

ALFAAA17463

## 1,3-Diamino-2-propanol-N,N,N',N'-tetraaceticacid

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明: 1,3-二氨基-2-丙醇-N,N,N',N'-四乙酸  
Product Description: 1,3-Diamino-2-propanol-N,N,N',N'-tetraaceticacid

Cat No. : A17463  
CAS No 3148-72-9  
Molecular Formula C11 H18 N2 O9

Supplier Avocado Research Chemicals Ltd.  
(Part of Thermo Fisher Scientific)  
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**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

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Recommended Use Laboratory chemicals.  
Uses advised against No Information available

### SECTION 2. HAZARD IDENTIFICATION

Physical State  
Solid

Appearance  
White

Odor  
No information available

#### Emergency Overview

May be harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

#### Classification of the substance or mixture

Acute Oral Toxicity	Category 5
Acute Dermal Toxicity	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity - (single exposure)	Category 3

#### Label Elements



## 1,3-Diamino-2-propanol-N,N',N'-tetraaceticacid

## Signal Word

## Warning

## Hazard Statements

H303 - May be harmful if swallowed  
H312 - Harmful in contact with skin  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation

## Precautionary Statements

## Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P264 - Wash face, hands and any exposed skin 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

## Response

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P312 - Call a POISON CENTER or doctor if you feel unwell  
P362 + P364 - Take off contaminated clothing and wash it before reuse

## Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

## Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

## Physical and Chemical Hazards

None identified.

## Health Hazards

May be harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

## Environmental hazards

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

This product does not contain any known or suspected endocrine disruptors.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
Glycine, N,N'-(2-hydroxy-1,3-propanediyl)bis[N-(carboxymethyl)-	3148-72-9	<=100

## SECTION 4. FIRST AID MEASURES

## General Advice

If symptoms persist, call a physician.

## Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

## Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

## Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

## Ingestion

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

# SAFETY DATA SHEET

## 1,3-Diamino-2-propanol-N,N,N',N'-tetraaceticacid

**Most important symptoms and effects**

None reasonably foreseeable.

**Self-Protection of the First Aider**

No special precautions required.

**Notes to Physician**

Treat symptomatically.

**SECTION 5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Extinguishing media which must not be used for safety reasons**

No information available.

**Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**SECTION 6. ACCIDENTAL RELEASE MEASURES****Personal Precautions**

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

**Environmental Precautions**

Should not be released into the environment. See Section 12 for additional Ecological Information.

**Methods for Containment and Clean Up**

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

**SECTION 7. HANDLING AND STORAGE****Handling**

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid dust formation. Do not get in eyes, on skin, or on clothing.

**Storage**

Keep container tightly closed in a dry and well-ventilated place.

**Specific Use(s)**

Use in laboratories

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control Parameters****Monitoring methods**

## 1,3-Diamino-2-propanol-N,N,N',N'-tetraaceticacid

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

**Exposure Controls****Engineering Measures**

None under normal use conditions. Ensure that eyewash stations and safety showers are close to the workstation location. .

**Personal protective equipment**

**Eye Protection** Goggles (European standard - EN 166)

**Hand Protection** Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Natural rubber	See manufacturers	-	EN 374	(minimum requirement)
Nitrile rubber	recommendations			
Neoprene				
PVC				

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

(Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

**Skin and body protection** Long sleeved clothing

**Respiratory Protection** No protective equipment is needed under normal use conditions.

**Large scale/emergency use** Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced  
**Recommended Filter type:** Particle filter

**Small scale/Laboratory use** Maintain adequate ventilation  
**Recommended half mask:-** Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** White  
**Physical State** Solid

**Odor** No information available

**Odor Threshold** No data available

**pH** No information available

**Melting Point/Range** 194 - 196 °C / 381.2 - 384.8 °F

**Softening Point** No data available

**Boiling Point/Range** No information available

**Flash Point** No information available

**Evaporation Rate** Not applicable

**Flammability (solid,gas)** No information available

**Explosion Limits** No data available

**Method -** No information available  
Solid

## 1,3-Diamino-2-propanol-N,N,N',N'-tetraaceticacid

Vapor Pressure	No data available	
Vapor Density	Not applicable	Solid
Specific Gravity / Density	No data available	
Bulk Density	No data available	
Water Solubility	No information available	
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/water)		
Autoignition Temperature	No data available	
Decomposition Temperature	No data available	
Viscosity	Not applicable	Solid
Explosive Properties	No information available	
Oxidizing Properties	No information available	

Molecular Formula C11 H18 N2 O9  
Molecular Weight 322.27

## SECTION 10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Hazardous Reactions	None under normal processing.
Hazardous Polymerization	No information available.
Conditions to Avoid	None known.
Materials to avoid	No information available.

Hazardous Decomposition Products None under normal use conditions.

## SECTION 11. TOXICOLOGICAL INFORMATION

## Product Information

## (a) acute toxicity;

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Glycine, N,N'-(2-hydroxy-1,3-propanediyl)bis[N-(carboxymethyl)-	LD50 > 3200 mg/kg ( Rat )		

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

## (d) respiratory or skin sensitization;

Respiratory No data available  
Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

# SAFETY DATA SHEET

## 1,3-Diamino-2-propanol-N,N,N',N'-tetraaceticacid

(h) STOT-single exposure;	Category 3
Results / Target organs	Respiratory system
(i) STOT-repeated exposure;	No data available
Target Organs	No information available.
(j) aspiration hazard;	Not applicable Solid
Symptoms / effects, both acute and delayed	No information available

### SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects	.
Persistence and Degradability	No information available
Bioaccumulative Potential	No information available
Mobility in soil	No information available
Endocrine Disruptor Information	This product does not contain any known or suspected endocrine disruptors
Persistent Organic Pollutant	This product does not contain any known or suspected substance
Ozone Depletion Potential	This product does not contain any known or suspected substance

### SECTION 13. DISPOSAL CONSIDERATIONS

Waste from Residues/Unused Products	Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.
Contaminated Packaging	Dispose of this container to hazardous or special waste collection point.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains.

### SECTION 14. TRANSPORT INFORMATION

<u>Road and Rail Transport</u>	Not Regulated
<u>IMDG/IMO</u>	Not regulated
<u>IATA</u>	Not regulated
Special Precautions for User	No special precautions required

## 1,3-Diamino-2-propanol-N,N,N',N'-tetraaceticacid

## SECTION 15. REGULATORY INFORMATION

## International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

Component	The Inventory of Hazardous Chemicals (2015 Edition)	List of dangerous goods GB 12268 - 2012	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
Glycine, N,N'-(2-hydroxy-1,3-propanediyl)bis[N-(carboxymethyl)-	-	-	X	X	221-575-6	X	X	X	X	X	X	2014-3-5867

## National Regulations

## SECTION 16. OTHER INFORMATION

## Prepared By

Health, Safety and Environmental Department

## Revision Date

01-May-2024

## Revision Summary

New emergency telephone response service provider.

## Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Legend

CAS - Chemical Abstracts Service

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

DNEL - Derived No Effect Level

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC - Predicted No Effect Concentration

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate

VOC - (Volatile Organic Compound)

## Key literature references and sources for data

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

# SAFETY DATA SHEET

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### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of Safety Data Sheet**