

## SAFETY DATA SHEET

Version: v1

Revision Date: 2024-01-10

Print Date: 2024-01-11

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

## 1.1 Product identifiers

Product name : 1,1,2-Trichloroethane solution  
Product Number : T419337  
Brand : aladdin  
CAS-No. : 79-00-5(Methanol)

## 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 2), H225  
Acute toxicity, oral (Class 3), H301  
Acute toxicity, inhalation (Class 3), H331  
Acute toxicity, transdermal (Class 3), H311  
Specific target organ systemic toxicity (single exposure) (Category 1), H370

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H225

Highly Flammable liquid and vapor

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|                            |                                                                                                          |
|----------------------------|----------------------------------------------------------------------------------------------------------|
| H370                       | Causes damage to organs                                                                                  |
| H301+H311+H331             | Toxic if swallowed, in contact with skin or if inhaled                                                   |
| Precautionary statement(s) |                                                                                                          |
| P210                       | Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking.          |
| P233                       | Keep container tightly closed.                                                                           |
| 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 dust/fume/gas/mist/vapors/spray.                                                          |
| P264                       | Wash hands [and ...] thoroughly after handling.                                                          |
| P270                       | Do not eat, drink or smoke when using this product.                                                      |
| P271                       | Use only outdoors or in a well-ventilated area.                                                          |
| P280                       | Wear protective gloves/protective clothing/eye protection/face protection.                               |
| P303+P361+P353             | IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or shower]. |
| P308+P311                  | IF exposed or concerned: Call a POISON CENTER/doctor/...                                                 |
| P370+P378                  | In case of fire: Use ... to extinguish.                                                                  |
| P405                       | Store locked up.                                                                                         |
| P403+P233                  | Store in a well-ventilated place. Keep container tightly closed.                                         |
| P403+P235                  | Store in a well-ventilated place. Keep cool.                                                             |
| P501                       | Dispose of contents/container to an approved waste disposal plant.                                       |
| P301+P310+P330             | IF SWALLOWED: Rinse mouth. Immediately call a POISON CENTER/doctor/.                                     |
| P304+P340+P311             | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor. |

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

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

|                  |                                      |
|------------------|--------------------------------------|
| Synonyms         | : Vinyl trichloride,β-Trichloroethan |
| Formula          | : no data available                  |
| Molecular weight | : no data available                  |

| Component         | Classification                                                              | Concentration |
|-------------------|-----------------------------------------------------------------------------|---------------|
| <b>Methanol</b>   |                                                                             |               |
| CAS-No. : 67-56-1 | Flam. Liq. 2; Acute Tox. 3; STOT SE 1; H225, H301, H331, H311, H370         |               |
| EC-No. :          | Concentration limits: >= 10 %: STOT SE 1, H370; 3 - < 10 %: STOT SE 2, H371 |               |

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| Component                             | Classification                                                                                     | Concentration |
|---------------------------------------|----------------------------------------------------------------------------------------------------|---------------|
| <b>1,1,2-Trichloroethane solution</b> |                                                                                                    |               |
| CAS-No. : 79-00-5                     | Acute Tox. 4; Acute Tox. 3; Acute Tox. 4; Carc. 2; Aquatic Chronic 3; H302, H331, H312, H351, H412 |               |
| EC-No. : 201-166-9                    |                                                                                                    |               |

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice

no data available

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

no data available

### 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

no data available

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

Carbon oxides

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

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

Use water spray to cool unopened containers.

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## 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.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

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

Store in a cool and ventilated warehouse. It is recommended to store at a temperature of 2-8 °C. It should be stored separately from oxidants and edible chemicals, and mixed storage should be avoided (please refer to Part 10 for prohibited substances). Keep the container sealed. Stay away from sparks and heat sources. The warehouse must be equipped with lightning protection equipment. The exhaust system should be equipped with a grounding device for conducting and removing static electricity. Adopting explosion-proof lighting and ventilation settings. Prohibit the use of equipment and tools that are prone to generating sparks. The storage area should be equipped with emergency response equipment for leaks and appropriate containment materials.

### 7.3 Specific end use(s)

no data available

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

## 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 EN 166(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

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

Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|                                                 |                   |
|-------------------------------------------------|-------------------|
| a) Appearance                                   | no data available |
| b) Odour                                        | no data available |
| c) Odour Threshold                              | no data available |
| d) pH                                           | no data available |
| e) Melting point/freezing point                 | no data available |
| f) Initial boiling point and boiling range      | no data available |
| g) Flash point                                  | no data available |
| 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 |

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|                                           |                   |
|-------------------------------------------|-------------------|
| m) Relative density                       | 0.7915            |
| 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

no data available

### 10.5 Incompatible materials

Strong alkali, strong oxidizing agent, reacts violently with the following: sodium/sodium oxide, potassium, magnesium, aluminum

### 10.6 Hazardous decomposition products

no data available

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 836.0 mg/kg

Skin corrosion/irritation

Skin - Rabbit Result: Severe skin irritation - 24 h Skin - Rabbit Result: Mild skin irritation - 24 h

Serious eye damage/eye irritation

Eyes - Rabbit Result: Mild eye irritation - 24 h

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification. The National Cancer Institute (NCI) has found clear evidence for carcinogenicity.

Limited evidence of carcinogenicity in animal studies

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

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## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish LC50 - *Lepomis macrochirus* (Bluegill) - 40.00 mg/l - 96 h LC50 - *Pimephales promelas* (fathead minnow) - 81.60 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates EC50 - *Daphnia magna* (Water flea) - 43.00 mg/l - 48 h

Toxicity to fish(Chronic toxicity) Growth inhibition LOEC - other fish - > 7.48 mg/l - 28 d

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

### 12.5 Results of PBT and vPvB assessment

no data available

### 12.6 Other adverse effects

no data available

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## 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)

UN number: 1230

Proper shipping name: Methanol

Packing group: II

Reportable Quantity(RQ): no data available

Class: 3 (6.1)

Poison Inhalation Hazard: no data available

Environmental Hazards: no

#### IMDG

UN number: 1230

Proper shipping name: Methanol

Packing group: II

EMS-No: no data available

#### IATA

UN number: 1230

Proper shipping name: Methanol

Packing group: II

Class: 3 (6.1)

## SECTION 15: Regulatory information

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

## SECTION 16: Other information

#### Prepared By

Regulatory Affairs

ALADDIN SCIENTIFIC CORPORATION

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#### Creation Date

30-Nov-2023

#### Revision Date

10-Jan-2024

#### Print Date

11-Jan-2024

#### Revision Summary

SDS sections updated v1

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