

# SAFETY DATA SHEET

## ACETIC ACID, GLACIAL

### Section 1 - Chemical Product and Company Identification

**SDS Name:** Acetic Acid, Glacial

**Catalog Numbers:** SO-618, SO-788

**Company Identification:** Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.  
10 ELECTRONICS AVENUE  
DANVERS, MA 01923

**For information, call:** 978-739-4883

**Emergency Number:** 800-424-9300

**For CHEMTREC assistance, call:** 800-424-9300

### Section 2 - Hazards Identification

#### GHS Classifications

H226-Flammable liquids: 3

H290-Corrosive to metals: 1

H303-Acute toxicity, oral: 5

H314-Skin corrosion/irritation: 1A

H318-Serious eye damage/eye irritation: 1

H332-Acute toxicity, inhalation: 4

H402-Hazardous to the aquatic environment, acute toxicity: 3

#### Pictograms or Hazard symbols and Hazard statement(s):



Signal Word: Danger

## Hazard Statements:

H226-Flammable liquid and vapour  
H290-May be corrosive to metals  
H303-May be harmful if swallowed  
H314-Causes severe skin burns and eye damage  
H318-Causes serious eye damage  
H332-Harmful if inhaled  
H402-Harmful to aquatic life

## Precautionary Statements:

P210-Keep away from heat/sparks/open flames/hot surfaces.-No smoking.  
P233-Keep container tightly closed.  
P234-Keep only in original container.  
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.  
P260-Do not breathe dusts or mists.  
P261-Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264-Wash thoroughly after handling.  
P271-Use only outdoors or in a well-ventilated area.  
P273-Avoid release to the environment.  
P280-Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P331-If swallowed: Rinse mouth. Do NOT induce vomiting.  
P302+P352-If on skin: Wash with plenty of soap and water.  
P303+P361+P353-If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340-If inhaled: Remove victim to fresh air and keep at rest in a position 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.  
P310-Immediately call a Poison Center or doctor/physician.  
P312-Call a Poison Center or doctor/physician if you feel unwell.  
P363-Wash contaminated clothing before reuse.  
P370+P378-In case of fire: Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam for extinction.  
P390-Absorb spillage to prevent material damage.  
P403+P235-Store in a well-ventilated place. Keep cool.  
P405-Store locked up.  
P406-Store in corrosive resistant/container with a resistant inner liner.  
P501-Dispose of contents/container in accordance with local/regional/national/international regulations.

### Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
64-19-7	Glacial Acetic Acid	99-100

#### Section 4 - First Aid Measures

**Eye Exposure:** In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Seek immediate medical attention.

**Dermal Exposure:** In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical attention.

**Oral Exposure:** If swallowed, seek immediate medical advice. Do NOT induce vomiting. Rinse mouth with water.

**Inhalation Exposure:** If inhaled, remove to fresh air. Seek immediate medical attention.

#### Section 5 - Fire Fighting Measures

**General Information:** Containers can build up pressure if exposed to heat and/or fire. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Note: Glacial acetic acid causes burns of eyes, skin, and mucous membranes.

**Extinguishing Media:** Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam.

**Hazardous Combustion Products:** Carbon oxides, irritating toxic fumes and gases.

**Flash Point:** 40 °C

**Autoignition temperature:** 427°C

**Explosion Limits, Lower:** 4.0 vol %

**Upper:** 19.9 vol %

**NFPA Rating:** (estimated) Health: 3; Flammability: 2; Instability: 0

#### Section 6 - Accidental Release Measures

**Procedure(s) of Personal Precaution(s):**

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation. Keep away from heat. Eliminate all sources of ignition.

**Methods for Cleaning up:** Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Do not release to the environment. Do not release to drains.

#### Section 7 - Handling and Storage



**Physical State:** Liquid

**Appearance:** Clear, colorless


**Odor:** Strong, vinegar-like

**Vapor Pressure:** 1.52 kPa at 20°C

**Odor Threshold:** 0.2 ppm

**Vapor Density:** 2.10

**pH:** <2.5 at 10g/L aqueous solution

**Relative density:** 1.049 g/cm<sup>3</sup> at 25°C

**Melting point/freezing point:** 16.2°C

**Solubility:** Soluble in water

**Boiling Point:** 117-118°C

**Flash point:** 40°C

**Evaporation Rate:** 0.97 (BuAC=1.0)

**Flammability (solid, gas):** Not applicable

**Partition coefficient: n-octanol/water:** log Pow: -0.17 at 25°C

**Auto-ignition temperature:** 427°C

**Decomposition temperature:** Not available

**Viscosity:** 1.53 mPa.s at 25°C

**Specific Gravity/Density:** 1.048

NOTE: Static discharge could act as an ignition source.

Section 10 - Stability and Reactivity
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**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, excess heat, hot surfaces, ignition sources, and freezing. Exposure to air or moisture over prolonged periods.

**Incompatibilities with Other Materials:** Strong oxidizing agents, strong bases, metals, acids, chromic acid, ethylene glycol, perchloric acid, nitric acid, phosphorous trichloride, oxidizers, sodium peroxide, strong caustics, carbonates, hydroxides, oxides, and phosphates.

**Hazardous Decomposition Products:** Carbon oxides, irritating and toxic fumes and

gases.

## Section 11 - Toxicological Information

### **CAS#64-19-7 Glacial Acetic Acid: RTECS#: AF1225000**

LD50 Oral: 3310 mg/kg (rat)

LD50 Dermal: 1060 mg/kg (rabbit)

LC50 Inhalation: 11.4 mg/L (rat) 4h

Investigated as a mutagen, reproductive effector.

Skin corrosion/irritation: skin (rabbit), causes severe burns

Serious eye damage/eye irritation: eyes (rabbit), corrosive to eyes, causes serious eye damage

**Carcinogenicity:** Glacial Acetic Acid CAS#64-19-7 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop 65.

Note: Acetic acid is extremely destructive to all body tissue. In concentrated form (glacial acetic acid), it is corrosive and flammable. Inhalation of concentrated vapors may cause serious damage to the lining of the nose, throat, and lungs. Breathing difficulties may occur. Ingestion of concentrated acetic acid causes severe swelling, severe damage to the tissue and danger of perforation. Contact with concentrated acetic acid may cause serious damage to the skin. Eye contact with concentrated acetic acid may cause severe eye damage followed by loss of sight. Exposure to vapor may cause intense watering and irritation to eyes.

**Epidemiology:** Not available

**Teratogenicity:** Not available

**Reproductive Effects:** Not available

**Developmental Effects:** Not available

**Neurotoxicity:** Not available

**Mutagenicity:** Not mutagenic in AMES test

**Specific Target Organ Toxicity, Single Exposure:** Not available

**Specific Target Organ Toxicity, Repeated Exposure:** Not available

**The toxicological properties of this material have not been thoroughly investigated.**

## Section 12 - Ecological Information

**Ecotoxicity:** Do not release to the environment. Do not release to drains. Harmful to aquatic life. Harmful effect due to pH shift. Caustic even in diluted form.

### **CAS#64-19-7 Glacial Acetic Acid:**

LC50, freshwater fish: 88 mg/L 96h (pimephales promelas)

LC50, freshwater fish: 75 mg/L 96h (lepomis macrochirus)

