

ACETONE

434-LIQUID

Safety Data Sheet

Section 1: Product and Company Identification

Product Identifier and Other Means of Identification

Product Name: Acetone**SDS Code:** 434-Liquid**Related Part #** 434-1L, 434-4L

Recommended Use and Restriction on Use

Use: Solvent**Uses Advised Against:** Not applicable

Details of Manufacturer or Importer

Manufacturer

MG Chemicals
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADA

MG Chemicals (Head Office)
9347-193 Street
Surrey, British Columbia V4N 4E7
CANADA

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Emergency Phone Number

For hazardous material incidents ONLY—leaks, spills, fires, exposures or accidents
USA or CANADA: Call CHEMTREC ☎: **+1-800-424-9300**

For emergencies involving dangerous goods—Collect 24/7
CANADA: Call CANUTEC ☎: **+1-613-996-6666** or ***666** on cellular phones

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Section 2: Hazard(s) Identification



Classification of Hazardous Chemical

GHS Categories

Criteria	Category	Signal Word	Pictograms
Flammable Liquid	2	Danger	Flame
Eye irritation	2A	Warning	Exclamation
Specific Target Organ Toxicity Single Exposure	3	Warning	Exclamation

Note: The degree of severity is ranked within each hazard class from 1 (Highest Severity) to up to 5 (Lowest Severity). Severity categories rankings do not allow comparisons between classes.

Label Elements

Signal Word	DANGER
Pictograms	Hazard Statements
	H225: Highly flammable liquid and vapor
	H319: Causes serious eye irritation H336: May cause drowsiness and dizziness
Prevention	Precautionary Statements
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof equipment.
P243	Take action to prevent static discharges.
P261	Avoid breathing vapors/mist/spray.
P271	Use only outdoors or in well-ventilated area.
P264	Wash hands thoroughly after handling.

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Prevention	Precautionary Statements
P280	Wear protective gloves/protective clothing/eye protection.
Response	Precautionary Statements
P370 + P378	In case of fire: Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P304 + P340, P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE/doctor if you feel unwell.
Storage	Precautionary Statements
P403 + P235	Store in well ventilated place. Keep cool.
P405	Store locked up.
Disposal	Precautionary Statements
P501	Dispose of contents/container in accordance to local/regional/international regulations.

Hazards Not Otherwise Classified

Other Criteria	Hazard Statements/Precautionary Statement	Signal Word	Pictograms
Defats skin	Repeated exposure may cause skin dryness or cracking.	None	None

Section 3: Composition/Information on Ingredients

CAS #	Chemical Name	%(weight)
67-64-1	acetone	100%

ACETONE**434-LIQUID****Section 4: First-Aid Measures**

<i>Exposure Condition</i>	<i>GHS Code: Precautionary Statement</i>
IF ON SKIN (or hair)	P303 + P361 + P353
Immediate Symptoms	<i>dry skin</i>
Response	Take off immediately all contaminated clothing. Rinse skin with water or shower.
IF IN EYES	P305 + P351 + P338, P337 + P313
Immediate Symptoms	<i>severe irritation, redness, pain</i>
Response	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention
IF INHALED	P304 + P340, P312
Immediate Symptoms	<i>cough, sore throat, nausea, headache, drowsiness, dizziness, unconsciousness</i>
Response	Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing. Call a POISON CENTRE/doctor if you feel unwell.
IF SWALLOWED	P301 + P330, P331
Immediate Symptoms	<i>nausea, dizziness, headaches, weakness</i>
Response	Rinse mouth. Do NOT induce vomiting.

Section 5: Fire-Fighting Measures

Extinguishing Media In case of fire: Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish.

Use water spray to cool containers.

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Specific Hazards	The vapors are heavier than air and may accumulate in low-lying areas. Vapors may travel long distances and ignite at an ignition source, which can cause a flashback or an explosion.
Combustion Products	Produces carbon oxides (CO, CO ₂).
Fire-Fighter	Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

Section 6: Accidental Release Measures

Personal Protection	See personal protection equipment in Section 8.
Precautions for Response	Avoid breathing the mist/spray/vapors. Remove or keep away all sources of ignition or extreme heat.
Environmental Precautions	Prevent spill from entering drains and waterways.
Containment	Contain with inert absorbent (such as soil, sand, vermiculite).
Cleaning	Collect the liquid in a sealable, chemical-resistant container. Sprinkle inert absorbent compound onto spill, then sweep into the container. Use soap and water to remove the last traces of residue. RECOMMENDATION: Use a grounded stainless steel or carbon steel container.
Disposal Methods	Dispose of spill waste according to Section 13.

Section 7: Handling and Storage

Prevention	Keep out of reach of children. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Ground and bond container and receiving equipment. Take action to prevent static discharges. Use explosion-proof equipment. Keep container tightly closed. Avoid breathing vapors/mist/spray. Use only outdoors or in a well-ventilated area.
Handling	Wear protective gloves/protective clothing/eye protection. Wash hands thoroughly after handling.
Storage	Store in a well-ventilated area. Keep cool. Store locked up.

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Section 8: Exposure Controls/Personal Protection

Substances with Occupational Exposure Limit Values

Chemical Name	Country	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
acetone	ACGIH	500 ppm	750 ppm
	U.S.A. OSHA PEL	1 000 ppm	Not established
	Canada AB	500 ppm	750 ppm
	Canada BC	250 ppm	500 ppm
	Canada ON	500 ppm	750 ppm
	Canada QC	750 ppm	1 000 ppm

Note: The ACGIH¹, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from by RTECS² database and data from suppliers' SDS were also consulted. Short term exposure limits (STEL) are for 15 min and long term permissible exposure limits (PEL) for 8 h.

Engineering Controls

Ventilation Keep airborne concentrations below the occupational exposure limits (OEL).

Personal Protective Equipment

Eye protection Wear appropriate protective eyeglasses or chemical safety goggles.

RECOMMENDATION: Use safety glasses with lateral protection (side shields).

Skin Protection For likely contacts, use of protective butyl rubber, fluorinated rubber, or other chemically resistant gloves.

For incidental contacts, use neoprene, natural latex rubber, or other chemically resistant gloves.

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Respiratory Protection

For over-exposures up to 10 x OEL of mist/vapors/spray, wear respirator such as a half-mask respirator with organic vapor cartridges.

Above 10 x OEL, use a positive-pressure, air-supplied respirator or a self-contained breathing apparatus.

RECOMMENDATION: Consult your local safety supply store to ensure that your respirator has a NIOSH (U.S.) approved filter cartridges appropriate for the ingredients listed in Section 3. The respirator should be fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when not being used.

General Hygiene Considerations

Wash hands thoroughly with water and soap after handling.

Section 9: Physical and Chemical Properties

Physical State	Liquid	Lower Flammability Limit	2.5%
Appearance	Colorless	Upper Flammability Limit	12.8%
Odor	Ketone-like	Vapor Pressure @20 °C	243 hPa [182 mmHg]
Odor Threshold	4.58 ppm	Vapor Density	2.01 (Air = 1)
pH	Not available	Specific Gravity @25 °C	0.79
Freezing/Melting Point	-94 °C [-137 °F]	Solubility in Water	Miscible
Boiling Point	≥56 °C [≥133 °F]	Partition Coefficient	Not available
Flash Point ^{a)}	-17°C [1.4 °F]	Auto-ignition Temperature	465 °C [869 °F]
Evaporation Rate	6.3 (ButAc = 1)	Decomposition Temperature	Not available
Flammability (solid, gas)	Not available	Viscosity @40 °C	<20.5 mm ² /s

a) Closed cup value

ACETONE**434-LIQUID****Section 10: Stability and Reactivity**

Reactivity	Acetone reacts exothermically with phosphorous oxychloride, which can lead to an explosion.
Chemical Stability	Chemically stable at normal temperatures and pressures
Conditions to Avoid	Avoid flames, sparks, other ignition sources and incompatible substances.
Incompatibilities	Phosphorous oxychloride, strong oxidizing agents, strong bases
Polymerization	Will not occur
Decomposition	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5.

Section 11: Toxicological Information**Routes of Exposure**

Eye Contact, Inhalation, Skin Contact, and Ingestion

Symptoms Summary

Eyes	Causes redness, serious eye irritation, and pain.
Skin	May cause dry skin.
Inhalation	May cause cough, sore throat, nausea, headache, and drowsiness, dizziness. Severe overexposure may lead to unconsciousness.
Ingestion	May cause nausea, weakness, headaches (see also inhalation symptoms).
Chronic	Prolonged or repeated exposure may cause skin dryness, cracking, as well as defatting the skin.

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ACETONE**434-LIQUID****Acute Toxicity (Lethal Exposure Concentrations)**

Chemical Name	LD50 oral	LD50 dermal	LC50 inhalation
acetone	5 800 mg/kg Rat	20 mL/kg Rabbit ^{a)}	16 000 ppm 4 h Rat ^{a)}

Note: Toxicity data from the RTECS² and ECHA were consulted. The data from supplier (M)SDS were also consulted.

a) Supplier safety data sheet

Other Toxicological Effects

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation Acetone is a known serious eye irritant.

Sensitization
(allergic reactions) Based on available data, the classification criteria are not met.

Carcinogenicity
(risk of cancer) Based on available data, the classification criteria are not met.

Mutagenicity
(risk of heritable genetic effects) Based on available data, the classification criteria are not met.

Reproductive Toxicity
(risk to sex functions) Based on available data, the classification criteria are not met.

Teratogenicity
(risk of fetus malformation) Based on available data, the classification criteria are not met.

STOT-single exposure Acetone can affect the central nervous system by inhalation causing drowsiness or dizziness.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met. There are no category 1 components.

ACETONE**434-LIQUID****Section 12: Ecological Information**

Ecological classifications are based on the IMDG/GHS criteria in conjunction with ecotoxicological data from our suppliers, the European Chemical Agency database (<http://echa.europa.eu>), and other reliable sources.

Acetone does not meet classification criteria for aquatic environmental toxicants with LC50 and EC50 of >100 mg/L.

- Acetone has a minimal LC50 96 h of 5 540 mg/L for *Oncorhynchus mykiss* (rainbow trout) and an EC50 48 h of 13 500 mg/L for *Daphnia magna* (water flea).

Acute Ecotoxicity

Available toxicity data does not meet classification thresholds.

Chronic Ecotoxicity

Available toxicity data does not meet classification thresholds.

Biodegradability

Not available

Other Effects

Volatile Organic Content (VOC) = 0% [0 g/L] by VOC-Exemption

Section 13: Disposal Information

Dispose of contents in accordance with all local, regional, national, and international regulations.

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Section 14: Transport Information

Ground

Refer to TDG regulations (Canadian Transportation of Dangerous Goods regulations);
USA DOT 49 CFR (Parts 100 to 185) **Regulations.**

Sizes 1 L and under

Limited Quantity



Sizes greater than 1 L

UN number: UN1090
Shipping Name: ACETONE
Class: 3
Packing Group: II
Marine Pollutant: No
Flash Point = -17°C [1.4 °F]



Air

Refer to ICAO-IATA Dangerous Goods Regulations.

Sizes 0.5 L and under

Limited Quantity

Max Net Qty/Pkg =
1 L



Sizes greater than 0.5 L
up to 5 L (passenger), 60 L (cargo)

UN number: UN1090
Shipping Name: ACETONE
Class: 3
Packing Group: II
Marine Pollutant: No
Flash Point = -17°C [1.4 °F]



Sea

Refer to IMDG regulations.

Sizes 5 Land under

Limited Quantity



Sizes greater than 5 L

UN number: UN1090
Shipping Name: ACETONE
Class: 3
Packing Group: II
Marine Pollutant: No
Flash Point = -17°C [1.4 °F]



Note: Shipper must be appropriately trained and certified before involvement with the transport of dangerous goods.

ACETONE**434-LIQUID****Section 15: Regulatory Information****Canada****Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)**

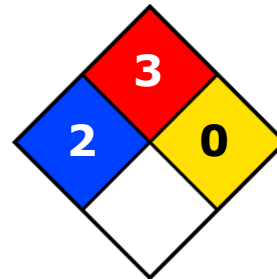
All hazardous ingredients are listed on the DSL.

Industry and Science Canada

MG Labels products intended for the workplace to conform to WHMIS labeling regulations. Product identification, net quantity declaration, minimum printing type size heights, and packaging of this product are in compliance.

USA**Other Classifications****HMIS® RATING**

HEALTH:	*	2
FLAMMABILITY:		3
PHYSICAL HAZARD:		0
PERSONAL PROTECTION:		

NFPA® 704 CODES

Approximate HMIS and NFPA Risk Ratings Legend:

0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

CAA (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product does not contain substances that are listed as hazardous air pollutants.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product contains acetone (CAS# 67-64-1), which is subject to the CERCLA reporting requirements at the 5000 lb (2268 kg) threshold.

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ACETONE**434-LIQUID****TSCA** (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity, June 06, 2014 revision, USA).

This product does not contain any substances known to be listed in California.

Europe**RoHS** (Restriction of Hazardous Substances Directive)

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, and complies with European RoHS regulations.

WEEE (Waste Electrical and Electronic Equipment Directive)

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

Section 16: Other Information

SDS Prepared by	Michel Hachey
Date of Revision	06 April 2016
Supersedes	07 November 2014
Reason for Changes:	Changes to better meet HCS 2012 and WHMIS 2015 requirements.

Reference

- 1) ACGIH 2013 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2013).
- 2) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)

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ACETONE**434-LIQUID****Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists (USA)
ECHA	European Chemicals Agency
EU	European Union
EC50	Half maximal effective concentration
EL50	Half maximal effective loading
IARC	International Agency for Research on Cancer
NOELR	No observable effect loading ratio
NTP	National Toxicology Program
GHS	Globally Harmonized System of Classification of Labeling of Chemicals
LC50	Lethal Concentration 50%
LCLo	Lowest published lethal concentration
LD50	Lethal Dose 50%
OEL	Occupational Exposure Limit
PEL	Permissible Exposure Limit
SDS	Safety Data Sheet
STEL	Short-Term Exposure Limit
TCLo	Lowest published toxic concentration
TWA	Time Weighted Average
VOC	Volatile Organic Content

Technical Queries Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at www.mgchemicals.com.

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