

Common Methamphetamine Chemicals

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Typical Chemicals Found in Lab Sites	Common Legitimate Uses	Chemical Characteristics	Toxic	Flammable (LEL/UEL)	Toxic Vapors	Water Cleanup	Corrosive (pH)	Main Route Body Entry	Common Health Hazards	IDLH (ppm)	LD ₅₀ (mg/kg) (rat)	LC ₅₀ (mg/kg) (rat)	Vd (air=1)
Acetone	Fingernail polish remover, solvents	Liquid Sweet Fragrant	X	very	X	miscible		Absorption	Reproductive disorders	2500	5,800	50,100 (8 hrs)	2.0
Methanol	Brake Cleaner fluid, fuel	Liquid Slight alcohol odor	X	X	X	miscible		Absorption	Blindness, eye damage	6000	4,000 (ppm) (human)	64,000 (4 hrs)	1.1
Ammonia	Disinfectants	Gas, pungent odor	X		X	n/a	X	Absorption	Blistering, lung damage	300	n/a	4,200 (1 hr)	0.6
Benzene	Dye, varnishes, lacquers	Liquid Aromatic odor	X	Very (Explosive)		miscible	X	Absorption	Carcinogen Leukemia	500	50-500 (human)	150 ppm	n/a
Ether	Starters fluid, anesthetic	Sweet pungent odor	X	Very (Explosive)		no		Inhalation	Respiratory Failure	1900	1,215	31,000 (0.5 hrs) (mouse)	2.6
Freon	Refrigerant & propellants	Gas Ether-like odor	X		X	n/a	X	Inhalation	Frostbite, Lung Damage	2000	n/a	220,000 (4 hours)	6.5
Hydroiodic Acid	Driveway cleaner	Liquid Pungent odor	X		X	miscible	X	Inhalation & Absorption	Burns, Thyroid Damage	2.0	>90 (mL/kg)	2,860 (ppm)	n/a
Hydrochloric Acid (HCL Gas)	Iron ore processing, mining	Gas Pungent odor	X		X	n/a	X	Absorption	Respiratory, Liver Damage	50	900 (rabbit)	3,124 (ppm) (1 hr)	1.3
Iodine Crystals	Antiseptic, Catalyst	Purple crystals	X	X (Explosive)		soluble	X	Ingestion	Birth Defects, Kidney Failure	2.0	>8 (g/kg)	n/a	4.93
Lithium Metal	Lithium batteries	Grey solid ribbon	X			reacts insoluble	X	Absorption	Burns, Pulmonary Edema	n/a	>24 (g/kg)	2062 (ppm) (4 hrs)	n/a
Muriatic Acid	Swimming pool cleaners	Liquid Pungent odor	X		X	miscible	X	Ingestion	Burns, Toxic Vapors	50	900 (mg/kg) (rabbit)	3,124 (ppm) (1 hr)	3.0
Phosphine Gas	Pesticides	Gas Fishlike/garlic odor	X		X	n/a		Absorption	Respiratory Failure	50	>2,000	11 (ppm) (4 hrs)	1.18
Pseudoephedrine	Cold medicines	White Crystalline powder	X			soluble		Ingestion	Abuse: Heart Damage	n/a	660	n/a	n/a
Red Phosphorus	Matches, fireworks	Red/violet solid Odorless	X	X (Explosive)	X	insoluble Reacts		Inhalation	Unstable Flammable	50	3,030 (µg/kg)	76,000 (4 hrs)	4.77
Sodium Hydroxide	Drain cleaners, lye	White flakes/pellets odorless	X		X	soluble	X	Absorption	Burns, Skin Ulcers	10 mg/m ³	4,090	2,300 (2 hrs)	1
Sulfuric Acid	Battery Acid	Liquid, colorless odorless	X		X	miscible	X	Absorption	Burns, Thyroid Damage	15 mg/m ³	2,140	510 (mg/m ³) (2 hr)	3.4
Toluene	Paint, thinners, solvents	Liquid Aromatic odor	X	Very (Explosive)	X	no		Absorption	Fetal Damage, Pneumonia	500	636	14 (ppm) (4 hrs)	3.14
Liquid Lab Waste	None	unknown	X	X (Explosive)	X	UNK	X	Absorption	Unknown long term effects	UNK	UNK	UNK	UNK
Methamphetamine	Stimulant Dopamine release	White bitter powder, Odorless crystals	X			soluble H ₂ O & ethanol		Ingestion & inhalation	Paranoia, addictive, stimulant	not established	0.3 µg/kg (day) (human)	n/a	n/a

*Miscible: mixes with water, "1 µg" = 1 million grams