



Material Safety Data Sheet

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Version 1.80

Section 1 - Product and Company Information

Product Name DIETHYLENTRIAMINE PENTAACETIC ACID
Product Number 32318
Brand Fluka Chemical

Company Sigma-Aldrich
Street Address 3050 Spruce Street
City, State, Zip, Country SAINT LOUIS, MO 63103 US
Technical Phone: 314 771 5765
Fax: 800 325 5052

Emergency Phone: 414 273 3850 Ext. 5996

Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>	<u>EC no</u>	<u>Annex I Index Number</u>
DIETHYLENTRIAMINE PENTAACETIC ACID	67-43-6	Yes	200-652-8	

<u>Ingredient Name</u>	<u>CAS #</u>	<u>Percent</u>	<u>SARA 313</u>
NITRILOTRIACETIC ACID	139-13-9	0.200 %	Yes

Formula C14H23N3O10
Synonyms Acetic acid, ((carboxymethylimino)bis(ethylenetriolo))tetra-, (((Carboxymethyl)imino)bis(ethylenetriolo))tetraacetic acid, CHEL 330, CHEL 330 acid, Chel DTPA, Dabeersen 503, Detapac, Detarex, Diethylenetriaminepentaacetic acid, 1,1,4,7,7-Diethylenetriaminepentaacetic acid, (Diethylenetriamino)pentaaetic acid, DTPA, Hamp-EX Acid, Monaquest CAI, Pentetic acid, Titriplex V, 3,6,9-Triazaundecanedioic acid, 3,6,9-tris(carboxymethyl)-

Section 3 - Hazards Identification

Emergency Overview
Irritant. Dangerous for the environment.
Irritating to eyes. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Calif. Prop. 65 carcinogen.

HMIS Rating
Health: 2* Flammability: 0 Reactivity: 0

NFPA Rating
Health: 2 Flammability: 0 Reactivity: 0

*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Dermal Exposure

In case of contact, immediately wash skin with soap and copious amounts of water.

Eye Exposure

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Section 5 - Fire Fighting Measures

Flash Point: 392 °F 200 °C

Autolgnition Temp: N/A

Extinguishing Media

Suitable

Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting

Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)

Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling

User Exposure

Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage

Suitable

Keep tightly closed.

Section 8 - Exposure Controls / PPE

Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment

Respiratory

Government approved respirator.

Hand

Compatible chemical-resistant gloves.

Eye

Chemical safety goggles.

General Hygiene Measures
Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance

Physical State
Solid

Molecular Weight: 393.35 AMU

pH	2.5	23 °C	Concentration: 10 g/l
BP/BP Range	N/A		
MP/MP Range	219 - 220 °C		
Freezing Point	N/A		
Vapor Pressure	N/A		
Vapor Density	N/A		
Saturated Vapor Conc.	N/A		
SG/Density	N/A		
Bulk Density	N/A		
Odor Threshold	N/A		
Volatile%	N/A		
VOC Content	N/A		
Water Content	N/A		
Solvent Content	N/A		
Evaporation Rate	N/A		
Viscosity	N/A		
Partition Coefficient	N/A		
Decomposition Temp.	N/A		
Flash Point °F	392 °F		Method: closed cup
Flash Point °C	200 °C		Method: closed cup
Explosion Limits	N/A		

Flammability N/A
Autoignition Temp N/A
Solubility
Solubility in Water: 1 g/l, 20°C
Solvent: 0.1M in NaOH 1M, 20°C, clear, colorless

N/A = not available

Section 10 - Stability and Reactivity

Stability

Stable
Stable.
Materials to Avoid
Strong oxidizing agents.

Hazardous Decomposition Products

Hazardous Decomposition Products
Carbon monoxide, Carbon dioxide, Nitrogen oxides.

Hazardous Polymerization
Hazardous Polymerization
Will not occur.

Section 11 - Toxicological Information

Route of Exposure

Skin Contact

May cause skin irritation.

Skin Absorption

May be harmful if absorbed through the skin.

Eye Contact

Causes eye irritation.

Inhalation

May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion

May be harmful if swallowed.

Signs and Symptoms of Exposure

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

RTECS Number: MB8205000

Toxicity Data

Oral - Rat: > 2,000 mg/kg(LD50)

Intraperitoneal - Rat: 587 MG/KG (LD50)

Remarks: Behavioral:Convulsions or effect on seizure threshold.

Behavioral:Aggression.

Lungs, Thorax, or Respiration:Chronic pulmonary edema.

Intraperitoneal - Mouse: 543 MG/KG (LD50)

Irritation Data

Skin - Rabbit:

Remarks: No irritation effect

Eyes - Rabbit:

Remarks: Moderate irritation effect

Section 12 - Ecological Information

Accumulation

Bioaccumulation Potential

Indication of bioaccumulation.

Acute Ecotoxicity Tests

Test Type

flow-through bioassay

Species

Leuciscus idus

Time:

96.0 h

Value:

> 100 mg/l

Test Type

Growth inhibitor on algae.

Time:

72.0 h

Value:

1 - 10 mg/l

Elimination

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

Contact a licensed professional waste disposal service to dispose of this material.
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: Environmentally hazardous substances, solid, n.o.s.
UN#: 3077
Class: 9
Packing Group: Packing Group III
Hazard Label: Class 9
PIH: Not PIH

IATA

Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s.
IATA UN Number: 3077
Hazard Class: 9
Packing Group: III

Section 15 - Regulatory Information

EU Additional Classification

Symbol of Danger: Xi N

Indication of Danger

Irritant. Dangerous for the environment.

Risk Statements R: 36 51/53

Irritating to eyes. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Statements S: 26 36 61

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.
Avoid release to the environment. Refer to special instructions/safety data sheets.

US Classification and Label Text

Indication of Danger

Irritant. Dangerous for the environment.

Risk Statements

Irritating to eyes. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Statements

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.
Avoid release to the environment. Refer to special instructions/safety data sheets.

US Statements

Calif. Prop. 65 carcinogen.

United States Regulatory Information

SARA Listed: Yes

Notes: This product is or contains a component that is subject to SARA313 reporting requirements.

TSCA Inventory Item: Yes

United States - State Regulatory Information

California Prop - 65

This product is or contains chemical(s) known to the state of California to cause cancer.

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes
NDSL: No

Section 16 - Other Information

Disclaimer

For R&D use only. Not for drug, household or other uses.

Warranty

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 Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

