

## SAFETY DATA SHEET

Version 6.1  
Revision Date 05/04/2019  
Print Date 05/28/2022

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifiers**

Product name : 1,2-Propane(diol-d<sub>2</sub>)

Product Number : 487201  
Brand : Aldrich  
CAS-No. : 58161-11-8

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

Identified uses : Laboratory chemicals, Synthesis of substances

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

Company : Sigma-Aldrich Inc.  
3050 SPRUCE ST  
ST. LOUIS MO 63103  
UNITED STATES

Telephone : +1 314 771-5765  
Fax : +1 800 325-5052

**1.4 Emergency telephone number**

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-  
527-3887 CHEMTREC (International) 24  
Hours/day; 7 Days/week

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

Not a hazardous substance or mixture.

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

Not a hazardous substance or mixture.

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none****SECTION 3: Composition/information on ingredients****3.1 Substances**

Synonyms : Propylene glycol-(OD)<sub>2</sub>

Formula : C<sub>3</sub>D<sub>2</sub>H<sub>6</sub>O<sub>2</sub>

Molecular weight : 78.07 g/mol  
CAS-No. : 58161-11-8

No components need to be disclosed according to the applicable regulations.

---

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

#### **In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### **If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. 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**

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

### 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

No data available

---

## SECTION 6: Accidental release measures

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

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

For personal protection see section 8.

## **6.2 Environmental precautions**

Do not let product enter drains.

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

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

## **6.4 Reference to other sections**

For disposal see section 13.

---

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.  
For precautions see section 2.2.

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

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Store under inert gas. hygroscopic  
Storage class (TRGS 510): 10: Combustible liquids

### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

---

## **SECTION 8: Exposure controls/personal protection**

### **8.1 Control parameters**

#### **Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

### **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**

Safety glasses with side-shields conforming to EN166 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.

##### **Body Protection**

Impervious 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 full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) 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                                   | Form: liquid, clear, viscous<br>Colour: colourless                    |
| b) Odour                                        | No data available                                                     |
| c) Odour Threshold                              | No data available                                                     |
| d) pH                                           | No data available                                                     |
| e) Melting point/freezing point                 | Melting point/range: -60 °C (-76 °F) - lit.                           |
| f) Initial boiling point and boiling range      | 187 °C 369 °F - lit.                                                  |
| g) Flash point                                  | 103.00 °C (217.40 °F) - closed cup                                    |
| h) Evaporation rate                             | No data available                                                     |
| i) Flammability (solid, gas)                    | No data available                                                     |
| j) Upper/lower flammability or explosive limits | Upper explosion limit: 12.50 %(V)<br>Lower explosion limit: 2.60 %(V) |
| k) Vapour pressure                              | 0.11 hPa at 20.00 °C (68.00 °F)                                       |
| l) Vapour density                               | No data available                                                     |
| m) Relative density                             | 1.063 g/mL at 25 °C (77 °F) 1.063 g/cm <sup>3</sup> at 25 °C (77 °F)  |
| 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                         | No data available                                                     |
| t) Oxidizing properties                         | 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**

Acid chlorides, Acid anhydrides, Oxidizing agents, Chloroformates, Reducing agents

### **10.6 Hazardous decomposition products**

No data available

Hazardous decomposition products formed under fire conditions. - Carbon oxides

In the event of fire: see section 5

---

## **SECTION 11: Toxicological information**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

LD50 Oral - Rat - 20,000 mg/kg

Inhalation: No data available

Inhalation: No data available

LD50 Dermal - Rabbit - 20,800 mg/kg

LD50 Intramuscular - Rat - 14 g/kg

LD50 Intravenous - Dog - 26 g/kg

LD50 Intraperitoneal - Rat - 6,660 mg/kg

LD50 Subcutaneous - Rat - 22,500 mg/kg

LD50 Intravenous - Rat - 6,423 mg/kg

LD50 Intraperitoneal - Mouse - 9,718 mg/kg

Remarks: Lungs, Thorax, or Respiration: Chronic pulmonary edema. Kidney, Ureter,

Bladder: Changes in both tubules and glomeruli. Blood: Changes in spleen.

LD50 Subcutaneous - Mouse - 17,370 mg/kg

Remarks: Behavioral: Change in motor activity (specific assay). Behavioral: Muscle contraction or spasticity. Cyanosis

LD50 Intravenous - Mouse - 6,630 mg/kg

LD50 Intravenous - Rabbit - 6,500 mg/kg

No data available

No data available

#### **Skin corrosion/irritation**

Skin - Human

Result: Mild skin irritation - 7.00 d

#### **Serious eye damage/eye irritation**

Eyes - Rabbit

Result: Mild eye irritation

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**

No data available

No data available

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: Not available

Gastrointestinal disturbance, Nausea, Headache, Vomiting, Central nervous system depression

---

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

Toxicity to fish                      NOEC - Pimephales promelas (fathead minnow) - 96.0 h

**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**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

## 12.6 Other adverse effects

No data available

---

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

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

#### Contaminated packaging

Dispose of as unused product.

---

## SECTION 14: Transport information

#### DOT (US)

Not dangerous goods

#### IMDG

Not dangerous goods

#### IATA

Not dangerous goods

---

## SECTION 15: Regulatory information

#### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

No SARA Hazards

#### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know Components

|                      |                       |               |
|----------------------|-----------------------|---------------|
| 1,2-Propane(diol-d2) | CAS-No.<br>58161-11-8 | Revision Date |
|----------------------|-----------------------|---------------|

#### New Jersey Right To Know Components

|                      |                       |               |
|----------------------|-----------------------|---------------|
| 1,2-Propane(diol-d2) | CAS-No.<br>58161-11-8 | Revision Date |
|----------------------|-----------------------|---------------|

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

---

## SECTION 16: Other information

### Further information

Copyright 2018 Sigma-Aldrich Co. LLC. 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. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.sigma-aldrich.com](http://www.sigma-aldrich.com) and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact [mlsbranding@sial.com](mailto:mlsbranding@sial.com).

Version: 6.1

Revision Date: 05/04/2019

Print Date: 05/28/2022