

# **Acetone**

## **SECTION 1. IDENTIFICATION**

Product Identifier Acetone

Other Means of 13-260, 13-261, 13-264, 13-264, 13-268, 23-269, 83-261, 83-264, 83-268

Identification

Product Family Acetone
Restrictions on Use None known.

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Emergency Phone No. CANUTEC, 613-996-6666, 24 Hours

**SDS No.** 06930007

# **SECTION 2. HAZARDS IDENTIFICATION**

## **GHS Classification**

Flammable liquid - Category 2; Serious eye damage/eye irritation - Category 2A; Specific target organ toxicity (single exposure) - Category 3

## **GHS Label Elements**





Signal Word:

Danger

Hazard Statement(s):

H225 Highly flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

Precautionary Statement(s):

Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical, ventilating, lighting, and other equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge. P261 Avoid breathing dust, fume, gas, mist, vapours or spray.

P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/eye protection/face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P312 Call a POISON CENTRE/doctor if you feel unwell.

P337 + P313 If eye irritation persists: Get medical advice/attention. carbon dioxide

dry chemical powder water spray or fog

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal:

P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

Other Hazards

None known.

# **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### Substance:

Chemical Name	CAS No.	%	Other Identifiers
Acetone	67-64-1	100	

# **SECTION 4. FIRST-AID MEASURES**

#### **First-aid Measures**

## Inhalation

Move to fresh air. Call a Poison Centre or doctor if you feel unwell or are concerned.

#### **Skin Contact**

Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely. Call a Poison Centre or doctor if you feel unwell or are concerned.

# **Eye Contact**

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice/attention.

#### Ingestion

Rinse mouth with water. Call a Poison Centre or doctor if you feel unwell or are concerned. Do not induce vomiting.

## **First-aid Comments**

Get medical advice/attention if you feel unwell or are concerned.

## Most Important Symptoms and Effects, Acute and Delayed

None known.

# **Immediate Medical Attention and Special Treatment**

#### **Special Instructions**

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

# **SECTION 5. FIRE-FIGHTING MEASURES**

# **Extinguishing Media**

## Suitable Extinguishing Media

Small fire: Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog. Large fire: Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

#### **Unsuitable Extinguishing Media**

None known.

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## **Specific Hazards Arising from the Chemical**

Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapour forms explosive mixture with air between upper and lower flammable limits.

Not known to generate any hazardous decomposition products in a fire.

## Special Protective Equipment and Precautions for Fire-fighters

Review Section 6 (Accidental Release Measures) for important information on responding to leaks/spills. Fire-fighters should enter area wearing specialized protective equipment. (Bunker Gear will not provide adequate protection.).

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

## Personal Precautions, Protective Equipment, and Emergency Procedures

May accumulate in hazardous amounts in low-lying areas especially inside confined spaces, if ventilation is not sufficient. Eliminate all ignition sources. Use grounded, explosion-proof equipment. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Evacuate downwind locations.

#### **Environmental Precautions**

Do not allow into any sewer, on the ground or into any waterway.

# Methods and Materials for Containment and Cleaning Up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

# **SECTION 7. HANDLING AND STORAGE**

# **Precautions for Safe Handling**

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

## **Conditions for Safe Storage**

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Control Parameters**

	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Acetone	250 ppm A4	500 ppm A4	750 ppm	1000 ppm		

## **Appropriate Engineering Controls**

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Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Do not allow product to accumulate in the air in work or storage areas, or in confined spaces. Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored. Control static electricity discharges which includes bonding of equipment to ground. Provide eyewash and safety shower if contact or splash hazard exists.

#### **Individual Protection Measures**

#### **Eye/Face Protection**

Wear chemical safety goggles and face shield when contact is possible.

#### **Skin Protection**

Wear chemical protective clothing e.g. gloves, aprons, boots.

## **Respiratory Protection**

Wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

# **Basic Physical and Chemical Properties**

Appearance Clear liquid.

Odour Pungent

**Odour Threshold** 13 - 20 ppm (30.8 - 47.4 mg/m3)

**pH** 7 (100% solution)

Melting Point/Freezing Point -94.2 °C (-137.6 °F) (melting); -94.2 °C (-137.6 °F) (freezing)

**Initial Boiling Point/Range** 56.1 °C (133.0 °F)

Flash Point -18.5 °C (-1.3 °F) (closed cup)

**Evaporation Rate** 5.6 (n-butyl acetate = 1)

Flammability (solid, gas) Not applicable

Upper/Lower Flammability or

Explosive Limit

12.8% (upper); 2.5% (lower)

Vapour Pressure 180.8 mm Hg (24.1 kPa)

Vapour Density (air = 1) 2

Relative Density (water = 1) 0.791 at 20 °C

**Soluble** in water; Soluble in all proportions in alcohols (e.g. ethanol).

Partition Coefficient, -0.24 at 20 °C

n-Octanol/Water (Log Kow)

Auto-ignition Temperature 464.85 °C (868.73 °F)

**Decomposition Temperature** Not available

Viscosity 0.40 mm2/s at 20 °C (kinematic); 0.32 mPa.s at 20 °C (dynamic)

Other Information

Physical State Liquid Molecular Weight 58.09

# **SECTION 10. STABILITY AND REACTIVITY**

#### Reactivity

Not reactive under normal conditions of use.

## **Chemical Stability**

Normally stable.

## **Possibility of Hazardous Reactions**

None known.

**Conditions to Avoid** 

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Open flames, sparks, static discharge, heat and other ignition sources. Sunlight. Temperatures above -20.0 °C (-4.0 °F)

## **Incompatible Materials**

Reacts violently with: strong oxidizing agents (e.g. perchloric acid), strong reducing agents (e.g. hydrides). Reacts explosively with: oxidizing agents (e.g. peroxides), strong acids (e.g. hydrochloric acid). Not corrosive to metals.

#### **Hazardous Decomposition Products**

Very toxic carbon monoxide, carbon dioxide; very toxic, flammable formaldehyde; irritating chemicals.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

# **Likely Routes of Exposure**

Inhalation; skin absorption; eye contact; ingestion.

# **Acute Toxicity**

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Acetone	18600 ppm (male mouse) (4-hour exposure)	5245 mg/kg (male mouse)	> 15800 mg/kg (rabbit)

#### Skin Corrosion/Irritation

Animal tests show very mild irritation.

## Serious Eye Damage/Irritation

Human experience and animal tests show serious eye irritation. The vapour also irritates the eyes. Symptoms include sore, red eyes, and tearing.

# STOT (Specific Target Organ Toxicity) - Single Exposure

#### Inhalation

May be harmful based on human experience. Nose and throat irritation, depression of the central nervous system. A severe exposure can cause unconsciousness.

#### **Skin Absorption**

No information was located.

## Ingestion

May be harmful based on human experience. Depression of the central nervous system.

#### **Aspiration Hazard**

May be drawn into the lungs (aspirated) if swallowed or vomited. Death can result.

# STOT (Specific Target Organ Toxicity) - Repeated Exposure

Causes If inhaled: effects on the central nervous system, effects similar to STOT (Specific Target Organ Toxicity) - Single Exposure, as described above.

Causes Following skin contact: dermatitis. Symptoms may include dry, red, cracked skin (dermatitis).

## Respiratory and/or Skin Sensitization

Not a skin sensitizer. No information was located.

#### Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Acetone	Not Listed	A4	Not Listed	Not Listed

Key to Abbreviations

A4 = Not classifiable as a human carcinogen.

# **Reproductive Toxicity**

#### **Development of Offspring**

Animal studies show effects on the offspring. If inhaled: known to cause: decreased weight. Embryotoxic (late resorptions) however, these effects are only seen with significant toxicity in the mothers.

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mothers. If swallowed: has been associated with: decreased weight. Embryotoxic (late resorptions)

May harm the unborn child. However, these effects are only seen with significant toxicity in the mothers. If inhaled: has been associated with: miscarriage.

## **Sexual Function and Fertility**

Animal studies show effects on sexual function and/or fertility. However, these effects were seen in the presence of significant other toxicity. If swallowed: known to cause: reduced male fertility.

May cause effects on sexual function and/or fertility. However, these effects were seen in the presence of significant other toxicity. Has been associated with: effects in men and women.

#### Effects on or via Lactation

Does not cause effects on or via lactation.

#### **Germ Cell Mutagenicity**

Conclusions cannot be drawn from the limited studies available.

#### **Interactive Effects**

No information was located.

# **SECTION 12. ECOLOGICAL INFORMATION**

# **Toxicity**

## **Acute Aquatic Toxicity**

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Acetone	8300 mg/L (Lepomis macrochirus (bluegill))	Not available		

## **Chronic Aquatic Toxicity**

Chemical Name	NOEC Fish	EC50 Fish	NOEC Crustacea	EC50 Crustacea
Acetone	Not available		Not available	

#### Persistence and Degradability

Expected to be removed rapidly from aquatic environments by evaporation.

#### **Bioaccumulative Potential**

Fish Bioconcentration Factor: 3

N-Octanol/Water Partition Coefficient (Log Kow): -0.24.

#### **Mobility in Soil**

No information was located.

#### Other Adverse Effects

There is no information available.

# **SECTION 13. DISPOSAL CONSIDERATIONS**

## **Disposal Methods**

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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## **SECTION 14. TRANSPORT INFORMATION**

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	1090	ACETONE	3	II
Canadian TDG	1090	ACETONE	3	II

**Environmental** Hazards

Not applicable

Special Precautions

Please note: In containers of 1 L (1Kg) capacity or less this product is classified as a "Limited

for User Quantities""Consumer Commodity" under TDG regulations.

U.S. DOT IB2, T4, TP1

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

# **SECTION 15. REGULATORY INFORMATION**

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

Listed on the DSL.

**USA** 

Toxic Substances Control Act (TSCA) Section 8(b)

Listed on the TSCA Inventory.

**Additional USA Regulatory Lists** 

New Jersey Right To Know: F3.

## **SECTION 16. OTHER INFORMATION**

NFPA Rating Health - 1 Flammability - 3 Instability - 0

SDS Prepared By Compliance and Regulatory Department

**Phone No.** 905-878-5544 **Date of Preparation** July 06, 2015

Additional Information We are committed to uphold the Industry Consumer Ingredient Communication Voluntary

Initiative.

Please send us your request by visiting our website at www.recochem.com.

Ingredients present (intentionally added ingredients) at a concentration of greater than one percent (1%) shall be listed in descending order of predominance. Ingredients present at a concentration of not more than one percent shall be listed but may be disclosed without

respect to order of predominance.

**Disclaimer** Notice to reader: To the best of our knowledge, the information contained herein is accurate.

However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are

described herein, we cannot guarantee that these are the only hazards that exist.

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