



Monarch Oil (Kitchener) Limited

P.O. BOX 653 808 VICTORIA ST. NORTH, KITCHENER, ONT. N2G 4B6 PHONE (519) 743-8241 TOLL FREE 1-800-268-OILS
FAX (519) 743-9802 EMAIL office@monarchoil.com INTERNET www.monarchoil.com

Materials Safety Data – ACETONE

UN - 1090

Shipping Name
Transport of Dangerous Goods Class
WHMIS Class
Material Use

ACETONE
Class 3; Packing Group II
B 2; D 2B
solvent, reagent

1. HAZARDOUS INGREDIENTS

	CAS NUMBER	%	TWAEV (ppm) = (mg/m ³)	LD ₅₀ ORAL	(mg/kg) SKIN	LC ₅₀ ppm INHALATION
Acetone	67-64-1	100%	500 = 1200	3000*	8000	18,300

NOTE: LD₅₀ varies widely between species. The above values are the most severe data listed. Human toxicity may be far lower than these data suggest

2. PHYSICAL CHARACTERISTICS

Odour & Appearance	clear, colourless, liquid with sharp ketone odour
Odour Threshold	60 ppm (varies from 4ppm - 600ppm!)
Vapour Pressure	180 - 185 mmHg (20°C)
Vapour Density (air = 1)	2
Boiling Point	56°C
Freezing Point	-94°C
Specific Gravity	0.792 (20°C)
Water Solubility	complete

3. FLAMMABILITY & REACTIVITY

Flash Point	-18°C
Autoignition Temperature	465°C
Flammable Limits	2.6% - 12.8% (25°C)
Hazardous Combustion Products	carbon monoxide, nitrogen oxides, smoke
Firefighting Precautions	foam, dry chemical, water fog; water spray only to cool, product floats on water - water jet spreads flames; firefighters must wear SCBA
Sensitivity to Static Discharge	not sensitive
Sensitivity to Mechanical Impact	not sensitive
Chemical Stability	stable; will not polymerize
Reactive With	strong oxidising agents; sodium & barium hydroxides, conc. nitric acid, chromium trioxide, bromine, chromyl chloride, nitrosyl perchlorate, potassium tert-butoxide; violent, explosive reaction with hexachloromelamine and trichloromelamine
Decomposition Products	apart from "Hazardous Combustion Products", toxic fumes on heating

4. TOXICOLOGY

EFFECTS OF ACUTE EXPOSURE

Skin Contact	aggressively drying, mild irritant
Skin Absorption	yes; toxic effects not anticipated by this route, partly due to very rapid evaporation
Eye Contact	irritating liquid; vapour irritating above 500 ppm; no permanent injury to eyes
Inhalation	irritating; headache, nausea, dizziness, drowsiness, intoxication, weakness
Ingestion	headache, dizziness, drowsiness, intoxication