

NIOSH POCKET GUIDE TO CHEMICAL HAZARDS

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
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Chemical name, structure/formula, CAS and RTECS Nos., and DOT ID and guide Nos.	Synonyms, trade names, and conversion factors	Exposure limits (TWA unless noted otherwise)	IDLH	Physical description	Chemical and physical properties		Incompatibilities and reactivities	Measurement method (See Table 1)
					MW, BP, SOL Fl.P, IP, Sp.Gr, flammability	VP, FRZ UEL, LEL		
Carbon disulfide CS ₂ 75-15-0 FF6650000 1131 28	Carbon bisulfide	NIOSH 1 ppm (3 mg/m ³) ST 10 ppm (30 mg/m ³) [skin] OSHA 4 ppm (12 mg/m ³) ST 12 ppm (36 mg/m ³) [skin]	500 ppm	Colorless to faint-yellow liquid with a sweet ether-like odor. [Note: Reagent grades are foul smelling.]	MW: 76.1 BP: 116°F Sol: 0.3% Fl.P: -22°F IP: 10.08 eV Sp.Gr: 1.26 Class IB Flammable Liquid	VP: 297 mm FRZ: -169°F UEL: 50.0% LEL: 1.3%	Strong oxidizers; chemically-active metals such as sodium, potassium & zinc; azides; rust; halogens; amines [Note: Vapors may be ignited by contact with ordinary light bulb.]	Char/ Dry tube; Toluene; GC/FPD; III [#1600]
Carbon monoxide CO 630-08-0 FG3500000 1016 18	Carbon oxide, Flue gas, Monoxide	NIOSH/OSHA 35 ppm (40 mg/m ³) C 200 ppm (229 mg/m ³) [Note: On 9/5/89 OSHA stayed the start-up date for the Ceiling limit for the following steel industry operations — blast furnaces, vessel blowing at basic oxygen furnaces, and sinter plants.]	1500 ppm	Colorless, odorless gas. [Note: Shipped as a nonliquefied compressed gas.]	MW: 28.0 BP: -313°F Sol: 2% Fl.P: NA (Gas) IP: 14.01 eV Flammable Gas	VP: >1 atm MLT: -337°F UEL: 74% LEL: 12.5%	Strong oxidizers, bromine trifluoride, chlorine trifluoride, lithium	Bag; none; ECA; II(4) [#S340]
Carbon tetrachloride CCl ₄ 56-23-5 FG4900000 1846 55	Carbon chloride, Carbon tet, Freon® 10, Halon® 104, Tetrachloromethane	NIOSH Ca See Appendix A ST 2 ppm (12.6 mg/m ³) [60-min] OSHA 2 ppm (12.6 mg/m ³)	Ca [300 ppm]	Colorless liquid with a character- istic ether-like odor.	MW: 153.8 BP: 170°F Sol: 0.05% Fl.P: NA IP: 11.47 eV Sp.Gr: 1.59 Noncombustible Liquid	VP: 91 mm FRZ: -9°F UEL: NA LEL: NA	Chemically-active metals such as sodium, potassium & magnesium; fluorine; aluminum [Note: Forms highly toxic phosgene gas when exposed to flames or welding arcs.]	Char; CS ₂ ; GC/FID; III [#1003, Haloge- nated Hydro- carbons]
Chlordane C ₁₀ H ₆ Cl ₈ 57-74-9 PB9800000 2762 28	1,2,4,5,6,7,8,8- Octachloro-3a,4,7,7a- tetrahydro-4,7- methanoindane	NIOSH Ca See Appendix A 0.5 mg/m ³ [skin] OSHA 0.5 mg/m ³ [skin]	Ca [500 mg/m ³]	Amber-colored, viscous liquid with a pungent, chlorine-like odor. [insecticide]	MW: 409.8 BP: Decomposes Sol: Insoluble Fl.P: NA IP: ? Sp.Gr(77°F): 1.56 Noncombustible Liquid, but may be utilized in flammable solutions.	VP: 0.00001 mm FRZ: ? UEL: NA LEL: NA	Strong oxidizers, alkaline reagents	Filter/ Chrom-102; Toluene; GC/ECD; III [#5510]

