



## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

|              |                                       |
|--------------|---------------------------------------|
| Product name | Acetic Acid, Glacial                  |
| CAS number   | 64-19-7                               |
| Synonyms     | Ethanoic acid; Methanecarboxylic acid |

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

|                 |                      |
|-----------------|----------------------|
| Identified uses | Laboratory Chemicals |
|-----------------|----------------------|

#### 1.3 Details of the supplier of the safety data sheet

|           |                                                                            |
|-----------|----------------------------------------------------------------------------|
| Company   | Lab Alley, LLC<br>12501 Pauls Valley Road<br>Austin, Texas 78737<br>U.S.A. |
| Telephone | 512-668-9918                                                               |
| Fax       | 512-886-4008                                                               |

#### 1.4 Emergency telephone

|                   |                              |          |
|-------------------|------------------------------|----------|
| Emergency Phone # | US & Canada: 1-800-535-5053  | INFOTRAC |
|                   | International 1-352-323-3500 | INFOTRAC |

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable Liquids (Category 3)  
Skin Corrosion/Irritation (Category 1A)  
Serious Eye Damage/Eye Irritation (Category 1)

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

Flammable liquid and vapor.  
Causes severe skin burns and eye damage.

Precautionary statements

Prevention: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well ventilated area. Wash face, hands, and any exposed skin thoroughly after handling. Keep container tightly closed.  
Response: Immediately call a POISON CENTER or doctor/physician.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Wash contaminated clothing before reuse.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.  
Fire: In case of fire, use CO<sub>2</sub>, dry chemical, or foam for extinction.  
Storage: Store locked up. Store in a well-ventilated place. Keep container tightly closed.  
Disposal: Dispose of contents/container to an approved waste disposal plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

### SECTION 3: Composition/information on ingredients

#### 3.1 Components

| Chemical name | Common name and synonyms              | CAS number | Concentration |
|---------------|---------------------------------------|------------|---------------|
| Acetic Acid   | Ethanoic acid; Methanecarboxylic acid | 64-19-7    | <=100%        |

### SECTION 4: First aid measures

#### 4.1 Description of first-aid measures

General advice

|                                |                                                                                                                                                                                                                                                                                                                                |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>If inhaled</b>              | If not breathing, give artificial respiration. Remove from exposure, lie down. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician immediately. |
| <b>In case of skin contact</b> | Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re use. Call a physician immediately.                                                                                                                                        |
| <b>In case of eye contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.                                                                                                                                                                                              |
| <b>If swallowed</b>            | Do NOT induce vomiting. Clean mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.                                                                                                                                                                                           |

#### 4.2 Most important symptoms and effects, both acute and delayed

Causes burns by all exposure routes. Ingestion causes severe swelling, severe damage to the delicate tissue, and danger of perforation. Symptoms of overexposure may be headache, dizziness, tiredness, nausea, and vomiting.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

|                                       |                                                                   |
|---------------------------------------|-------------------------------------------------------------------|
| <b>Suitable extinguishing media</b>   | CO <sub>2</sub> , dry chemical, dry sand, alcohol-resistant foam. |
| <b>Unsuitable extinguishing media</b> | No information available.                                         |

#### 5.2 Specific hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin, and mucous membranes.

Hazardous Combustion Products: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

#### 5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 5.4 Further information

|                    |                            |
|--------------------|----------------------------|
| <b>Flash Point</b> | 39 °C (103°F) - Closed Cup |
|--------------------|----------------------------|

**Autoignition Temperature** 463°C (867°F)

**Explosion limits**

**Upper** 19.9 vol %

**Lower** 4.0 vol %

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 3      | 2            | 0           | N/A              |

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### 6.2 Environmental precautions

Should not be released into the environment.

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed, seek immediate medical assistance.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Corrosives area. Keep away from heat, sparks, and flame. Keep containers tightly closed in a dry, cool, and well-ventilated place.

#### Incompatibilities

Strong oxidizing agents. Strong bases. Metals.

## SECTION 8: Exposure controls/personal protection

### 8.1 Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Component   | Type          | Value           |
|-------------|---------------|-----------------|
| Acetic Acid | (Vacated) TWA | 10 ppm 25 mg/m3 |
|             | TWA           | 10 ppm 25 mg/m3 |

#### US. ACGIH Threshold Limit Values

| Component   | Type | Value  |
|-------------|------|--------|
| Acetic acid | TWA  | 10 ppm |
|             | STEL | 15 ppm |

#### US. NIOSH: Pocket Guide to Chemical Hazards

| Component   | Type | Value           |
|-------------|------|-----------------|
| Acetic acid | IDLH | 50 ppm          |
|             | TWA  | 10 ppm 25 mg/m3 |
|             | STEL | 15 ppm 37 mg/m3 |

#### Biological occupational exposure limits

No information available.

### 8.2 Exposure controls

#### Appropriate engineering controls

Use only under a chemical fume hood. Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

#### Personal protective equipment

##### Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles, as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN 166.

##### Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

##### Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

##### Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended Filter type: Particulates filter conforming to EN 143. Acid gases filter. Type E. Yellow. Conforming to EN14387.

#### **Control of environmental exposure**

No information available.

## **SECTION 9: Physical and chemical properties**

### **9.1 Information on basic physical and chemical properties**

|                                           |                                 |
|-------------------------------------------|---------------------------------|
| Physical State                            | Liquid                          |
| Appearance                                | Clear                           |
| Odor                                      | Sharp/vinegar                   |
| Odor Threshold                            | No information available        |
| pH                                        | 2                               |
| Melting Point/Range                       | 16°C (61 °F)                    |
| Boiling Point/Range                       | 117.9°C (244.2°F)               |
| Evaporation Rate                          | No information available        |
| Flammability (solid)                      | Not applicable                  |
| Flammability or explosive limit           |                                 |
| Upper                                     | 19.9% (V)                       |
| Lower                                     | 4% (V)                          |
| Vapor Pressure                            | 15.2 hPa (11.4 mmHg) at 20.0 °C |
| Vapor Density                             | 2.1                             |
| Density                                   | 1.049 g/mL at 25 °C             |
| Solubility                                | Miscible                        |
| Partition coefficient;<br>n-octanol/water | log Pow: -0.17                  |
| Autoignition Temp                         | 463 °C (867 °F)                 |
| Decomposition Temp                        | No information available        |
| Viscosity                                 | No information available        |
| Molecular Formula                         | C2 H4 O2                        |
| Molecular Weight                          | 60.05 g/mol                     |
| VOC Content(%)                            | No information available        |
| Oxidizing properties                      | No information available        |

### **9.2 Other safety information**

No information available.

## **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

No information available

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to avoid

Incompatible products. Excess heat. Keep away from open flames, hot surfaces, and sources of ignition.

### 10.5 Incompatible materials

Strong oxidizing agents, Strong bases, Metals.

### 10.6 Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

##### Acute toxicity

| Component   | LD50 Oral        | LD50 Dermal          | LC50 Inhalation |
|-------------|------------------|----------------------|-----------------|
| Acetic acid | 3310 mg/kg (Rat) | 1,112 mg/kg (rabbit) | > 40 mg/L (Rat) |

##### Skin corrosion/irritation

Causes severe burns by all exposure routes.

##### Serious eye damage/eye irritation

Causes severe burns by all exposure routes.

##### Respiratory or skin sensitization

Potential to cause skin sensitisation through direct contact.

##### Germ cell mutagenicity

Not mutagenic in AMES Test.

##### Carcinogenicity

| Component   | CAS     | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|-------------|---------|------------|------------|------------|------------|------------|
| Acetic acid | 64-19-7 | Not listed | Not listed | Not listed | Not listed | Not listed |

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**Specific target organ toxicity - single exposure**

None known.

**Specific target organ toxicity - repeated exposure**

None known.

**Reproductive toxicity**

No information available.

**Chronic effects**

Ingestion causes severe swelling, severe damage to the delicate tissue, and danger of perforation. Symptoms of overexposure may be headache, dizziness, tiredness, nausea, and vomiting.

**11.2 Additional Information**

The toxicological properties have not been fully investigated.

**SECTION 12: Ecological information****12.1 Toxicity**

Do not empty into drains.

| Product     |      | Species                    | Test Results   |
|-------------|------|----------------------------|----------------|
| Acetic acid | LC50 | Pimephales promelas        | 88 mg/L/96h    |
|             | LC50 | Lepomis macrochirus        | 75 mg/L/96h    |
|             | EC50 | Photobacterium phosphoreum | 8.8 mg/L/5 min |
|             | EC50 | Water Flea                 | 95 mg/L/24h    |

**12.2 Persistence and degradability**

Miscible with water. Persistence is unlikely based on information available.

**12.3 Bio accumulative potential**

No information available.

**12.4 Mobility in soil**

Will likely be mobile in the environment due to its water solubility.

**12.5 Results of PBT and vPvB assessment**

No information available.

**12.6 Endocrine disrupting properties**

No information available.

**12.7 Other adverse effects**

Biochemical Oxygen Demanded (BOD): 880 mg/g.

## SECTION 13: Disposal considerations

### 13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## SECTION 14: Transport information

### DOT (US)

|                         |                      |
|-------------------------|----------------------|
| UN Number               | UN2789               |
| Proper Shipping name    | ACETIC ACID, GLACIAL |
| Hazard Class            | 8                    |
| Subsidiary Hazard Class | 3                    |
| Packing Group           | II                   |

### IMDG

|                         |                      |
|-------------------------|----------------------|
| UN Number               | UN2789               |
| Proper Shipping name    | ACETIC ACID, GLACIAL |
| Hazard Class            | 8                    |
| Subsidiary Hazard Class | 3                    |
| Packing Group           | II                   |

### IATA

|                         |                      |
|-------------------------|----------------------|
| UN Number               | UN2789               |
| Proper Shipping name    | ACETIC ACID, GLACIAL |
| Hazard Class            | 8                    |
| Subsidiary Hazard Class | 3                    |
| Packing Group           | II                   |

## SECTION 15: Regulatory information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not applicable.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Listed, Acetic acid (CAS #64-19-7), RQ: 5000 lb.

### SARA 304 Emergency release notification

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous**

Acute Health Hazard, Chronic Health Hazard, Fire Hazard.

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Clean Water Act (CWA) - Hazardous Substances**

Listed, Acetic acid (CAS #64-19-7), RQ: 5000 lb.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Listed, Acetic acid (CAS #64-19-7).

**US state regulations**

**US. Massachusetts RTK - Substance List**

Listed, Acetic acid (CAS #64-19-7).

**US. New Jersey Worker and Community Right-to-Know Act**

Listed, Acetic acid (CAS #64-19-7).

**US. Pennsylvania Worker and Community Right-to-Know Law**

Listed, Acetic acid (CAS #64-19-7).

**California Proposition 65**

Not listed.

**SECTION 16: Other information**

Date of Issue: 11/14/2024

Revised on 07/07/2026

**SECTION 17: Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.