# SAFETY DATA SHEET

# ACETIC ACID, GLACIAL

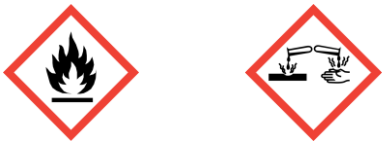
## SECTION 1: CHEMICAL AND COMPANY IDENTIFICATION

**BioShop Canada Inc.**
**5480 Mainway**
**Burlington, Ontario L7L 6A4**
**1-800-234-1179**
**Emergency Telephone No.: 1-905-466-3832**
**Chemical Name:** Acetic Acid, Glacial
**Catalog Number:** ACE222/ACE333

## SECTION 2 HAZARDS IDENTIFICATION

GHS Classification:
Flammable liquids: (category 3)
Acute Toxicity (category 5)
Skin corrosion (category 1A)
Serious eye damage (category 1)

Pictogram



Signal word DANGER

Hazard statements:
H226 Flammable liquid and vapour
H303 May be harmful if swallowed
H314 causes severe skin burns and eye damage

Precautionary statements
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.
P303+P361+P353- IF ON SKIN (or hair): take off immediately all contaminated clothing. Rinse skin with water.
P305+P340+P312- IF INHALED: remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell
P310 Immediately call a POISON CENTR or doctor/physcian.

**Eyes**: Causes severe eye burns. Contact with liquid or vapor causes severe burns and possible irreversible eye damages.
**Skin**: Causes severe burns with delayed tissue destruction.
**Ingestion**: May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. Causes severe pain, nausea, vomiting, diarrhea and shock.
**Inhalation:** Effects may be delayed. May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. Causes chemical burns to the respiratory tract .Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.

**CHRONIC HEALTH HAZARDS:** Prolonged or repeated skin contact may cause dermatitis. Repeated inhalation may cause chronic bronchitis.

## SECTION 3 COMPOSITION/ INGREDIENTS

| | CAS # | RTECS | % |
|---|---|---|---|
| **Acetic Acid** | **64-19-7** | **AF1225000** | **99.7%** |

Molecular Formula: C2H4O2
Molecular weight: 6005g/mol

## SECTION 4 FIRST AID MEASURES

**Eyes: Immediately flush w**ith plenty of water for at least 15 minutes. GET MEDICAL ATTENTION
**Skin**: Immediately flush area with soap and water. GET MEDICAL ATTENTION.
**Inhalation**: Get medical aid immediately. Remove from exposure to fresh air. If not breathing give artificial respiration.If breathing is difficult, give oxygen.
**Ingestion**: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. GET MEDICAL ATTENTION.

## SECTION 5 FIRE FIGHTING MEASURES

**Reactive with most metas to form highly flammable hydrogen gas. May form explosive mixtures with air. Vapors can cause flash backs.**
**Flammable**: Yes
**Flash Point**: 39°C
**Autoignition temperature:** 426C
**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, water spray or
alcohol resistant foam. Use water spray to cool fire exposed containers.
**Explosion Data**: Lower: 4.0 vol%, Upper: 19.0 vol%

## SECTION 6 ACCIDENTAL RELEASE MEASURES

Ventilate the area. Wear appropriate protective equipment. Sweep and place in a closed container. In the event of a fire always wear self-contained breathing apparatus, NIOSH/MSHA approved or equivalent.
**Leak and Spill Procedures**: Ventilate the area. Wear appropriate protective equipment. Cover with dry lime or soda. Sweep and place in a closed container

## SECTION 7 HANDLING AND STORAGE

**Handling**: Avoid contact. Do not get in eyes, on skin, or clothing. Wash

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thoroughly after handling. Wash contaminated clothing before reuse. Do not spill. Do not breathe vapor. Keep away form heat or open flames.
**Storage Conditions**: Room temperature. Keep away form heat and ignition sources.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure limits:**
ACGIH: 10 ppm TWA, 15 ppm STEL
NIOSH: 10 ppm; 25 mg/m3 TWA
OSHA: 10 ppm TWA; 25 mg/m3 TWA
Use adequate ventilation. AVOID SPILLING.
Wear appropriate protective equipment to prevent eye and skin exposure.
Wear appropriate respirator to prevent lung irritation.
**Personal Protection**: Lab coat, safety goggles, rubber gloves.
**Ventilation:** Local exhaust systems. Use fume hood
**Respiratory protection**: use OSHA/MSHA approved respirator.
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## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Physical State**: Liquid
**Appearance and Odor**: APHA: 10 max., pungent (vinegar) odor.
**Melting Point**: 16.00 - 16.50 °C
**Boiling Point**: 117.0 – 118.0°C
**Specific Gravity**: 1.0490g/cm3
**Vapor Density**: 2.10 (air=1)
**Water Solubility**: Miscible with water
**pH**: N/A
**Decomposition Temp:** Not available
**Molecular Formula:** $C_2H_4O_2$
**Molecular Weight: 60.05**

## SECTION 10 STABILITY AND REACTIVITY:

**Stability**: Stable under normal room temperature and pressures.
Conditions to avoid: Ignition sources, open flames. Exercise caution when mixing with water due to evolution of heat which may cause splattering. Add acid to water not the reverse.
**Incompatibility**: Acetaldehyde, 2-aminoethanol, ammonium nitrate, bromine Pentafluoride, chlorine trifluoride, chlorosulfonic acid,chromic acid, chromic Anhydride + acetic anhydride, diallyl methyl carbinol +ozone, ethylenediamine, ethyleneimine, hydrogen peroxide, nitric acid, nitric acid + acetone,oleum, perchloric acid, permanganates, phosphorus isocyanate, phosphorus trichloride, potassium hydroxide, potassium-t-butoxide, sodium hydroxide, sodium peroxide and xylene.
**Hazardous Decomposition Products**: Carbon monoxide, carbon dioxide, acrid smoke and fumes.
**Hazardous Polymerization**: Has not been reported.

## SECTION 11 TOXICOLOGICAL PROPERTIES

### Exposure Limits:

LD50 / LC50:
Oral rat: LD50 = 3310 mg/kg
Inhalation, rat: LC50= 5620/24H Mild
Draize test, rabbit skin= 50mg/24H Mild

**Carcinogenicty:** No information available
**Teratogenicity**: Effects on Newborn; behavioral, orl rat TDLo=700mg/kg.
**Epidemiology:** No information available
**Reproductive Effects:** Fertility: male index, rat TDLo=400mg/kg. Orl rat TDLo 700mg/kg (18D post).
**Neurotoxicity;** No information available
**Mutagenicity:** mmo-esc 300 ppm/3H sln-dmg-orl 1000 ppm cyt-grh-Par 40 mmol/l sce-hmn-lym 5 mmol/l dns-mus-skn 79279 ug/kg oms-mus-Skn 1201 mg/kg cyt-ham-ovr 10mmol/l

## SECTION 12 ECOLOGICAL INFORMATION

Little potential for biological accumulation. Will be neutralized in a natural water environment. Fish Fathead minnow: LC50 = 88 mg/L

## SECTION 13 DISPOSAL CONSIDERATION

**Waste Disposal**: Burn in chemical incinerator. Observe all Federal, provincial and local regulations.

## SECTION 14 TRANSPORT INFORMATION

**Shipping Information:**

**DOT (USA)**
ACETIC ACID, GLACIAL, 8(3), UN 2789, II
**IMDG:**
ACETIC ACID, GLACIAL, 8(3), UN 2789, II
**IATA:**
ACETIC ACID, GLACIAL, 8(3), UN 2789, II

## SECTION 15 REGULATORY INFORMATION

**US** : TSCA: listed
**European/International**: Flammable, causes severe burns. Do not inhale gas/fumes/vapor/spray
**Canada:** WHMIS: B3, E

## SECTION 16 ADDITIONAL INFORMATION

**Hazard Rating System**

| NFPA | Health | Fire | Reactivity |
|---|---|---|---|
| | 3 | 2 | 0 |

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