








**EMERGENCY NUMBERS:**

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(CAN) CANUTEC : 1(613) 996-6666 (24hrs)

(USA) Anachemia : 1(518) 297-4444

(CAN) Anachemia : 1(514) 489-5711

WHMIS	Protective Clothing	TDG Road/Rail
WHMIS CLASS: B-2 D-2B		TDG CLASS: 3 PIN: UN1090 PG: II
 	   	

## Section I. Product Identification and Uses

<b>Product name</b>	<b>ACETONE</b>	<b>CI#</b>	Not available.
<b>Chemical formula</b>	CH <sub>3</sub> COCH <sub>3</sub>	<b>CAS#</b>	67-64-1
<b>Synonyms</b>	2-Propanone, Dimethyl ketone, Methyl ketone, Ketone propane, Dimethyl formaldehyde, AC-0150, AC-0150SC, AC-0150PG, CD-0150, GD-0150, AC-0151, AC-0152, M-11823, M-12097, M-13002, M-13387, 00870, 00876, 00878, 00884, 00896	<b>Code</b>	AC-0150
<b>Supplier</b>	Anachemia Canada. 255 Norman. Lachine (Montreal), Que H8R 1A3	<b>Formula weight</b>	58.08
		<b>Supersedes</b>	
<b>Material uses</b>	For laboratory use only.		

## Section II. Ingredients

Name	CAS #	%	TLV
1) ACETONE	67-64-1	90-100	Exposure limits: ACGIH TWA 500 ppm (1188 mg/m <sup>3</sup> ); STEL 750 ppm (1780 mg/m <sup>3</sup> )

**Toxicity values of the hazardous ingredients**

ACETONE:

 ORAL (LD<sub>50</sub>): Acute: 3000 mg/kg (Mouse). 5800 mg/kg (Rat). 5340 mg/kg (Rabbit).

 VAPOR (LC<sub>50</sub>): Acute: 50100 mg/m<sup>3</sup> (Rat) (8 hour(s)). 44000 mg/m<sup>3</sup> (Mouse) (4 hour(s)).

**Section III. Physical Data**

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<b>Physical state and appearance / Odor</b>	Clear, colorless volatile liquid with a characteristic sweetish odor.
<b>pH (1% soln/water)</b>	Not available.
<b>Odor threshold</b>	2-62 ppm
<b>Percent volatile</b>	100% (V/V)
<b>Freezing point</b>	-94°C
<b>Boiling point</b>	57°C
<b>Specific gravity</b>	0.79 (Water = 1)
<b>Vapor density</b>	2 (Air = 1)
<b>Vapor pressure</b>	>181 (400) mm of Hg @ 20°C (39.5°C)
<b>Water/oil dist. coeff.</b>	0.58
<b>Evaporation rate</b>	7.7 (n-Butyl acetate = 1).
<b>Solubility</b>	Miscible in water.

**Section IV. Fire and Explosion Data**

<b>Flash point</b>	CLOSED CUP: -20°C (Tag Closed Cup)
<b>Flammable limits</b>	LOWER: 2% UPPER: 13%
<b>Auto-ignition temperature</b>	464°C
<b>Fire degradation products</b>	Oxides of carbon (CO, CO <sub>2</sub> ).
<b>Fire extinguishing procedures</b>	Use DRY chemical, carbon dioxide, or alcohol-resistant foam. Water may be ineffective to extinguish fires. Wear adequate personal protection to prevent contact with material or its combustion products. Self contained breathing apparatus with a full facepiece operated in a pressure demand or other positive pressure mode. Do not enter confined fire space without adequate protective clothing and approved positive pressure self-contained breathing apparatus. Cool containing vessels with flooding quantities of water. Disperse vapors with water spray if they have not ignited.
<b>Fire and Explosion Hazards</b>	Extremely flammable. Vapors formed from this product may travel or be moved by air currents and ignited by pilot lights, other flames, sparks, heaters, electrical equipment, static discharges or other ignition sources at locations distant from handling point. Vapor forms explosive mixture with air. Container explosion may occur under fire conditions or when heated. Contact with oxidizers may cause fire and/or explosion. The product is not sensitive to impact. The product is sensitive to static discharge. Emits toxic fumes under fire conditions.

**Section V. Toxicological Properties**

<b>Routes of entry</b>	Ingestion and inhalation. Eye contact. Skin contact. Skin absorption.
<b>Effects of Acute Exposure</b>	Harmful by ingestion, inhalation or skin absorption. Irritant. Target organs: respiratory system, skin, eyes, lungs, central nervous system, liver, kidneys. 2500 ppm (ACETONE) is immediately dangerous to life or health.
<b>Eye</b>	Causes irritation, conjunctivitis, and possible damage to the cornea. May cause permanent damage. IRRITATION: EYE-RABBIT 20 mg SEVERE.
<b>Skin</b>	Causes skin irritation. Prolonged and repeated contact with skin can cause defatting and drying of the skin resulting in dermatitis. Readily absorbed through skin. See inhalation.
<b>Inhalation</b>	Can cause headache, nausea, vomiting, weakness, dizziness, drowsiness, blurred vision, incoordination, narcosis and central nervous system depression.
<b>Ingestion</b>	Causes gastrointestinal irritation. Kidney damage. See inhalation.

**Section V. Toxicological Properties**

**Effects of Chronic Overexposure** Defatting dermatitis with prolonged use. Human: passes the placental barrier, detected in maternal milk. Carcinogenic effects: Not available. Mutagenic effects: Not available. Teratogenic effects: Not available. Toxicity of the product to the reproductive system: Not available. To the best of our knowledge, the chemical, physical, and toxicity of this substance has not been fully investigated. Medical conditions which may be aggravated: Individuals with preexisting diseases of the skin or eyes may be more susceptible to the toxicity of overexposure to this product.

**Section VI. First Aid Measures**

**Eye contact** Immediately flush eyes with copious quantities of water for at least 15 minutes holding lids apart to ensure flushing of the entire surface. Seek medical attention.

**Skin contact** Immediately flush skin with plenty of water and soap for at least 15 minutes while removing contaminated clothing and shoes. Seek medical attention. Wash contaminated clothing before reusing.

**Inhalation** Remove patient to fresh air. Administer approved oxygen supply if breathing is difficult. Administer artificial respiration or CPR if breathing has ceased. Seek medical attention.

**Ingestion** Do not induce vomiting. Guard against aspiration into lungs by having the individual turn on their left side. Never give anything by mouth to an unconscious or convulsing person. Get immediate medical attention. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus.  
NOTES TO PHYSICIAN: If more than 2.0 ml/kg has been ingested, vomiting should be induced with supervision. If symptoms such as loss of gag, reflex, convulsions or unconsciousness occur before vomiting, gastric lavage with a cuffed endotracheal tube should be considered.

**Section VII. Reactivity Data**

**Stability** Stable. Conditions to avoid: High temperatures, sparks, open flames and all other sources of ignition, contamination.

**Hazardous decomp. products** Not available.

**Incompatibility** May react violently or explosively with: oxidizing agents, acids, bases, chlorinated solvents/ alkali mixtures, reducing agents, chromic anhydride, hexachloromelamine, trichloromelamine, sulfur dichloride, potassium tert-butoxide, 2-methyl-1,3-butadiene, ammonia, amines, halogen compounds, perchlorates, nitrosyl chloride, bromoform, chloroform, permonosulfuric acid, chromyl chloride, sodium hypobromite, hydrogen peroxide, acetic acid, sulfuric acid, nitric acid, hydrochloric acid.

**Reaction Products** Not available. Hazardous polymerization will not occur.

## Section VIII. Preventive Measures

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**Protective Clothing in case of spill and leak** Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves.

**Spill and leak** Evacuate the area. Eliminate all sources of ignition. Stay upwind: Keep out of low areas. Dyke the area with sand or a natural barrier. Absorb on sand or vermiculite and place in a closed container for disposal. Use water spray to reduce vapors. Use non-sparking tools. Ventilate area and wash spill site after material pick up is complete. DO NOT empty into drains. DO NOT touch damaged container or spilled material. Runoff to sewer may create fire or explosion hazard.

**Waste disposal** Burn in a chemical incinerator equipped with an after burner and scrubber. According to all applicable regulations. May be harmful to aquatic life. Can be dangerous if allowed to enter drinking water intakes. Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds, or rivers.

**Storage and Handling** Aluminum containers are not recommended for storage. Store in a cool place away from heated areas, sparks, and flame. Store in a well ventilated area. Store away from incompatible materials. Do not add any other material to the container. Do not wash down the drain. Do not breathe gas/fumes/vapor/spray. In case of insufficient ventilation, wear suitable respiratory equipment. Keep away from direct sunlight or strong incandescent light. Keep container tightly closed and dry. Manipulate under an adequate fume hood. Take precautionary measures against electrostatic discharges. Ground the container while dispensing. Ground all equipment containing material. Use explosion proof equipment. Use non-sparking tools. Watch for accumulation in low confined areas. Empty containers may contain a hazardous residue. Do not use pressure to dispense. Handle and open container with care. Take off immediately all contaminated clothing. This product must be manipulated by qualified personnel. Do not get in eyes, on skin, or on clothing. Wash well after use. In accordance with good storage and handling practices. Do not allow smoking and food consumption while handling. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

## Section IX. Protective Measures

**Protective clothing** Face shield and/or splash goggles. Impervious butyl rubber gloves, apron, coveralls, and/or other resistant protective clothing. Sufficient to protect skin. A OSHA/MSHA jointly approved respirator is advised in the absence of proper environmental controls. If more than TLV, do not breathe vapor. Wear self-contained breathing apparatus. Do not wear contact lenses. Make eye bath and emergency shower available. Ensure that eyewash station and safety shower is proximal to the work-station location.

**Engineering controls** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. Use adequate ventilation. Do not use in unventilated spaces. Vapors are heavier than air and may travel along the ground or pool in low areas. Because vapor is heavy, ventilation must be provided at floor level as well as at higher levels.

## Section X. Other Information

**Special Precautions or comments** Extremely flammable liquid! Irritant! Risk of serious damage to eyes. Do not breathe vapor. Avoid all contact with the product. Avoid prolonged or repeated exposure. Use in a chemical fume hood. Keep away from heat, sparks and flame. Liquid can accumulate static charge by flow or agitation. Take precautionary measures against static discharges. Bond and ground transfer containers and equipment to avoid static accumulation. Use non-sparking tools. Handle and open container with care. Container should be opened only by a technically qualified person.  
Synergistic materials: Exposure to acetone may enhance the liver toxicity of chlorinated solvents (carbon tetrachloride, chloroform, trichloroethylene, 1,1,2-trichloroethane, 1,1-dichloroethylene, dibromochloromethane, bromodichloromethane), bromoform, ethanol and acetonitrile.  
RTECS NO. AL3150000 (Acetone).



NFPA

Prepared by MSDS Department/Département de F.S..

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