

## Section 1 Chemical Product and Company Identification

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5100 West Henrietta Rd  
PO Box 92912  
Rochester, NY 14692-9012  
Tel: (800) 962-2660

Boreal Science  
399 Vansickle Road  
St. Catharines, Ontario  
L2S 3T4 Canada  
Tel: (800) 387-9393

**CHEMTREC 24 Hour Emergency USA**  
**Phone Number (800) 424-9300**  
For laboratory and industrial use only.  
Not for drug, food or household use.

<b>Product</b>	ACETONE
<b>Synonyms</b>	2-Propanone / Dimethyl Ketone / Solvent

## Section 2 Hazards Identification

**Signal word:** DANGER  
**Pictograms:** GHS02 / GHS07  
**Target organs:** Central nervous system



**GHS Classification:**  
Flammable liquid (Category 2)  
Eye irritation (Category 2A)  
STOT-SE (Category 3)

**GHS Label information: Hazard statement:**  
H225: Highly flammable liquid and vapour.  
H319: Causes serious eye irritation.  
H336: May cause drowsiness or dizziness.

**Supplemental information:**  
Repeated exposure may cause skin dryness or cracking.

**Precautionary statement:**

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P240: Ground/bond container and receiving equipment.  
P241: Use explosion-proof electrical/ventilating/lighting equipment.  
P242: Use only non-sparking tools.  
P243: Take precautionary measures against static discharge.  
P261: Avoid breathing mist/vapours/spray.  
P264: Wash hands thoroughly after handling.  
P271: Use only outdoors or in a well-ventilated area.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
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 attention.  
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.  
P312: Call a POISON CENTER or doctor if you feel unwell.  
P370+P378: In case of fire: Use dry chemical, alcohol foam, carbon dioxide or water spray to extinguish.  
P403+P233: Store in a well-ventilated place. Keep container tightly closed.  
P405+P235: Store locked up. Keep cool.  
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

**Hazards not otherwise classified:**

Health hazards not otherwise classified (HHNOC) - Not Known  
Physical hazards not otherwise classified (PHNOC) - Not Known

## Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Acetone	67-64-1	100%	200-662-2

## Section 4 First Aid Measures

**INGESTION:** HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** CAUSES SEVERE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN ABSORPTION:** REPEATED OR PROLONGED CONTACT MAY CAUSE DRYING AND DEFATTING OF SKIN. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Carbon dioxide, dry chemical, dry sand, alcohol foam.

**Protective Actions for Fire-fighters:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

**Specific Hazards:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Acetone is extremely flammable and its vapors form explosive mixtures with air. Dangerous when exposed to heat, sparks, flame or oxidizing agents.

## Section 6 Accidental Release Measures

**Personal Precautions:** Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

**Environmental Precautions:** Avoid runoff into storm sewers and ditches which lead to waterways.

**Containment and Cleanup:** Remove all sources of ignition. Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

**Precautions for Safe Handling:** Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Conditions for Safe Storage:** Store in a cool, well-ventilated area away from incompatible substances. Keep away from ignition sources.

## Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Acetone	TWA: 500 ppm; STEL: 750 ppm	TWA: 1000 ppm / 2400 mg/m <sup>3</sup>	TWA: 250 ppm / 590 mg/m <sup>3</sup>

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

## Section 9 Physical &amp; Chemical Properties

<b>Appearance:</b> Clear, colorless liquid.	<b>Evaporation rate ( Butyl acetate = 1):</b> 7.7	<b>Partition coefficient:</b> (n-octanol / water): Log Pow: -.24
<b>Odor:</b> Pungent odor.	<b>Flammability (solid/gas):</b> Data not available.	<b>Auto-ignition temperature:</b> 465°C (869°F)
<b>Odor threshold:</b> Data not available.	<b>Explosion limits: Lower / Upper:</b> 2.5% / 12.8%	<b>Decomposition temperature:</b> Data not available.
<b>pH:</b> Data not available.	<b>Vapor pressure (mm Hg):</b> 180	<b>Viscosity:</b> Data not available.
<b>Melting / Freezing point:</b> Approximately -95°C (-139°F)	<b>Vapor density (Air = 1):</b> 2.00	<b>Molecular formula:</b> CH <sub>3</sub> COCH <sub>3</sub>
<b>Boiling point:</b> 56°C (133°F)	<b>Relative density (Specific gravity):</b> 0.8	<b>Molecular weight:</b> 58.08
<b>Flash point:</b> -20°C (-4°F) CC	<b>Solubility(ies):</b> Soluble in water.	

## Section 10 Stability &amp; Reactivity

**Chemical stability:** Stable

**Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Excessive temperatures, heat, sparks, open flame and other sources of ignition.

**Incompatible materials:** Chloroform, chromic anhydride, hydrogen peroxide, nitric compounds, acids, strong oxidizers, alkalies.

**Hazardous decomposition products:** Oxides of carbon.

## Section 11 Toxicological Information

**Acute toxicity:** Oral-rat LD50: 5,800 mg/kg ; Inhalation-rat LC50: 76 mg/L/4 hours

**Skin corrosion/irritation:** Skin-rabbit - Slight irritant.

**Serious eye damage/irritation:** Eyes-rabbit - Severe irritant.

**Respiratory or skin sensitization:** Data not available

**Germ cell mutagenicity:** Data not available

**Carcinogenicity:** Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** Data not available

**STOT-single exposure:** The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

**STOT-repeated exposure:** Data not available

**Aspiration hazard:** Data not available

**Potential health effects:**

Inhalation: Inhalation may cause cough, sore throat, confusion, headache, dizziness, drowsiness, unconsciousness.

Ingestion: Ingestion causes nausea, vomiting, and other symptoms same as inhalation.

Skin: Contact with skin causes irritation, dry and/or defatting on prolonged contact.

Eyes: Contact with eyes causes redness, pain and blurred vision.

**Signs and symptoms of exposure:** See Potential health effects above. Exercise appropriate procedures to minimize potential hazards.

**Additional information:** RTECS #: AL3150000

## Section 12 Ecological Information

**Toxicity to fish:** Gambusia affinis (fish, fresh water), LC50 = 13,000 mg/L/48 hours

**Toxicity to daphnia and other aquatic invertebrates:** Daphnia cucullata (Crustacea), EC50 = ca. 7,635 mg/L/48 hours

**Toxicity to algae:** Anabaena inaequalis (Algae), EC50 = 21,725 mg/L/14 days

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and vPvB assessment:** No data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

## Section 14 Transport Information (US DOT / CANADA TDG)

**UN/NA number:** UN1090

**Shipping name:** Acetone

**Hazard class:** 3

**Packing group:** II

**Reportable Quantity:** 5,000 lbs (2270 kg)

**Marine pollutant:** No

**Exceptions:** Limited quantity equal to or less than 1 L

**2016 ERG Guide #** 127

## Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Acetone	Listed	5,000 lbs (2270 kg)	U002	Listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

## Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.