

ALADDIN SCIENTIFIC CORPORATION  
14078 Meridian Parkway, Riverside, CA. 92518

## SAFETY DATA SHEET

Version: v1  
Revision Date: 2024-03-01  
Print Date: 2024-03-01

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

#### 1.1 Product identifiers

Product name : Acetic acid (glacial) 100%  
Product Number : A433223  
Brand : aladdin  
CAS-No. : 64-19-7

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

Identified uses : Laboratory chemicals, Manufacture of substances.

#### 1.3 Company

Company : ALADDIN SCIENTIFIC CORPORATION  
Address : 14078 Meridian Parkway,  
Riverside, CA. 92518  
Telephone : +1 (833) 552-7181  
Fax : no data available

#### 1.4 Emergency telephone number



CHEMTREC®, Inside the USA : 1-800-424-9300  
CHEMTREC®, Outside the USA :

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)  
Flammable liquid (Class 3), H226  
Acute toxicity, oral (Category 5), H303  
Skin corrosion/irritation (Category 1A), H314  
Serious eye damage/eye irritation (Category 1), H318

#### 2.2 GHS Label elements, including precautionary statements

|                            |                                                                                                                                                                         |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pictogram                  |   |
| Signal word                | Danger                                                                                                                                                                  |
| Hazard statement(s)        |                                                                                                                                                                         |
| H226                       | Flammable liquid and vapor                                                                                                                                              |
| H303                       | May be harmful if swallowed                                                                                                                                             |
| H314                       | Causes severe skin burns and eye damage                                                                                                                                 |
| Precautionary statement(s) |                                                                                                                                                                         |
| P210                       | Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking.                                                                         |
| P233                       | Keep container tightly closed.                                                                                                                                          |
| 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.                                                                                                                   |
| P264                       | Wash hands [and ...] thoroughly after handling.                                                                                                                         |
| P280                       | Wear protective gloves/protective clothing/eye protection/face protection.                                                                                              |
| P310                       | Immediately call a POISON CENTER or doctor/physician.                                                                                                                   |
| P312                       | Call a POISON CENTER or doctor/... if you feel unwell.                                                                                                                  |
| P363                       | Wash contaminated clothing before reuse.                                                                                                                                |
| P301+P330+P331             | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.                                                                                                                      |
| P303+P361+P353             | IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or shower].                                                                |
| P304+P340                  | IF INHALED: Remove person to fresh air and keep comfortable for breathing.                                                                                              |

**ALADDIN SCIENTIFIC CORPORATION**

14078 Meridian Parkway, Riverside, CA. 92518

|                |                                                                                                                                  |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. |
| P370+P378      | In case of fire: Use ... to extinguish.                                                                                          |
| P405           | Store locked up.                                                                                                                 |
| P403+P235      | Store in a well-ventilated place. Keep cool.                                                                                     |
| P501           | Dispose of contents/container to an approved waste disposal plant.                                                               |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS**
**SECTION 3: Composition/information on ingredients**
**3.1 Substances**

|                  |                                                   |
|------------------|---------------------------------------------------|
| Synonyms         | : Acetic acid, Ethanoic acid, Glacial acetic acid |
| Formula          | : C2H4O2                                          |
| Molecular weight | : 60.05                                           |
| CAS No.          | : 64-19-7                                         |
| EC-NO.           | : 231-791-2                                       |

| Component                  | Classification    | Concentration                                 |
|----------------------------|-------------------|-----------------------------------------------|
| Acetic acid (glacial) 100% | no data available | for analysis , ACS<br>Standard-Grade Reagents |

**SECTION 4: First aid measures**
**4.1 Description of first aid measures**

## General advice

Show this material safety data sheet to the doctor in attendance.

## If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

## In case of skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

## In case of eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

## If swallowed

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

no data available

**SECTION 5: Firefighting measures**
**5.1 Extinguishing media**

## Suitable extinguishing media

Use dry chemical, carbon dioxide or alcohol-resistant foam.

## Unsuitable extinguishing media

Do not spray with water.

**5.2 Special hazards arising from the substance or mixture**

Carbon oxide Flammable

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**

no data available

**ALADDIN SCIENTIFIC CORPORATION**

14078 Meridian Parkway, Riverside, CA. 92518

**SECTION 6: Accidental release measures**
**6.1 Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**6.2 Environmental precautions**

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

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

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

**6.4 Reference to other sections**

For disposal see section 13.

**SECTION 7: Handling and storage**
**7.1 Precautions for safe handling**

Operators should be specially trained and strictly abide by the operating procedures. Operation and disposal should be carried out in a place with local ventilation or general ventilation facilities. Avoid eye and skin contact and avoid breathing vapor. See Section 8 for personal protective measures. Keep away from fire and heat sources, and smoking is strictly prohibited in the workplace. Use explosion-proof ventilation systems and equipment. If canning is required, the flow rate should be controlled, and there should be a grounding device to prevent the accumulation of static electricity. Avoid contact with incompatible substances such as oxidizing agents (see section 10 for incompatible substances). When handling, it should be lightly loaded and unloaded to prevent damage to packaging and containers. Empty containers may be harmful residues. Wash hands after use and prohibit eating or drinking in the workplace. Equipped with the corresponding variety and quantity of fire fighting equipment and leakage emer

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

Store in a dry environment at room temperature.

**7.3 Specific end use(s)**

no data available

**SECTION 8: Exposure controls/personal protection**
**8.1 Control parameters**

**Hazard composition and occupational exposure limit:**

| Components  | CAS No. | value   | Control parameters | basis                                                                                           |
|-------------|---------|---------|--------------------|-------------------------------------------------------------------------------------------------|
| acetic acid | 64-19-7 | PC-TWA  | 10 mg/m3           | Occupational exposure limit for hazardous factors in the workplace - chemical hazardous factors |
|             |         | PC-STEL | 20 mg/m3           | Occupational exposure limit for hazardous factors in the workplace - chemical hazardous factors |

**8.2 Exposure controls**

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU)2016/425 and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

## ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN(EU).

Control of environmental exposure

If safety requires, prevent further leakage or spillage. Do not let the product enter the sewer.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

|                                                 |                                |
|-------------------------------------------------|--------------------------------|
| a) Appearance                                   | form: liquid color: colourless |
| b) Odour                                        | no data available              |
| c) Odour Threshold                              | no data available              |
| d) pH                                           | no data available              |
| e) Melting point/freezing point                 | 113 °C                         |
| f) Initial boiling point and boiling range      | 117 - 118 °C                   |
| g) Flash point                                  | 40°C                           |
| h) Evaporation rate                             | no data available              |
| i) Flammability (solid, gas)                    | no data available              |
| j) Upper/lower flammability or explosive limits | no data available              |
| k) Vapour pressure                              | no data available              |
| l) Vapour density                               | no data available              |
| m) Relative density                             | 1.049g/mL at 25°C (lit.)       |
| n) Water solubility                             | no data available              |
| o) Partition coefficient: n-octanol/water       | no data available              |
| p) Auto-ignition temperature                    | no data available              |
| q) Decomposition temperature                    | no data available              |
| r) Viscosity                                    | no data available              |
| s) Explosive properties N                       | no data available              |
| t) Oxidizing properties N                       | no data available              |

**9.2 Other safety information**

no data available

**SECTION 10: Stability and reactivity****10.1 Reactivity**

no data available

**10.2 Chemical stability**

Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

no data available

**10.4 Conditions to avoid**

Heat, flame and sparks.

**10.5 Incompatible materials**

Oxidant, soluble carbonate and phosphate, hydroxide, metal, peroxide, permanganate; Such as potassium permanganate, amine, alcohol, nitric acid

**10.6 Hazardous decomposition products**

no data available

**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

Acute toxicity

LD50 Oral Rat 3310 mg/kg Remarks: (RTECS)

LC50 inhalation - mice - 4 h - 2819 mg/l Remarks: (RTECS)

Transcutaneous: no data

## ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Skin corrosion/irritation

Skin rabbit results: cause burns- 4 h (OECD Test Guideline 404) Remarks: (IUCLID)

Serious eye damage/eye irritation

Eyes - Rabbit Result: Causes burns- 4 h (OECD Test Guideline 405) Remarks: (IUCLID) Causes serious eye damage.

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

Test type: Ames test Test system: Salmonella typhimurium Metabolic activation: with or without metabolic activation Method: OECD Test Guideline 471 Result: Negative Test

type: mutagenicity (mammalian cell test): chromosome mutation is negative Test system: Chinese hamster ovary cells Metabolic activation: with or without metabolic

activation Method: OECD Test Guideline 473 Result: Negative Test type: micronucleus test Species: rat Cell type: bone marrow Route of exposure: inhalation (vapor) Methods:

Mutagenicity (micronucleus test) Result: Negative

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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

Toxicity to fish LC50 - Lepomis mSemi static toxicity test on fish LC50 - Oncorhynchus mykiss ->1000 mg/l - 96 h (OECD Test Guideline 203)

Static toxicity test for Daphnia magna and other aquatic invertebrates EC50 - Daphnia magna ->1000 mg/l - 48 h (OECD Test Guideline 202)

Static test of toxicity to algae EC50 - Skeletonema costatum ->1000 mg/l - 72 h (ISO 10253)

Toxicity to bacteria EC5 - Pseudomonas putida - 2850 mg/l - 16 h Remarks: neutral (maximum allowable toxic concentration) (Lit.) microtox test EC50 - Photobacterium phophororum - 11 mg/l - 15 min Remarks: (IUCLID)acochirus - 105 mg / L - 48 h

**12.2 Persistence and degradability**

Results: 99% - fast biodegradable. (OECD Test Guideline 301D) Remarks: (HSDB) Result: 95% - easily removed from water (OECD Test Guideline 302B)

**12.3 Bioaccumulative potential**

no data available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

The PBT / vpvb assessment is not available because the chemical safety assessment is not required / carried out

**12.6 Other adverse effects**

no data available

**SECTION 13:****13.1 Disposal considerations**

Product

Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur. Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging

Dispose of as unused product.

**SECTION 14: Transport information**

DOT (US)

Phone: +1 (833) 552-7181 Email: QualityAssurance@aladdinsci.com Website: <https://www.aladdinsci.com/>

**ALADDIN SCIENTIFIC CORPORATION**

14078 Meridian Parkway, Riverside, CA. 92518

|                                           |                                            |                                             |
|-------------------------------------------|--------------------------------------------|---------------------------------------------|
| UN number: 2789                           | Packing group: II                          | Class: 8 (3)                                |
| Proper shipping name: Glacial acetic acid | Reportable Quantity(RQ): no data available | Poison Inhalation Hazard: no data available |
| Environmental Hazards: no                 |                                            |                                             |
| <b>IMDG</b>                               |                                            |                                             |
| UN number: 2789                           | Packing group: II                          | EMS-No: no data available                   |
| Proper shipping name: Glacial acetic acid |                                            |                                             |
| <b>IATA</b>                               |                                            |                                             |
| UN number: 2789                           | Packing group: II                          | Class: 8 (3)                                |
| Proper shipping name: Glacial acetic acid |                                            |                                             |

**SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**SECTION 16: Other information**

|                         |                                                                                                                                                     |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Prepared By</b>      | Regulatory Affairs<br>ALADDIN SCIENTIFIC CORPORATION<br>Email: <a href="mailto:QualityAssurance@aladdinsci.com">QualityAssurance@aladdinsci.com</a> |
| <b>Creation Date</b>    | 24-Oct-2023                                                                                                                                         |
| <b>Revision Date</b>    | 01-Mar-2024                                                                                                                                         |
| <b>Print Date</b>       | 01-Mar-2024                                                                                                                                         |
| <b>Revision Summary</b> | SDS sections updated v1                                                                                                                             |

**Disclaimer**

Copyright Aladdin Co. Ltd. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aladdin Co. Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.