

# SAFETY DATA SHEET

Version 6.3 Revision Date 12/18/2024 Print Date 12/19/2024

#### **SECTION 1. IDENTIFICATION**

1.1 Product identifiers

Product name : 1,4-Phenylenedipropionic acid

Product Number : 183768
Brand : Aldrich
CAS-No. : 4251-21-2

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

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-

527-3887 CHEMTREC (International) 24

Hours/day; 7 Days/week

#### **SECTION 2. HAZARDS IDENTIFICATION**

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a hazardous substance or mixture.

**GHS label elements** 

Not a hazardous substance or mixture.

Other hazards

None known.

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Substance

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### **Components**

No hazardous ingredients

#### **SECTION 4. FIRST AID MEASURES**

If inhaled : If breathed in, move person into fresh air.

If not breathing, give artificial respiration.

In case of skin contact : Wash off with soap and plenty of water.

In case of eye contact : Flush eyes with water as a precaution.

If swallowed : Never give anything by mouth to an unconscious per-

son

Rinse mouth with water.

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

Protection of first-aiders : For personal protection see section 8.

Notes to physician : No data available

#### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing

media

: Use water spray, alcohol-resistant foam, dry chemical

or carbon dioxide.

Specific hazards during

fire fighting

: No data available

Hazardous combustion

products

: Carbon oxides

Specific extinguishing

methods

: No data available

Further information : No data available

Special protective equip-

ment for fire-fighters

Wear self-contained breathing apparatus for fire-

fighting if necessary.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, : Avoid dust formation.

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protective equipment and emergency procedures

Avoid breathing vapors, mist or gas. Advice for emergency responders: For personal protection see section 8.

Environmental precau-

tions

: No special environmental precautions required.

Methods and materials for containment and

cleaning up

: Sweep up and shovel.

Keep in suitable, closed containers for disposal.

#### **SECTION 7. HANDLING AND STORAGE**

For precautions see section 2.2.

Advice on protection against fire and explosion

: Provide appropriate exhaust ventilation at places

where dust is formed.

Advice on safe handling : Further processing of solid materials may result in the

formation of combustible dusts. The potential for combustible dust formation should be taken into con-

sideration before additional processing occurs.

Conditions for safe stor-

age

: Keep container tightly closed in a dry and well-

ventilated place.

Storage class : 11, Combustible Solids

Recommended storage

temperature

: Recommended storage temperature see product label.

### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

## Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

**Engineering measures** : No data available

### Personal protective equipment

Respiratory protection : Respiratory protection is not required. Where protec-

tion from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as

NIOSH (US) or CEN (EU).

Hand protection

Remarks : Handle with gloves. Gloves must be inspected prior to

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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.

Eye protection : Use equipment for eye protection tested and ap-

proved under appropriate government standards such

as NIOSH (US) or EN 166(EU).

Choose body protection in relation to its type, to the Skin and body protection

concentration and amount of dangerous substances,

and to the specific work-place.

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures : General industrial hygiene practice.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

: solid Appearance

Color : No data available

Odor : No data available

Odor Threshold : No data available : No data available рΗ

Melting point/ range : 448 - 453 °F / 231 - 234 °C

Boiling point/boiling range : No data available

Flash point : No data available

: No data available Evaporation rate

Flammability (solid, gas) : No data available

Flammability (liquids) : No data available

Burning rate : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit

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: No data available

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Vapor pressure : No data available

Relative vapor density : No data available

Relative density : No data available

: No data available Density

Water solubility : No data available

Partition coefficient: n-

octanol/water

: No data available

Autoignition temperature : No data available

Decomposition tempera-

ture

: No data available

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Flow time : No data available

: No data available Explosive properties

Oxidizing properties : No data available

Molecular weight : 222.24 g/mol

Particle characteristics

Particle size : No data available

### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No data available

Chemical stability : No data available

Possibility of hazardous

reactions

: Stable under recommended storage conditions.

Conditions to avoid : No data available

: Strong oxidizing agents Incompatible materials

products

Hazardous decomposition : In the event of fire: see section 5

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#### **SECTION 11. TOXICOLOGICAL INFORMATION**

## 11.1 Information on toxicological effects

### **Acute toxicity**

Oral: No data available Inhalation: No data available Dermal: No data available

No data available

**Skin corrosion/irritation** Remarks: No data available

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No ingredient 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 ingredient 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 ingredient 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

## Specific target organ toxicity - single exposure

No data available

### Specific target organ toxicity - repeated exposure

No data available

### **Aspiration hazard**

No data available

### 11.2 Additional Information

No data available

## **SECTION 12. ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

No data available

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## Persistence and degradability

No data available

### **Bioaccumulative potential**

No data available

## Mobility in soil

No data available

#### Other adverse effects

No data available

### **SECTION 13. DISPOSAL CONSIDERATIONS**

#### Disposal methods

Waste from residues : Offer surplus and non-recyclable solutions to a li-

censed disposal company.

Contaminated packaging : Dispose of as unused product.

#### **SECTION 14. TRANSPORT INFORMATION**

## **International Regulations**

#### **IATA-DGR**

Not regulated as a dangerous good

### **IMDG-Code**

Not regulated as a dangerous good

## Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### **National regulation**

#### 49 CFR Road

Not regulated as a dangerous good

Poison Inhalation Hazard : No

## Special precautions for user

Remarks : Not classified as dangerous in the meaning of

transport regulations.

## **SECTION 15. REGULATORY INFORMATION**

## **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

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## **SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

## SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

Components	CAS-No.	Component TPQ (lbs)	
SARA 313	nents with known	s not contain any chemical compo- CAS numbers that exceed the nimis) reporting levels established by	
	•	SARA Title III, Section 313.	

## **US State Regulations**

## **Massachusetts Right To Know**

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

### **Pennsylvania Right To Know**

3,3'-(p-Phenylene)dipropionic acid 4251-21-2

# **New Jersey Right To Know**

3,3'-(p-Phenylene)dipropionic acid 4251-21-2

### California Prop. 65

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

## The ingredients of this product are reported in the following inventories:

TSCA : Product contains substance(s) not listed on TSCA in-

ventory.

#### **TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

#### **SECTION 16. OTHER INFORMATION**

### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Iden-

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tification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA -Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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Revision Date : 12/18/2024

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