]	2 ppm		
	1,3-Dichloropropene [542-75-6]	1 ppm		Skin
	2,2-Dichloropropionic acid [75-99-0]	5 mg/m <sup>3</sup> (l)		
	Dichlorotetrafluoroethane [76-14-2]	1,000 ppm		
	Dichlorvos (DDVP) [62-73-7]	0.1 mg/m <sup>3</sup> (IFV)		Skin
	Dicrotophos [141-66-2]	0.05 mg/m <sup>3</sup> (IFV)		Skin
	Dicyclopentadiene [77-73-6]	5 ppm		
	Dicyclopentadienyl iron, as Fe [102-54-5]	10 mg/m <sup>3</sup>		
	Dieldrin [60-57-1]	0.25 mg/m <sup>3</sup>		Skin
	Diesel fuel [68334-30-5; 68476-30-2; 68476-31-3; 68476-34-6; 77650-28-3], as total hydrocarbons	100 mg/m <sup>3</sup> (IFV)		Skin
	Diethanolamine [111-42-2]	1 mg/m <sup>3</sup> (IFV)		Skin
	Diethylamine [109-89-7]	5 ppm	15 ppm	Skin
	2-Diethylaminoethanol [100-37-8]	2 ppm		Skin
◇	Diethylene glycol monoethyl ether [111- 90-0]	30 ppm 165 mg/m <sup>3</sup>		
	Diethylene triamine [111-40-0]	1 ppm		Skin
◇	Di(2-ethylhexyl)phthalate (DEHP) [117-81-7]	3 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	
	Diethyl ketone [96-22-0]	200 ppm	300 ppm	
	Diethyl phthalate [84-66-2]	5 mg/m <sup>3</sup>		
	Diiododibromomethane [75-61-6]	100 ppm		
	Diglycidyl ether (DGE) [2238-07-5]	0.01 ppm		
◇	Diisodecyl phthalate [26761-40-0]	5 mg/m <sup>3</sup>		
	Diisobutyl ketone [108-83-8]	25 ppm		
	Diisopropylamine [108-18-9]	5 ppm		Skin
	N,N-Dimethylacetamide [127-19-5]	10 ppm		Skin
	Dimethylamine [124-40-3]	5 ppm	15 ppm	
◇	3-(Dimethylamino) propylamine [109-55-7]	0.5 ppm 2 mg/m <sup>3</sup>		Skin
	Dimethylaniline [121-69-7]	5 ppm	10 ppm	Skin
	Dimethyl carbamoyl chloride [79-44-7]	0.005 ppm		Skin
◇	N, N-Dimethyl-cyclohexylamine [98-94-2]		5 ppm 26 mg/m <sup>3</sup>	
	Dimethyl disulfide [624-92-0]	0.5 ppm		Skin
	Dimethylethoxysilane [14857-34-2]	0.5 ppm	1.5 ppm	
◇	N, N-Dimethyl-ethanolamine [108-01-0]	3 ppm 11 mg/m <sup>3</sup>	6 ppm 22 mg/m <sup>3</sup>	
	Dimethylformamide [68-12-2]	10 ppm		Skin
	1,1-Dimethylhydrazine [57-14-7]	0.01 ppm		Skin
	Dimethyl phthalate [131-11-3]	5 mg/m <sup>3</sup>		
	Dimethyl sulfate [77-78-1]	0.1 ppm		Skin
	Dimethyl sulfide [75-18-3]	10 ppm		
◇	Dimethyl terephthalate [120-61-6]	5 mg/m <sup>3</sup>		
◇	Dimethyl 2,3,5,6-tetrachloroterephthalate [1861-32-1]	5 mg/m <sup>3</sup>		

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		TWA	STEL/C	Notations
	Dinitrobenzene, All isomers [528-29-0; 99-65-0; 100-25-4; 25154-54-5]	0.15 ppm		Skin
	Dinitro-o-cresol [534-52-1]	0.2 mg/m <sup>3</sup>		Skin
	3,5-Dinitro-o-toluamide [148-01-6]	1 mg/m <sup>3</sup>		
	Dinitrotoluene [25321-14-6]	0.2 mg/m <sup>3</sup>		Skin
	1,4-Dioxane [123-91-1]	20 ppm		Skin
	Dioxathion [78-34-2]	0.1 mg/m <sup>3</sup> (IFV)		Skin
	1,3-Dioxolane [646-06-0]	20 ppm		
	Diphenylamine [122-39-4]	10 mg/m <sup>3</sup>		
	Dipropyl ketone [123-19-3]	50 ppm		
◇	Dipropylene glycol monomethyl ether acetate [88917-22-0]	100 ppm 776 mg/m <sup>3</sup>	150 ppm 1,164 mg/m <sup>3</sup>	
◇	Diquat [2764-72-9; 85-00-7; 6385-62-2]	0.5 mg/m <sup>3</sup> 0.1 mg/m <sup>3</sup> (R)		Skin
	Disulfiram [97-77-8]	2 mg/m <sup>3</sup>		
	Disulfoton [298-04-4]	0.05 mg/m <sup>3</sup> (IFV)		Skin
	Diuron [330-54-1]	10 mg/m <sup>3</sup>		
	Divinyl benzene [1321-74-0]	10 ppm		
	Dodecyl mercaptan [112-55-0]	0.1 ppm		
	Endosulfan [115-29-7]	0.1 mg/m <sup>3</sup> (IFV)		Skin
	Endrin [72-20-8]	0.1 mg/m <sup>3</sup>		Skin
◇	Enflurane [13838-16-9]	2 ppm 16 mg/m <sup>3</sup>		
	Epichlorohydrin [106-89-8]	0.5 ppm		Skin
	EPN [2104-64-5]	0.1 mg/m <sup>3</sup> (I)		Skin
	Ethane [74-84-0]	See Aliphatic Hydrocarbon gases		
	Ethanol [64-17-5]		1,000 ppm	
	Ethanolamine [141-43-5]	3 ppm	6 ppm	
	Ethion [563-12-2]	0.05 mg/m <sup>3</sup> (IFV)		Skin
	2-Ethoxyethanol (EGEE) [110-80-5]	5 ppm		Skin
	2-Ethoxyethyl acetate (EGEEA) [111-15-9]	5 ppm		Skin
	Ethyl acetate [141-78-6]	400 ppm		
	Ethyl acrylate [140-88-5]	5 ppm	15 ppm	
	Ethylamine [75-04-7]	5 ppm	15 ppm	Skin
	Ethyl amyl ketone [541-85-5]	10 ppm		
	Ethyl benzene [100-41-4]	100 ppm	125 ppm	
	Ethyl bromide [74-96-4]	5 ppm		Skin
	Ethyl tert-butyl ether (ETBE) [637-92-3]	5 ppm		
	Ethyl butyl ketone [106-35-4]	50 ppm	75 ppm	
	Ethyl chloride [75-00-3]	100 ppm		Skin
	Ethyl cyanoacrylate [7085-85-0]	0.2 ppm		
◇	Ethyl-3-ethoxy propionate [763-69-9]	50 ppm 300 mg/m <sup>3</sup>		
	Ethylene [74-85-1]	200 ppm		
	Ethylene chlorohydrin [107-07-3]		C 1 ppm	Skin
	Ethylenediamine [107-15-3]	10 ppm		Skin
◇	Ethylene dibromide [106-93-4]	(L)		Skin
	Ethylene dichloride [107-06-2]	10 ppm		
	Ethylene glycol [107-21-1]		C 100 mg/m <sup>3</sup> (H)	
◇	Ethylene glycol dimethyl ether [110-71-4]	5 ppm 18 mg/m <sup>3</sup>		Skin
	Ethylene glycol dinitrate (EGDN) [628-96-6]	0.05 ppm		Skin
◇	Ethylene glycol mono-n-propyl ether [2807-30-9]	25 ppm		Skin

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Ontario Table Listings	Agent [CAS No.]	Time-Weighted Average Limit (TWA), Short-Term Exposure Limit (STEL), Ceiling Limit (C) and Notations		
		TWA	STEL/C	Notations
		110 mg/m <sup>3</sup>		
◇	Ethylene glycol mononitrate [16051-48-2]	0.05 ppm 0.22 mg/m <sup>3</sup>		Skin
◇*	Ethylene oxide [75-21-8]	1 ppm 1.8 mg/m <sup>3</sup>	10 ppm 18 mg/m <sup>3</sup>	
	Ethyleneimine [151-56-4]	0.05 ppm	0.1 ppm	Skin
	Ethyl ether [60-29-7]	400 ppm	500 ppm	
	Ethyl formate [109-94-4]	100 ppm		
	2-Ethylhexanoic acid [149-57-5]	5 mg/m <sup>3</sup> (IFV)		
	Ethylidene norbornene [16219-75-3]		C 5 ppm	
	Ethyl mercaptan [75-08-1]	0.5 ppm		
◇	Ethyl methacrylate [97-63-2]	100 ppm 470 mg/m <sup>3</sup>		
	N-Ethylmorpholine [100-74-3]	5 ppm		Skin
	Ethyl silicate [78-10-4]	10 ppm		
	Fenamiphos [22224-92-6]	0.05 mg/m <sup>3</sup> (IFV)		Skin
	Fensulfothion [115-90-2]	0.01 mg/m <sup>3</sup> (IFV)		Skin
	Fenthion [55-38-9]	0.05 mg/m <sup>3</sup> (IFV)		Skin
	Ferbam [14484-64-1]	5 mg/m <sup>3</sup> (I)		
	Ferrovandium dust [12604-58-9]	1 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>	
◇	Flour dust	See Wheat Flour Dust (total dust)		
	Fluorides, as F	2.5 mg/m <sup>3</sup>		
	Fluorine [7782-41-4]	1 ppm	2 ppm	
	Fonofos [944-22-9]	0.01 mg/m <sup>3</sup> (IFV)		Skin
◇	Forane [26675-46-7]	2 ppm 15 mg/m <sup>3</sup>		
◇	Formaldehyde [50-00-0]		STEL 1 ppm C 1.5 ppm	
	Formamide [75-12-7]	10 ppm		Skin
	Formic acid [64-18-6]	5 ppm	10 ppm	
	Furfural [98-01-1]	2 ppm		Skin
	Furfuryl alcohol [98-00-0]	10 ppm	15 ppm	Skin
	Gallium arsenide [1303-00-0]	0.0003 mg/m <sup>3</sup> (R)		
	Gasoline [86290-81-5]	300 ppm	500 ppm	
	Germanium tetrahydride [7782-65-2]	0.2 ppm		
	Glutaraldehyde [111-30-8], activated and inactivated		C 0.05 ppm	
	Glycerin mist [56-81-5]	10 mg/m <sup>3</sup>		
	Glycidol [556-52-5]	2 ppm		
	Glyoxal [107-22-2]	0.1 mg/m <sup>3</sup> (IFV)		
	Grain dust (oat, wheat, barley)	4 mg/m <sup>3</sup>		
	Graphite (all forms except graphite fibers) [7782-42-5]	2 mg/m <sup>3</sup> (R)		
	Hafnium [7440-58-6] and compounds, as Hf	0.5 mg/m <sup>3</sup>		
◇	Halothane [151-67-7]	2 ppm 16 mg/m <sup>3</sup>		
	Helium [7440-59-7]	Simple asphyxiant		
	Heptachlor [76-44-8] and Heptachlor epoxide [1024-57-3]	0.05 mg/m <sup>3</sup>		Skin
	Heptane, All isomers [142-82-5; 590-35-2; 565-59-3; 108-08-7; 591-76-4; 589-34-4]	400 ppm	500 ppm	
◇	Heptyl acetate [112-06-1]	50 ppm 320 mg/m <sup>3</sup>		
	Hexachlorobenzene [118-74-1]	0.002 mg/m <sup>3</sup>		Skin
	Hexachlorobutadiene [87-68-3]	0.02 ppm		Skin

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		TWA	STEL/C	Notations
	Hexachlorocyclopentadiene [77-47-4]	0.01 ppm		
	Hexachloroethane [67-72-1]	1 ppm		Skin
	Hexachloronaphthalene [1335-87-1]	0.2 mg/m <sup>3</sup>		Skin
	Hexafluoroacetone [684-16-2]	0.1 ppm		Skin
	Hexafluoropropylene [116-15-4]	0.1 ppm		
	Hexahydrophthalic anhydride, All isomers [85-42-7; 13149-00-3; 14166-21-3]		C 0.005 mg/m <sup>3</sup> (IFV)	
◇	Hexamethylenetetramine (HMT) [100-97-0]		0.35 ppm 2 mg/m <sup>3</sup>	
◇	Hexamethyl phosphoramidate [680-31-9]	(L)		Skin
	n-Hexane [110-54-3]	50 ppm		Skin
	Hexane, Other isomers	500 ppm	1,000 ppm	
	1,6-Hexanediamine [124-09-4]	0.5 ppm		
	1-Hexene [592-41-6]	50 ppm		
	sec-Hexyl acetate [108-84-9]	50 ppm		
◇	Hexyl acetate (isomeric mixture) [88230-35-7]	50 ppm 294 mg/m <sup>3</sup>		
	Hexylene glycol [107-41-5]		C 25 ppm	
	Hydrazine [302-01-2]	0.01 ppm		Skin
	Hydrogen [1333-74-0]	Simple asphyxiant		
◇	Hydrogenated terphenyls <sup>1</sup> [61788-32-7]	0.5 ppm		
	Hydrogen bromide [10035-10-6]		C 2 ppm	
	Hydrogen chloride [7647-01-0]		C 2 ppm	
	Hydrogen cyanide and Cyanide salts, as CN Hydrogen cyanide [74-90-8] Cyanide salts [592-01-8; 151-50-8; 143-33-9]		C 4.7 ppm C 5 mg/m <sup>3</sup>	Skin Skin
	Hydrogen fluoride [7664-39-3], as F	0.5 ppm	C 2 ppm	Skin
	Hydrogen peroxide [7722-84-1]	1 ppm		
	Hydrogen selenide [7783-07-5], as Se	0.05 ppm		
	Hydrogen sulfide [7783-06-4]	10 ppm	15 ppm	
	Hydroquinone [123-31-9]	1 mg/m <sup>3</sup>		
	2-Hydroxypropyl acrylate [999-61-1]	0.5 ppm		Skin
	Indene [95-13-6]	5 ppm		
	Indium [7440-74-6] and compounds, as In	0.1 mg/m <sup>3</sup>		
	Iodine and Iodides Iodine [7553-56-2] Iodides	0.01 ppm (IFV) 0.01 ppm (IFV)	0.1 ppm (V)	
	Iodoform [75-47-8]	0.6 ppm		
	Iron oxide (Fe <sub>2</sub> O <sub>3</sub> ) [1309-37-1]	5 mg/m <sup>3</sup> (R)		
	Iron pentacarbonyl [13463-40-6], as Fe	0.1 ppm	0.2 ppm	
	Iron salts, soluble, as Fe	1 mg/m <sup>3</sup>		
	Isoamyl alcohol [123-51-3]	100 ppm	125 ppm	
	Isobutanol [78-83-1]	50 ppm		
◇	Isobutyl acetate [110-19-0]	150 ppm	187 ppm	
	Isobutyl nitrite [542-56-3]		C 1 ppm (IFV)	
◇ *	Isocyanates, organic compounds Toluene diisocyanate (TDI) [584-84-9] [91-08-7] Methylene bisphenyl isocyanate (MDI) [101-68-8] Hexamethylene diisocyanate (HDI) [822-06-0] Isophorone diisocyanate (IPDI) [4098-71-9] Methylene bis (4-cyclohexylisocyanate) [5124-30-1]	0.005 ppm 0.005 ppm 0.005 ppm 0.005 ppm 0.005 ppm	C 0.02 ppm C 0.02 ppm C 0.02 ppm C 0.02 ppm C 0.02 ppm	
	Isooctyl alcohol [26952-21-6]	50 ppm		Skin
	Isophorone [78-59-1]		C 5 ppm	

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Ontario Table Listings	Agent [CAS No.]	Time-Weighted Average Limit (TWA), Short-Term Exposure Limit (STEL), Ceiling Limit (C) and Notations		
		TWA	STEL/C	Notations
	2-Isopropoxyethanol [109-59-1]	25 ppm		Skin
	Isopropyl acetate [108-21-4]	100 ppm	200 ppm	
	Isopropylamine [75-31-0]	5 ppm	10 ppm	
◇	Isopropylaminoethanols [109-56-8; 121-93-7]		400 ppm 1,900 mg/m <sup>3</sup>	
	N-Isopropylaniline [768-52-5]	2 ppm		Skin
◇	Isosorbide dinitrate [87-33-2]	0.2 mg/m <sup>3</sup>		Skin
	Isopropyl ether [108-20-3]	250 ppm	310 ppm	
	Isopropyl glycidyl ether (IGE) [4016-14-2]	50 ppm	75 ppm	
	Kaolin [1332-58-7]	2 mg/m <sup>3</sup> (E, R)		
	Kerosene [8008-20-6; 64742-81-0] / Jet fuels, as total hydrocarbon vapour	200 mg/m <sup>3</sup> (P)		Skin
	Ketene [463-51-4]	0.5 ppm	1.5 ppm	
◇ *	Lead [7439-92-1] elemental lead, inorganic and organic compounds of lead, as Pb  Elemental lead, inorganic and organic compounds of lead, as Pb except tetraethyl lead [78-00-2] Tetraethyl lead, as Pb [78-00-2]	0.05 mg/m <sup>3</sup>  0.10 mg/m <sup>3</sup>	0.30 mg/m <sup>3</sup>	Skin (organic compounds)
◇ *	Lead chromate [7758-97-6] as Pb (see listing for Lead [7439-92-1]) as Cr	0.05 mg/m <sup>3</sup> 0.012 mg/m <sup>3</sup>		
◇	Lincomycin [154-21-2]	0.1 mg/m <sup>3</sup>		
	Lindane [58-89-9]	0.5 mg/m <sup>3</sup>		Skin
	Lithium hydride [7580-67-8]	0.025 mg/m <sup>3</sup>		
	L.P.G. (Liquefied petroleum gas) [68476-85-7]	See Aliphatic Hydrocarbons gases		
◇	Lithium hydroxide Anhydrous [1310-65-2] Monohydrate [1310-66-3]		1 mg/m <sup>3</sup> 1 mg/m <sup>3</sup>	
◇	Magnesite (total dust) [546-93-0]	10 mg/m <sup>3</sup> (E)		
	Magnesium oxide [1309-48-4]	10 mg/m <sup>3</sup> (I)		
	Malathion [121-75-5]	1 mg/m <sup>3</sup> (IFV)		Skin
	Maleic anhydride [108-31-6]	0.1 ppm		
	Manganese [7439-96-5] and inorganic compounds, as Mn	0.2 mg/m <sup>3</sup>		
	Manganese cyclopentadienyl tricarbonyl [12079-65-1], as Mn	0.1 mg/m <sup>3</sup>		Skin
◇ *	Mercury [7439-97-6], elemental mercury, inorganic and organic compounds of mercury, as Hg  All forms of except alkyl, as Hg Alkyl compounds of, as Hg	0.025 mg/m <sup>3</sup> 0.01 mg/m <sup>3</sup>	0.03 mg/m <sup>3</sup>	Skin Skin
	Mesityl oxide [141-79-7]	15 ppm	25 ppm	
	Methacrylic acid [79-41-4]	20 ppm		
	Methane [74-82-8]	See Aliphatic Hydrocarbons gases		
	Methanol [67-56-1]	200 ppm	250 ppm	Skin
	Methomyl [16752-77-5]	2.5 mg/m <sup>3</sup>		
	Methoxychlor [72-43-5]	10 mg/m <sup>3</sup>		
	2-Methoxyethanol (EGME) [109-86-4]	0.1 ppm		Skin
	2-Methoxyethyl acetate (EGMEA) [110-49-6]	0.1 ppm		Skin
◇	Methoxyflurane [76-38-0]	2 ppm 13 mg/m <sup>3</sup>		
	(2-Methoxymethylethoxy) propanol (DPGME) [34590-94-	100 ppm	150 ppm	Skin

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Ontario Table Listings	Agent [CAS No.]	Time-Weighted Average Limit (TWA), Short-Term Exposure Limit (STEL), Ceiling Limit (C) and Notations		
		TWA	STEL/C	Notations
	8]			
	4-Methoxyphenol [150-76-5]	5 mg/m <sup>3</sup>		
	1-Methoxy-2-propanol (PGME) [107-98-2]	100 ppm	150 ppm	
	Methyl acetate [79-20-9]	200 ppm	250 ppm	
◇	Methyl acetylene [74-99-7]	1,000 ppm	1,250 ppm	
	Methyl acetylene-propadiene mixture (MAPP) [59355-75-8]	1,000 ppm	1,250 ppm	
	Methyl acrylate [96-33-3]	2 ppm		Skin
	Methylacrylonitrile [126-98-7]	1 ppm		Skin
	Methylal [109-87-5]	1,000 ppm		
	Methylamine [74-89-5]	5 ppm	15 ppm	
◇	Methyl n-amyl ketone [110-43-0]	25 ppm 115 mg/m <sup>3</sup>		
	N-Methyl aniline [100-61-8]	0.5 ppm		Skin
	Methyl bromide [74-83-9]	1 ppm		Skin
◇	Methyl tert-butyl ether (MTBE) [1634-04-4]	40 ppm		
◇	Methyl n-butyl ketone [591-78-6]	1 ppm 4 mg/m <sup>3</sup>		Skin
	Methyl chloride [74-87-3]	50 ppm	100 ppm	Skin
	Methyl chloroform [71-55-6]	350 ppm	450 ppm	
	Methyl 2-cyanoacrylate [137-05-3]	0.2 ppm		
	Methylcyclohexane [108-87-2]	400 ppm		
	Methylcyclohexanol [25639-42-3]	50 ppm		
	o-Methylcyclohexanone [583-60-8]	50 ppm	75 ppm	Skin
	2-Methylcyclopentadienyl manganese tricarbonyl [12108-13-3], as Mn	0.2 mg/m <sup>3</sup>		Skin
	Methyl demeton [8022-00-2]	0.05 mg/m <sup>3</sup> (IFV)		Skin
◇	4,4'-Methylene bis(2-chloroaniline) (MBOCA; MOCA®) [101-14-4]	0.0005 ppm		Skin
		0.005 mg/m <sup>3</sup>		
◇	4,4'-Methylene dianiline [101-77-9]	0.04 mg/m <sup>3</sup>		Skin
	Methyl ethyl ketone (MEK) [78-93-3]	200 ppm	300 ppm	
	Methyl ethyl ketone peroxide [1338-23-4]		C 0.2 ppm	
	Methyl formate [107-31-3]	100 ppm	150 ppm	
	Methyl hydrazine [60-34-4]	0.01 ppm		Skin
	Methyl iodide [74-88-4]	2 ppm		Skin
	Methyl isoamyl ketone [110-12-3]	50 ppm		
	Methyl isobutyl carbinol [108-11-2]	25 ppm	40 ppm	Skin
	Methyl isobutyl ketone [108-10-1]	50 ppm	75 ppm	
	Methyl isopropyl ketone [563-80-4]	200 ppm		
	Methyl mercaptan [74-93-1]	0.5 ppm		
	Methyl methacrylate [80-62-6]	50 ppm	100 ppm	
	1-Methyl naphthalene [90-12-0] and 2-Methyl naphthalene [91-57-6]	0.5 ppm		Skin
	Methyl parathion [298-00-0]	0.02 mg/m <sup>3</sup> (IFV)		Skin
	Methyl propyl ketone [107-87-9]		150 ppm	
◇	N-Methyl-2-pyrrolidone [872-50-4]	400 mg/m <sup>3</sup>		
	Methyl silicate [681-84-5]	1 ppm		
	α-Methyl styrene [98-83-9]	50 ppm	100 ppm	
	Methyl vinyl ketone [78-94-4]		C 0.2 ppm	Skin
	Metribuzin [21087-64-9]	5 mg/m <sup>3</sup>		
	Mevinphos [7786-34-7]	0.01 mg/m <sup>3</sup> (IFV)		Skin
	Mica [12001-26-2]	3 mg/m <sup>3</sup> (R)		

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		TWA	STEL/C	Notations
◇	Mineral Spirits	525 mg/m <sup>3</sup>		
	Molybdenum [7439-98-7], as Mo Soluble compounds Metal and insoluble compounds	0.5 mg/m <sup>3</sup> (R) 10 mg/m <sup>3</sup> (I) 3 mg/m <sup>3</sup> (R)		
	Monochloroacetic acid [79-11-8]	0.5 ppm (IFV)		Skin
	Monocrotophos [6923-22-4]	0.05 mg/m <sup>3</sup> (IFV)		Skin
◇	Morpholine [110-91-8]	20 ppm 70 mg/m <sup>3</sup>	30 ppm 105 mg/m <sup>3</sup>	Skin
	Naled [300-76-5]	0.1 mg/m <sup>3</sup> (IFV)		Skin
	Naphthalene [91-20-3]	10 ppm	15 ppm	Skin
	β-Naphthylamine [91-59-8]	(L)		
	Natural gas [8006-14-2]	See Aliphatic hydrocarbons gases		
	Natural rubber latex [9006-04-6], as inhalable allergenic proteins	0.0001 mg/m <sup>3</sup> (I)		Skin
	Neon [7440-01-9]	Simple asphyxiant		
◇	Nepheline syenite (total dust) [37244-96-5]	10 mg/m <sup>3</sup>		
◇	Nickel Elemental/metal [7440-02-0] Insoluble compounds, as Ni [7440-02-0] Soluble compounds, as Ni [7440-02-0] Nickel subsulfide, as Ni [12035-72-2]	1 mg/m <sup>3</sup> (I) 0.2 mg/m <sup>3</sup> (I) 0.1 mg/m <sup>3</sup> (I) 0.1 mg/m <sup>3</sup> (I)		
	Nickel carbonyl [13463-39-3], as Ni	0.05 ppm		
	Nicotine [54-11-5]	0.5 mg/m <sup>3</sup>		Skin
	Nitrapyrin [1929-82-4]	10 mg/m <sup>3</sup>	20 mg/m <sup>3</sup>	
	Nitric acid [7697-37-2]	2 ppm	4 ppm	
	Nitric oxide [10102-43-9]	25 ppm		
	p-Nitroaniline [100-01-6]	3 mg/m <sup>3</sup>		Skin
	Nitrobenzene [98-95-3]	1 ppm		Skin
	p-Nitrochlorobenzene [100-00-5]	0.1 ppm		Skin
	4-Nitrodiphenyl [92-93-3]	(L)		Skin
	Nitroethane [79-24-3]	100 ppm		
	Nitrogen [7727-37-9]	Simple asphyxiant		
	Nitrogen dioxide [10102-44-0]	3 ppm	5 ppm	
	Nitrogen trifluoride [7783-54-2]	10 ppm		
	Nitroglycerin (NG) [55-63-0]	0.05 ppm		Skin
	Nitromethane [75-52-5]	20 ppm		
	1-Nitropropane [108-03-2]	25 ppm		
◇	2-Nitropropane [79-46-9]	10 ppm 35 mg/m <sup>3</sup>	20 ppm 70 mg/m <sup>3</sup>	
◇	N-Nitrosamines, including n-Nitrosodimethylamine [62-75-9]	(L)		Skin
	Nitrotoluene, All isomers [88-72-2; 99-08-1; 99-99-0]	2 ppm		Skin
	5-Nitro-o-toluidine [99-55-8]	1 mg/m <sup>3</sup> (I)		
◇	Nitrous oxide [10024-97-2]	25 ppm 45 mg/m <sup>3</sup>		
	Nonane [111-84-2], All isomers	200 ppm		
	Octachloronaphthalene [2234-13-1]	0.1 mg/m <sup>3</sup>	0.3 mg/m <sup>3</sup>	Skin
	Octane, All isomers [111-65-9]	300 ppm		
	Oil mist, mineral	5 mg/m <sup>3</sup> (O)	10 mg/m <sup>3</sup> (O)	
	Osmium tetroxide [20816-12-0], as Os	0.0002 ppm	0.0006 ppm	
	Oxalic acid [144-62-7]	1 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	
	p,p'-Oxybis(benzenesulfonyl hydrazide) [80-51-3]	0.1 mg/m <sup>3</sup> (I)		
	Oxygen difluoride [7783-41-7]		C 0.05 ppm	

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		TWA	STEL/C	Notations
◇	Ozone [10028-15-6]	0.1 ppm 0.2 mg/m <sup>3</sup>	0.3 ppm 0.6 mg/m <sup>3</sup>	
	Paraffin wax fume [8002-74-2]	2 mg/m <sup>3</sup>		
◇	Paraquat [4685-14-7]	0.1 mg/m <sup>3</sup>		
	Parathion [56-38-2]	0.05 mg/m <sup>3</sup> (IFV)		Skin
◇	Particles (Insoluble or Poorly Soluble) Not Otherwise Specified (PNOS)	10 mg/m <sup>3</sup> (I)  3 mg/m <sup>3</sup> (R)		
◇	Penicillin (total dust) [1406-05-9]	0.1 mg/m <sup>3</sup>		
	Pentaborane [19624-22-7]	0.005 ppm	0.015 ppm	
	Pentachloronaphthalene [1321-64-8]	0.5 mg/m <sup>3</sup>		Skin
	Pentachloronitrobenzene [82-68-8]	0.5 mg/m <sup>3</sup>		
	Pentachlorophenol [87-86-5]	0.5 mg/m <sup>3</sup>		Skin
	Pentaerythritol [115-77-5]	10 mg/m <sup>3</sup>		
◇	Pentaerythritol tetrabenzoate [4196-86-5]		2 mg/m <sup>3</sup>	
◇	Pentane, All isomers [78-78-4; 109-66-0; 463-82-1]	600 ppm 1,770 mg/m <sup>3</sup>	750 ppm 2,210 mg/m <sup>3</sup>	
	Pentyl acetate, All isomers [628-63-7; 626-38-0; 123-92-2; 625-16-1; 624-41-9; 620-11-1]	50 ppm	100 ppm	
	Perchloromethyl mercaptan [594-42-3]	0.1 ppm		
	Perchloryl fluoride [7616-94-6]	3 ppm	6 ppm	
	Perfluorobutyl ethylene [19430-93-4]	100 ppm		
	Perfluoroisobutylene [382-21-8]		C 0.01 ppm	
◇	Perlite	10 mg/m <sup>3</sup> (E)		
	Persulfates, as persulfate	0.1 mg/m <sup>3</sup>		
◇	Petroleum coke (total dust) [64741-79-3]	3.5 mg/m <sup>3</sup> (b)		
	Petroleum ether	(e)		
	Phenol [108-95-2]	5 ppm		Skin
	Phenothiazine [92-84-2]	5 mg/m <sup>3</sup>		Skin
◇	2-Phenoxyethanol [122-99-6]	25 ppm 141 mg/m <sup>3</sup>		Skin
	N-Phenyl-β-naphthylamine [135-88-6]	(L)		
	o-Phenylenediamine [95-54-5]	0.1 mg/m <sup>3</sup>		
	m-Phenylenediamine [108-45-2]	0.1 mg/m <sup>3</sup>		
	p-Phenylenediamine [106-50-3]	0.1 mg/m <sup>3</sup>		
	Phenyl ether [101-84-8], vapor	1 ppm	2 ppm	
	Phenyl glycidyl ether (PGE) [122-60-1]	0.1 ppm		Skin
	Phenylhydrazine [100-63-0]	0.1 ppm		Skin
	Phenyl mercaptan [108-98-5]	0.1 ppm		Skin
	Phenylphosphine [638-21-1]		C 0.05 ppm	
	Phorate [298-02-2]	0.05 mg/m <sup>3</sup> (IFV)		Skin
	Phosgene [75-44-5]	0.1 ppm		
	Phosphine [7803-51-2]	0.3 ppm	1 ppm	
	Phosphoric acid [7664-38-2]	1 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>	
	Phosphorus (yellow) [12185-10-3]	0.1 mg/m <sup>3</sup>		
◇	Phosphorus oxychloride [10025-87-3]	0.1 ppm 0.6 mg/m <sup>3</sup>	0.5 ppm 3 mg/m <sup>3</sup>	
	Phosphorus pentachloride [10026-13-8]	0.1 ppm		
	Phosphorus pentasulfide [1314-80-3]	1 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>	
	Phosphorus trichloride [7719-12-2]	0.2 ppm	0.5 ppm	
	Phthalic anhydride [85-44-9]	1 ppm		
	m-Phthalodinitrile [626-17-5]	5 mg/m <sup>3</sup> (IFV)		
◇	Picloram [1918-02-1]	10 mg/m <sup>3</sup>	20 mg/m <sup>3</sup>	

## Occupational Exposure Limits (OELs) for Ontario Workplaces

Ontario Table Listings	Agent [CAS No.]	Time-Weighted Average Limit (TWA), Short-Term Exposure Limit (STEL), Ceiling Limit (C) and Notations		
		TWA	STEL/C	Notations
◇	Picric acid [88-89-1]	0.1 mg/m <sup>3</sup>	0.3 mg/m <sup>3</sup>	Skin
	Pindone [83-26-1]	0.1 mg/m <sup>3</sup>		
	Piperazine dihydrochloride [142-64-3]	5 mg/m <sup>3</sup>		
◇	Platinum [7440-06-4] Metal Water-soluble compounds of, including chloroplatinates (as Pt)	1 mg/m <sup>3</sup> 0.002 mg/m <sup>3</sup>		
◇	Polychlorinated biphenyls (PCBs) <sup>2</sup>	0.05 mg/m <sup>3</sup>		
	Portland cement [65997-15-1]	10 mg/m <sup>3</sup> (E)		
	Potassium hydroxide [1310-58-3]		C 2 mg/m <sup>3</sup>	
◇	Poultry dust (total dust)	5 mg/m <sup>3</sup>		
◇	Precipitated silica (total dust) [1343-98-2]	10 mg/m <sup>3</sup>		
	Propane [74-98-6]	See Aliphatic hydrocarbons gases		
	Propane sultone [1120-71-4]	(L)		
	n-Propanol (n-Propyl alcohol) [71-23-8]	100 ppm		
	2-Propanol [67-63-0]	200 ppm	400 ppm	
	Propargyl alcohol [107-19-7]	1 ppm		Skin
	β-Propiolactone [57-57-8]	0.5 ppm		
	Propionaldehyde [123-38-6]	20 ppm		
	Propionic acid [79-09-4]	10 ppm		
	Propoxur [114-26-1]	0.5 mg/m <sup>3</sup>		
	n-Propyl acetate [109-60-4]	200 ppm	250 ppm	
	Propylene [115-07-1]	500 ppm		
	Propylene dichloride [78-87-5]	10 ppm		
	Propylene glycol dinitrate [6423-43-4]	0.05 ppm		Skin
◇	1,2-Propylene glycol [57-55-6]	50 ppm (V) 155 mg/m <sup>3</sup> (V) 10 mg/m <sup>3</sup> (H)(c)		
◇	Propylene glycol monomethyl ether acetate [108-65-6]	50 ppm 270 mg/m <sup>3</sup>		
	Propylene oxide [75-56-9]	2 ppm		
	Propyleneimine [75-55-8]	0.2 ppm	0.4 ppm	Skin
	n-Propyl nitrate [627-13-4]	25 ppm	40 ppm	
	Pyrethrum [8003-34-7]	5 mg/m <sup>3</sup>		
	Pyridine [110-86-1]	1 ppm		
	Quinone [106-51-4]	0.1 ppm		
	Resorcinol [108-46-3]	10 ppm	20 ppm	
	Rhodium [7440-16-6], as Rh Metal and Insoluble compounds Soluble compounds	1 mg/m <sup>3</sup> 0.01 mg/m <sup>3</sup>		
	Ronnel [299-84-3]	5 mg/m <sup>3</sup> (IFV)		
	Rosin core solder thermal decomposition products (colophony) [8050-09-7]	(L)		
	Rotenone (commercial) [83-79-4]	5 mg/m <sup>3</sup>		
	Rubber Solvent (Naphtha) [8030-30-6]	(e)		
	Selenium [7782-49-2] and compounds, as Se	0.2 mg/m <sup>3</sup>		
◇	Selenium hexafluoride [7783-79-1], as Se	0.025 ppm 0.1 mg/m <sup>3</sup>		
	Sesone [136-78-7]	10 mg/m <sup>3</sup>		
◇	Shellac dust (total dust) [9000-59-3]	10 mg/m <sup>3</sup>		
◇ *	Silica, Crystalline			

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Ontario Table Listings	Agent [CAS No.]	Time-Weighted Average Limit (TWA), Short-Term Exposure Limit (STEL), Ceiling Limit (C) and Notations		
		TWA	STEL/C	Notations
	Quartz/Tripoli [14808-60-7; 1317-95-9] Cristobalite [14464-46-1]	0.10 mg/m <sup>3</sup> (R) 0.05 mg/m <sup>3</sup> (R)		
◇	Silica fume [69012-64-2]	2 mg/m <sup>3</sup> (R)		
◇	Silica fused [60676-86-0]	0.1 mg/m <sup>3</sup> (R)		
◇	Silica gel [112926-00-8]	10 mg/m <sup>3</sup>		
◇	Silicon (total dust) [7440-21-3]	10 mg/m <sup>3</sup>		
◇	Silicon carbide [409-21-2] Non-fibrous  Fibrous (including whiskers)	10 mg/m <sup>3</sup> (I) (E) 3 mg/m <sup>3</sup> (R)(E) 0.1 f/cc (R)(F)		
	Silicon tetrahydride [7803-62-5]	5 ppm		
	Silver [7440-22-4] Metal, dust and fume Soluble Compounds, as Ag	0.1 mg/m <sup>3</sup> 0.01 mg/m <sup>3</sup>		
◇	Sisal dust (total dust)	2 mg/m <sup>3</sup>		
◇	Soap dust [68918-36-5]	5 mg/m <sup>3</sup>		
	Soapstone	6 mg/m <sup>3</sup> (E) 3 mg/m <sup>3</sup> (E,R)		
	Sodium azide [26628-22-8] as Sodium azide as Hydrazoic acid vapour	C 0.29 mg/m <sup>3</sup> C 0.11 ppm		
	Sodium bisulfite [7631-90-5]	5 mg/m <sup>3</sup>		
◇	Sodium fluoroacetate [62-74-8]	0.05 mg/m <sup>3</sup>	0.15 mg/m <sup>3</sup>	Skin
	Sodium hydroxide [1310-73-2]		C 2 mg/m <sup>3</sup>	
	Sodium metabisulfite [7681-57-4]	5 mg/m <sup>3</sup>		
◇	Spectinomycin [1695-77-8]	2 mg/m <sup>3</sup>		
	Starch [9005-25-8]	10 mg/m <sup>3</sup>		
	Stearates (J)	10 mg/m <sup>3</sup>		
	Stoddard solvent [8052-41-3]	100 ppm		
◇	140 Degree C Flash Aliphatic Solvent, Type of Stoddard Solvent	525 mg/m <sup>3</sup>		
	Strontium chromate [7789-06-2], as Cr	0.0005 mg/m <sup>3</sup>		
	Strychnine [57-24-9]	0.15 mg/m <sup>3</sup>		
◇	Styrene - monomer [100-42-5]	35 ppm	100 ppm	
	Subtilisins [1395-21-7; 9014-01-1], as crystalline active enzyme		C 0.00006 mg/m <sup>3</sup>	
	Sucrose [57-50-1]	10 mg/m <sup>3</sup>		
	Sulfometuron methyl [74222-97-2]	5 mg/m <sup>3</sup>		
	Sulfotepp (TEDP) [3689-24-5]	0.1 mg/m <sup>3</sup> (IFV)		Skin
◇	Sulfur dioxide [7446-09-5]	2 ppm 5.2 mg/m <sup>3</sup>	5 ppm 10.4 mg/m <sup>3</sup>	
	Sulfur hexafluoride [2551-62-4]	1,000 ppm		
	Sulfuric acid [7664-93-9]	0.2 mg/m <sup>3</sup> (T)		
	Sulfur monochloride [10025-67-9]		C 1 ppm	
	Sulfur pentafluoride [5714-22-7]		C 0.01 ppm	
	Sulfur tetrafluoride [7783-60-0]		C 0.1 ppm	
	Sulfuryl fluoride [2699-79-8]	5 ppm	10 ppm	
	Sulprofos [35400-43-2]	0.1 mg/m <sup>3</sup> (IFV)		Skin
◇	Synthetic Vitreous Fibres (Man Made Mineral Fibres) Continuous filament glass fibres Continuous filament glass fibres Glass wool fibres Refractory ceramic fibres Rock wool fibres	5 mg/m <sup>3</sup> (I) 1 f/cc (F) 1 f/cc (F) 0.5 f/cc (F) 1 f/cc (F)		

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Ontario Table Listings	Agent [CAS No.]	Time-Weighted Average Limit (TWA), Short-Term Exposure Limit (STEL), Ceiling Limit (C) and Notations		
		TWA	STEL/C	Notations
	Slag wool fibres Special purpose glass fibres Synthetic Vitreous Fibres, not otherwise classified (excluding fibrous glass dust and mineral wool fibre)	1 f/cc (F) 1 f/cc (F) 1 f/cc (F)(d)		
	2,4,5-T [93-76-5]	10 mg/m <sup>3</sup>		
◇	Talc [14807-96-6], containing no asbestos	2 mg/m <sup>3</sup> (R)(E) 2 f/cc (K)		
◇	Tantalum, metal and oxide (total dust) [7440-25-7]	10 mg/m <sup>3</sup>		
	Tellurium [13494-80-9] and compounds (NOS), as Te, excluding hydrogen telluride	0.1 mg/m <sup>3</sup>		
◇	Tellurium hexafluoride [7783-80-4], as Te	0.01 ppm 0.1 mg/m <sup>3</sup>		
	Temephos [3383-96-8]	1 mg/m <sup>3</sup> (IFV)		Skin
	Terbufos [13071-79-9]	0.01 mg/m <sup>3</sup> (IFV)		Skin
	Terephthalic acid [100-21-0]	10 mg/m <sup>3</sup>		
	Terphenyls [26140-60-3]		C 5 mg/m <sup>3</sup>	
	1,1,2,2-Tetrabromoethane [79-27-6]	0.1 ppm (IFV)		
	1,1,1,2-Tetrachloro-2,2-difluoroethane [76-11-9]	100 ppm		
	1,1,2,2-Tetrachloro-1,2-difluoroethane [76-12-0]	50 ppm		
	1,1,2,2-Tetrachloroethane [79-34-5]	1 ppm		Skin
	Tetrachloroethylene [127-18-4]	25 ppm	100 ppm	
◇	Tetrachlorophthalic anhydride [117-08-8]	0.1 mg/m <sup>3</sup>		
◇	Tetrachlorophenol [25167-83-3]	0.5 mg/m <sup>3</sup>		Skin
	Tetrachloronaphthalene [1335-88-2]	2 mg/m <sup>3</sup>		
	Tetraethyl pyrophosphate (TEPP) [107-49-3]	0.01 mg/m <sup>3</sup> (IFV)		Skin
	Tetrafluoroethylene [116-14-3]	2 ppm		
	Tetrahydrofuran [109-99-9]	50 ppm	100 ppm	Skin
	Tetrakis (hydroxymethyl) phosphonium salts Tetrakis (hydroxymethyl) phosphonium chloride [124-64-1] Tetrakis (hydroxymethyl) phosphonium sulfate [55566-30-8]	2 mg/m <sup>3</sup> 2 mg/m <sup>3</sup>		
	Tetramethyl succinonitrile [3333-52-6]	0.5 ppm		Skin
	Tetranitromethane [509-14-8]	0.005 ppm		
◇	Tetrasodium pyrophosphate [7722-88-5]	5 mg/m <sup>3</sup>		
	Tetryl [479-45-8]	1.5 mg/m <sup>3</sup>		
	Thallium [7440-28-0] and soluble compounds, as Tl	0.1 mg/m <sup>3</sup>		Skin
	4,4' Thiobis (6-tert-butyl-m-cresol) [96-69-5]	10 mg/m <sup>3</sup>		
	Thioglycolic acid [68-11-1]	1 ppm		Skin
	Thionyl chloride [7719-09-7]		C 1 ppm	
	Thiram [137-26-8]	0.05 mg/m <sup>3</sup> (IFV)		
◇	Tin [7440-31-5], as Sn Metal Oxide and inorganic compounds, as Sn, except tin hydride Organic compounds, as Sn	2 mg/m <sup>3</sup> 2 mg/m <sup>3</sup> 0.1 mg/m <sup>3</sup>		Skin (organic compounds)
	Titanium dioxide [13463-67-7]	10 mg/m <sup>3</sup>		
◇	o-Tolidine [119-93-7]	(L)		Skin
	Toluene [108-88-3]	20 ppm		
	o-Toluidine [95-53-4]	2 ppm		Skin

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Ontario Table Listings	Agent [CAS No.]	Time-Weighted Average Limit (TWA), Short-Term Exposure Limit (STEL), Ceiling Limit (C) and Notations		
		TWA	STEL/C	Notations
	m-Toluidine [108-44-1]	2 ppm		Skin
	p-Toluidine [106-49-0]	2 ppm		Skin
	Tributyl phosphate [126-73-8]	0.2 ppm		
	Trichloroacetic acid [76-03-9]	1 ppm		
	1,2,4-Trichlorobenzene [120-82-1]		C 5 ppm	
	1,1,2-Trichloroethane [79-00-5]	10 ppm		Skin
	Trichloroethylene [79-01-6]	10 ppm	25 ppm	
	Trichlorofluoromethane [75-69-4]		C 1,000 ppm	
	Trichloronaphthalene [1321-65-9]	5 mg/m <sup>3</sup>		Skin
	1,2,3-Trichloropropane [96-18-4]	10 ppm		Skin
	1,1,2-Trichloro-1,2,2-trifluoroethane [76-13-1]	1,000 ppm	1,250 ppm	
	Trichlorphon [52-68-6]	1 mg/m <sup>3</sup> (I)		
◇	Triethanolamine [102-71-6]	0.5 ppm 3.1 mg/m <sup>3</sup>		
	Triethylamine [121-44-8]	1 ppm	3 ppm	Skin
◇	Triethylenediamine [280-57-9]	1 ppm 4.6 mg/m <sup>3</sup>		Skin
◇	Triethylenetetramine [112-24-3]	0.5 ppm 3 mg/m <sup>3</sup>		Skin
	Trifluorobromomethane [75-63-8]	1,000 ppm		
	1,3,5-Triglycidyl-s-triazinetrione [2451-62-9]	0.05 mg/m <sup>3</sup>		
	Trimellitic anhydride [552-30-7]	0.0005 mg/m <sup>3</sup> (IFV)	0.002 mg/m <sup>3</sup> (IFV)	Skin
◇	Trimethoxyvinylsilane [2768-02-7]		10 ppm 60 mg/m <sup>3</sup>	
	Trimethylamine [75-50-3]	5 ppm	15 ppm	
	Trimethyl benzene (mixed isomers) [25551-13-7]	25 ppm		
	Trimethyl phosphite [121-45-9]	2 ppm		
◇	2,4,6-Trinitrotoluene (TNT) [118-96-7]	0.01 ppm 0.1 mg/m <sup>3</sup>	0.02 ppm 0.2 mg/m <sup>3</sup>	Skin
	Triorthocresyl phosphate [78-30-8]	0.1 mg/m <sup>3</sup>		Skin
	Triphenyl phosphate [115-86-6]	3 mg/m <sup>3</sup>		
◇	Trixylylphosphate [25155-23-1]	0.1 mg/m <sup>3</sup>		
	Tungsten [7440-33-7], as W			
	Metal and insoluble compounds	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	
	Soluble compounds	1 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>	
	Turpentine [8006-64-2] and selected monoterpenes [80-56-8; 127-91-3; 13466-78-9]	20 ppm		
	Uranium (natural) [7440-61-1] Soluble and insoluble compounds, as U	0.2 mg/m <sup>3</sup>	0.6 mg/m <sup>3</sup>	
	n-Valeraldehyde [110-62-3]	50 ppm		
	Vanadium pentoxide [1314-62-1] as V	0.05 mg/m <sup>3</sup> (I)		
◇	Vegetable oils (mists) except mists of irritant oils such as oils of castor and cashew nut	10 mg/m <sup>3</sup>		
	Vinyl acetate [108-05-4]	10 ppm	15 ppm	
	Vinyl bromide [593-60-2]	0.5 ppm		
◇ *	Vinyl chloride [75-01-04]	1 ppm		
	4-Vinyl cyclohexene [100-40-3]	0.1 ppm		
	Vinyl cyclohexene dioxide [106-87-6]	0.1 ppm		Skin
	Vinyl fluoride [75-02-5]	1 ppm		
	N-Vinyl-2-pyrrolidone [88-12-0]	0.05 ppm		
◇	Vinylidene chloride [75-35-4]	1 ppm 4 mg/m <sup>3</sup>	20 ppm 80 mg/m <sup>3</sup>	
	Vinylidene fluoride [75-38-7]	500 ppm		

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		TWA	STEL/C	Notations
	Vinyl toluene [25013-15-4]	50 ppm	100 ppm	
	VM & P Naphtha [8032-32-4]	(e)		
	Warfarin [81-81-2]	0.1 mg/m <sup>3</sup>		
◇	Wheat flour dust (total dust)	3 mg/m <sup>3</sup>		
◇	Wood dust Certain hardwoods as beech and oak Softwood	1 mg/m <sup>3</sup> 5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	
	Xylene [1330-20-7] (o, m & p isomers) [95-47-6; 108-38-3; 106-42-3]	100 ppm	150 ppm	
	m-Xylene α,α'- diamine [1477-55-0]		C 0.1 mg/m <sup>3</sup>	Skin
	Xylidine (mixed isomers) [1300-73-8]	0.5 ppm (IFV)		Skin
	Yttrium [7440-65-5] and compounds, as Y	1 mg/m <sup>3</sup>		
	Zinc chloride fume [7646-85-7]	1 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	
	Zinc chromates [13530-65-9; 11103-86-9; 37300-23-5], as Cr	0.01 mg/m <sup>3</sup>		
	Zinc oxide [1314-13-2]	2 mg/m <sup>3</sup> (R)	10 mg/m <sup>3</sup> (R)	
	Zirconium [7440-67-7] and compounds, as Zr	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	

### Abbreviations:

- ◇ Denotes substances listed in Ontario Table, Regulation 833
- \* Denotes designated substance according to O. Reg. 490/09

- <sup>1</sup> Means the benzene soluble fraction of total particulate matter of the substances emitted into the atmosphere from metallurgical coke ovens including condensed vapours and solid particulates.
- <sup>2</sup> As sum of components assayed by chromatographic procedure with reference to the bulk sample.
- [CAS No.] - CAS Registry Number.
- f/cc - Fibres per cubic centimetre of air.
- mg/m<sup>3</sup> - Milligrams of the agent per cubic metre of air.
- ppm - Parts of the agent per million parts of air by volume.
- Skin - Danger of cutaneous absorption.
- (E) The value is for particulate matter containing no asbestos and < 1 per cent crystalline silica.
- (F) Respirable fibres: length > 5µm; aspect ratio ≥3:1, as determined by the membrane filter method at 400-450 times magnification (4-mm objective), using phase-contrast illumination.
- (G) As measured by the vertical elutriator, cotton-dust sampler.
- (H) Aerosol only.

## Occupational Exposure Limits (OELs) for Ontario Workplaces

- (I) Inhalable fraction.
- (IFV) Inhalable fraction and vapour.
- (J) Does not include stearates of toxic metals.
- (K) Should not exceed 2 mg/m<sup>3</sup> respirable particulate mass.
- (L) Exposure by all routes should be carefully controlled to levels as low as possible.
- (O) Sampled by method that does not collect vapour.
- (P) Application restricted to conditions in which there are negligible aerosol exposures.
- (R) Respirable fraction.
- (T) Thoracic fraction.
- (V) Vapour and aerosol.
- (a) Asbestos fibres longer than 5 µm in length and less than 3 µm in width and that have a length to width ratio not less than 3:1 as viewed in a phase contrast optical microscope at 400-450 times magnification.
- (b) Provided that the total dust contains less than 0.7 per cent vanadium.
- (c) For assessing the visibility in a work environment where 1,2-propylene glycol aerosol is present.
- (d) A secondary limit of 5 mg/m<sup>3</sup> (total dust) is recommended to deal with dusty operations where fibre counts are usually difficult to determine. Where both types of measurements are made simultaneously, the more restrictive limit should be used to assess the exposures.
- (e) See MOL document *Determination of Occupational Exposure Limits for Certain Refined Hydrocarbon Solvent Vapour Mixtures*.