

# SAFETY DATA SHEET

Version: v1

Revision Date: 2025-09-12

Print Date: 2025-09-13

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

### 1.1 Product identifiers

Product name : 1,2,4-Trichlorobenzene  
Product Number : T103302  
Brand : aladdin  
CAS-No. : 120-82-1

### 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)

Acute toxicity, Oral (Category 4), H302

Skin corrosion/irritation (Category 2), H315

Short-term (acute) aquatic hazard (Category 1), H400

Long-term (chronic) aquatic hazard (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

| Signal word                       | Warning                                                                    |
|-----------------------------------|----------------------------------------------------------------------------|
| <b>Hazard statement(s)</b>        |                                                                            |
| H302                              | Harmful if swallowed                                                       |
| H315                              | Causes skin irritation                                                     |
| H400                              | Very toxic to aquatic life                                                 |
| H410                              | Very toxic to aquatic life with long lasting effects                       |
| <b>Precautionary statement(s)</b> |                                                                            |
| P264                              | Wash hands [and ...] thoroughly after handling.                            |
| P270                              | Do not eat, drink or smoke when using this product.                        |
| P273                              | Avoid release to the environment.                                          |
| P280                              | Wear protective gloves/protective clothing/eye protection/face protection. |
| P321                              | Specific treatment (see ... on this label).                                |
| P330                              | Rinse mouth.                                                               |
| P391                              | Collect spillage.                                                          |
| P302+P352                         | IF ON SKIN: wash with plenty of water.                                     |
| P362+P364                         | Take off contaminated clothing and wash it before reuse.                   |
| P501                              | Dispose of contents/container to an approved waste disposal plant.         |
| P301+P317                         | IF SWALLOWED: Get medical help.                                            |
| P332+P317                         | If skin irritation occurs: Get medical help.                               |

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

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

|                  |                                                 |
|------------------|-------------------------------------------------|
| Synonyms         | : Dichloromethane                               |
| Formula          | : C <sub>6</sub> H <sub>3</sub> Cl <sub>3</sub> |
| Molecular weight | : 181.45                                        |
| CAS No.          | : 120-82-1                                      |
| EC-NO.           | : 204-428-0                                     |

| Component                     | Classification                                                                                                                                                                                                    | Concentration |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <b>1,2,4-Trichlorobenzene</b> | Acute toxicity Category 4; Skin corrosion/irritation Category 2; Short-term (acute) aquatic hazard Category 1; Long-term (chronic) aquatic hazard Category 1; H302, H315, H400, H410 M-Factor - Aquatic Acute: 10 | CP, ≥96%      |

## 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**

After inhalation: fresh air.

**In case of skin contact**

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

**In case of eye contact**

After eye contact: rinse out with plenty of water. Remove contact lenses.

**If swallowed**

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

**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**

Water Foam Carbon dioxide (CO<sub>2</sub>) Dry powder

**Unsuitable extinguishing media**

no data available

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

Carbon oxides Hydrogen chloride gas Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire.

**5.3 Advice for firefighters**

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

**5.4 Further information**

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

---

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

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## 6.2 Environmental precautions

Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Dispose of properly. Clean up affected area.

## 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

For precautions see section 2.2.

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

Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons. Moisture sensitive , Dry storage.

### 7.3 Specific end use(s)

no data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

| Component              | CAS No.  | Value | Control parameters | Basis                                    |
|------------------------|----------|-------|--------------------|------------------------------------------|
| 1,2,4-Trichlorobenzene | 120-82-1 | C     | 5 ppm              | U.S.A. ACGIH threshold limit value (TLV) |
|                        |          | C     | 5ppm40 mg/m3       | U.S.A. NIOSH recommended exposure limits |

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

|  |  |   |                 |                                                                                                           |
|--|--|---|-----------------|-----------------------------------------------------------------------------------------------------------|
|  |  | C | 5ppm40<br>mg/m3 | USA. OSHA -<br>TABLE Z-1<br>Limits for<br><br>Air<br>Contaminants<br>- 1910.1000                          |
|  |  | C | 5ppm40<br>mg/m3 | California<br>allowable<br>exposure<br>limits for<br>chemical<br>pollutants<br>(para<br><br>107 (para. 8) |

## 8.2 Exposure controls

### Appropriate engineering controls

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

### Personal protective equipment

#### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

#### 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.

#### Body Protection

protective clothing

#### Respiratory protection

required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

#### 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

**ALADDIN SCIENTIFIC CORPORATION**

14078 Meridian Parkway, Riverside, CA. 92518

|                                                 |                                                                                                                                                                                      |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| b) Odour                                        | no data available                                                                                                                                                                    |
| c) Odour Threshold                              | no data available                                                                                                                                                                    |
| d) pH                                           | no data available                                                                                                                                                                    |
| e) Melting point/freezing point                 | 16 °C (lit.)                                                                                                                                                                         |
| f) Initial boiling point and boiling range      | 214 °C (lit.)                                                                                                                                                                        |
| g) Flash point                                  | 110°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                             | 1.451-1.457                                                                                                                                                                          |
| n) Water solubility                             | It can be miscible with ether, benzene, petroleum ether and carbon disulfide, soluble in oil, slightly soluble in ethanol, insoluble in water, water solubility: 49 mg / L (20 ° C). |
| 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

The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions

Exothermic reaction with: Oxidizing agents Alkali metals Alkaline earth metals Risk of explosion with: fire-promoting substances

### 10.4 Conditions to avoid

Strong heating.

### 10.5 Incompatible materials

Strong oxidizing agents

## 10.6 Hazardous decomposition products

In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Oral: No data available

LD50 Oral - Rat - male and female - 930 mg/kg

(OECD Test Guideline 401)

Inhalation: No data available

LD50 Dermal - Rat - 6,139 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity).

Behavioral:Convulsions or effect on seizure threshold.

(RTECS)

#### Skin corrosion/irritation

No data available Skin - Rabbit Result: Moderate skin irritation Remarks: (RTECS) (Regulation (EC) No 1272/2008, Annex VI)

#### Serious eye damage/eye irritation

No data available Eyes - Rabbit Result: No skin irritation - 24 h (OECD Test Guideline 405)

#### Respiratory or skin sensitisation

Maximization Test - Guinea pig Result: negative (OECD Test Guideline 406)

#### Germ cell mutagenicity

No data available Test Type: Ames test Test system: S. typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 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

RTECS: DC2100000

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Nausea, Dizziness, Headache, Gastrointestinal disturbance, Liver injury may occur., Kidney injury may occur.

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

---

## SECTION 12: Ecological information

### 12.1 Toxicity

No data available

Toxicity to daphnia

and other aquatic

invertebrates

EC50 - Daphnia magna (Water flea) - 1.4 mg/l - 48 h

(OECD Test Guideline 202)

Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata (green algae) -

1.4 mg/l - 96 h

(US-EPA)

### 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

---

## SECTION 13:

### 13.1 Disposal considerations

---

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



**ALADDIN SCIENTIFIC CORPORATION**

14078 Meridian Parkway, Riverside, CA. 92518

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

no data available

**SECTION 14: Transport information**
**DOT (US)**

UN number: 2321

Packing group: III

Class: 6.1

Proper shipping name:

Reportable Quantity(RQ): no data  
available

Poison Inhalation Hazard: no data  
available

TRICHLOROBENZENES, LIQUID

Environmental Hazards: yes

**IMDG**

UN number: 2321

Packing group: III

EMS-No: no data available

Proper shipping name: TRICHLOROBENZENES, LIQUID

**IATA**

UN number: 2321

Packing group: III

Class: 6.1

Proper shipping name: TRICHLOROBENZENES, LIQUID

**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

Email: [QualityAssurance@aladdinsci.com](mailto:QualityAssurance@aladdinsci.com)
**Creation Date**

07-Dec-2021

**Revision Date**

12-Sep-2025

**Print Date**

13-Sep-2025

**Revision Summary**

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.