

ACUTELY TOXIC CHEMICALS

EXAMPLES	Physical State	IDLH ¹	LD ₅₀ ²	LC ₅₀ ³
	(@ 20°C)	(ppm)	(mg/kg)	(ppm)
Acrolein	liquid	2	46	
Arsine	gas	3		390 mg/m ³
Chlorine	gas	10		299
Chlorine trifluoride	gas	20		299
Cisplatin	solid	4 mg/m ³	26	
Diazomethane	gas	2		175
Diborane	gas	15		40
Dieldrin	solid	0.25 mg/m ³	38	
Dinitro-o-cresol	solid	5 mg/m ³	7	
Fluorine	gas	25		185
Hydrogen cyanide	gas	50		160
Hydrogen fluoride	gas/liquid	30		1276
Mercury (organo) alkyl compounds	liquid	2 mg/m ³	51	258 mg/m ³
Methyl hydrazine	liquid	20 ppm	32	
Methyl isocyanate	liquid	3	51	6
Nickel carbonyl	liquid	2		35
Nicotine	liquid	5 mg/m ³	50	
Nitrogen dioxide	gas/liquid	20		88
Ozone	gas	5		5
Parathion	liquid	10 mg/m ³	2	
Potassium cyanide	solid	25 mg/m ³	5	
Phosgene	gas	2		25
Sodium azide	solid	20	27	37
Sodium cyanide (as CN)	solid	25 mg/m ³	6	
Tetraethyl lead	liquid	40 mg/m ³	12	
Toxaphene	solid	200 mg/m ³	50	

¹ IDLH - Immediately Dangerous to Life and Health (IDLH), values based on a tiered analysis of acute human and animal toxicity data, National Institute of Occupational Safety and Health (NIOSH), *Pocket Guide to Chemical Hazards*, 2010.

² LD₅₀ - Lethal Dose's from National Institute of Health (NIH) U.S. National Library of Medicine, TOXNET Toxicology Data Network (<http://toxnet.nlm.nih.gov>), ChemIDplus/Hazardous Substance Data Bank (HSDB). Note: The OSHA/GHS* Category 1 and 2 acutely toxic substances with an LD₅₀ less than or equal to 50 mg/kg are considered acutely toxic by oral ingestion (rat). OSHA/GHS* Category 3 substances with values from 50 - 300 mg/kg can also be considered acutely toxic if they can be fatal or cause damage to target organs as the result of a single exposure of short duration.

³ LC₅₀ - Lethal Concentration's from National Institute of Health (NIH) U.S. National Library of Medicine, TOXNET Toxicology Data Network (<http://toxnet.nlm.nih.gov>), ChemIDplus/Hazardous Substance Data Bank (HSDB). Note: The OSHA/GHS* Category 1, 2, and 3 substances with an LC₅₀ less than or equal to 2500 ppm are considered acutely toxic by inhalation (rat).

* OSHA/GHS (Occupational Safety and Health Administration and the Globally Harmonized System of Chemical Classification and Labelling).