

Acetone

SECTION 1. IDENTIFICATION

Product Identifier	Acetone
Other Means of Identification	Dimethyl Ketone, Dimethyl Formaldehyde, Propanone, Propan-2-one
Product Code(s)	AC4110, AC4120, AC4121, AC4140, AC4150, AA1596
Product Family	Organic
Recommended Use	Laboratory and industrial solvent.
Restrictions on Use	None known.
Supplier Identifier	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
Emergency Phone No.	Infotrac, 1-800-535-5053, 24 Hours
SDS No.	0017
Date of Preparation	July 06, 2015

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015).

Classification

Flammable liquid - Category 2; Skin irritation - Category 3; Eye irritation - Category 2B; Specific target organ toxicity (single exposure) - Category 3

Label Elements



Signal Word:
Danger

Hazard Statement(s):

Highly flammable liquid and vapour.
Causes mild skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.

Precautionary Statement(s):

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Avoid breathing dust/fume/gas/mist/vapours/spray.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Acetone	67-64-1	> 99	Dimethyl Ketone, Dimethyl Formaldehyde, Propanone

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms (e.g. coughing, shortness of breath, wheezing), call a Poison Centre or doctor.

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.

Eye Contact

Quickly and gently blot or brush chemical off the face. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face.

Ingestion

NEVER give anything by mouth if victim is rapidly losing consciousness, is unconscious or convulsing. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. If vomiting occurs naturally, have victim rinse mouth with water again. Immediately obtain medical attention. Specific treatment is required.

First-aid Comments

Some of the first-aid procedures recommended here require advanced first-aid training. If exposed or concerned, get medical advice or attention.

Most Important Symptoms and Effects, Acute and Delayed

Contact causes severe burns with redness, swelling, pain and blurred vision. Permanent damage including blindness can result.

Immediate Medical Attention and Special Treatment

Special Instructions

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Unsuitable Extinguishing Media

Water is not effective for extinguishing a fire. It may not cool product below its flash point.

Specific Hazards Arising from the Product

May travel a considerable distance to a source of ignition and flash back to a leak or open container. Can be ignited by static discharge. Even dilute solutions in water may be flammable.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide; very toxic, flammable formaldehyde.

Special Protective Equipment and Precautions for Fire-fighters

Fight fire from a protected, explosion-resistant location or maximum distance possible. Stop leak before attempting to put out the fire. Product could form an explosive mixture and reignite. If the leak cannot be stopped, let the fire burn itself out. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

Product Identifier: Acetone

Date of Preparation: July 06, 2015

Page 02 of 06

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Remove or isolate incompatible materials as well as other hazardous materials. Eliminate all ignition sources. Use grounded, explosion-proof equipment. Use the personal protective equipment recommended in Section 8 of this safety data sheet.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

Methods and Materials for Containment and Cleaning Up

Contain and soak up spill with absorbent that does not react with spilled product. Stop or reduce leak if safe to do so. Place used absorbent into suitable, covered, labelled containers for disposal. Large spills or leaks: contact emergency services and manufacturer/supplier for advice.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not breathe in this product. Prevent skin contact. Only use where there is adequate ventilation. Eliminate heat and ignition sources such as sparks, open flames, hot surfaces and static discharge. Post "No Smoking" signs. Electrically bond and ground equipment. Ground clips must contact bare metal. Immediately report leaks, spills or failures of the safety equipment (e.g. ventilation system).

Conditions for Safe Storage

Store in an area that is: cool, well-ventilated, out of direct sunlight and away from heat and ignition sources. Store in a closed container. Clear of combustible and flammable materials (e.g. old rags, cardboard). Electrically bond and ground containers. Ground clips must contact bare metal. Avoid bulk storage indoors.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

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

Consult local authorities for provincial or state exposure limits.

Appropriate Engineering Controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

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.

Suitable materials are: butyl rubber, Barrier® (PE/PA/PE), Silver Shield/4H® (PE/EVAL/PE), polyethylene, polyvinyl alcohol, Trelchem® HPS, Trelchem® VPS, Tychem® BR/LV, Tychem® Responder, Tychem® TK.

Respiratory Protection

Wear a NIOSH approved air-purifying respirator with an organic vapour cartridge, wear a NIOSH approved air-purifying respirator with an appropriate cartridge, wear a powered air-purifying respirator with an appropriate cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Colourless volatile liquid.
Odour	Fruity
Odour Threshold	Not available

Product Identifier: Acetone

Date of Preparation: July 06, 2015

Page 03 of 06

pH	Not available
Melting Point/Freezing Point	-94.7 °C (-138.5 °F) (melting); -94 °C (freezing)
Initial Boiling Point/Range	56.1 °C
Flash Point	-20 °C (closed cup)
Evaporation Rate	> 1 (n-butyl acetate = 1)
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limit	12.8% (upper); 2.5% (lower)
Vapour Pressure	180 mm Hg
Vapour Density (air = 1)	2.9
Relative Density (water = 1)	0.791 at 20 °C
Solubility	Soluble in all proportions in water
Partition Coefficient, n-Octanol/Water (Log Kow)	-0.24
Auto-ignition Temperature	465 °C
Decomposition Temperature	Not available
Viscosity	0.40 centistokes at 20 °C (kinematic); 0.32 centipoises at 20 °C (dynamic)
Other Information	
Physical State	Liquid
Molecular Weight	58.08

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

Sunlight. High temperatures. Open flames, sparks, static discharge, heat and other ignition sources.

Incompatible Materials

Reducing agents (e.g. hydroquinone), strong bases (e.g. sodium hydroxide), strong oxidizing agents (e.g. perchloric acid), halogenated compounds (e.g. trichloroethylene), inorganic acids (e.g. hydrofluoric acid), organic acids (e.g. acetic acid).

Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Acetone	16000 mg/m ³ (rat) (4-hour exposure)	7400 mg/kg (rat)	20,000 mg/kg (rabbit)

Skin Corrosion/Irritation

Animal tests show very mild irritation.

Product Identifier: Acetone

Date of Preparation: July 06, 2015

Page 04 of 06

Serious Eye Damage/Irritation

Animal tests show serious eye irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure**Inhalation**

May cause depression of the central nervous system.

Skin Absorption

No information was located.

Ingestion

Irritation of the mouth, throat and stomach, harmful effects on the liver.

Aspiration Hazard

May cause lung damage if aspirated based on existing animal tests and physical and chemical properties.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

No data available. Conclusions cannot be drawn from the limited studies available.

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer. Not known to be a skin sensitizer.

Carcinogenicity

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

Conclusions cannot be drawn from the limited studies available.

Reproductive Toxicity**Development of Offspring**

No information was located.

Sexual Function and Fertility

No information was located.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

This section is not required by OSHA HCS 2012. This section is not required by WHMIS.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal Methods**

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction. Bury in a licensed landfill or burn in an approved incinerator according to federal, provincial/state, and local regulations.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	UN1090	Acetone	3	II

Environmental Hazards Not applicable

Product Identifier: Acetone

Date of Preparation: July 06, 2015

Special Precautions Not applicable

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

WHMIS 1988 Classification

B2 - Flammable Liquid; D2B - Toxic (Eye irritant)

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.

SECTION 16. OTHER INFORMATION

NFPA Rating **Health - 2** **Flammability - 3**

SDS Prepared By Alphachem Limited

Phone No. (905)-821-2995

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