

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifiers Diethylenetriamine-N,N,N",N"-tetra-tert-butyl acetate-N'-acetic acid Synonym: DTPA-tetra (t-Bu ester) Product Number: B-365 Brand: Macrocyclics CAS-No.: 174267-71-1

1.2 Relevant identified uses of the substance Identified uses : Laboratory and research chemicals

1.3 Details of the supplier providing the safety data sheet

Company:	Macrocyclics
	700 Klein Rd.
	Plano, TX 75074
	USA
Telephone:	469-786-6079
Fax:	469-814-9116

1.4 Emergency telephone number

Emergency Phone #: 469-786-6079

2. HAZARDOUS IDENTIFICATION

2.1 Classification of the compound

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 Specific target organ toxicity – single exposure (Category 3), Respiratory system, H335 For the full text of the H-Statements mentioned in this Section see Section 16

2.2 GHS Label elements, including precautionary statements

Pictogram:



Signal word: Warning

Hazardous statement(s)H315:May causes skin irritationH335:May cause respiratory irritation

Precautionary statement(s)

P261: Avoid breathing dust.

P264:	Wash skin thoroughly after handling.
P280:	Wear protective gloves/eye protection/face protection.
P302 + P352:	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340:	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + 351 + P338:	If IN EYES: Rinse with water for several minutes. Remove contacts if present and continue rinsing.
P312:	Contact a physician
P332 + P313:	If skin irritation persists seek medical attention
P337 + P313:	If eye irritation persists seek medical attention
P362:	Remove contaminated clothing and wash before reuse
P403 + P233:	Store in well-ventilated area. Keep container tightly sealed.
P405:	Store in secure location.
P501:	Dispose of contents by approved waste management procedures

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - None

3. COMPOSITION INFORMATION OF INGREDIENTS

3.1 Substances

Synonym:	DTPA-tetra (t-Bu ester)
Formula:	$C_{30}H_{55}N_{3}O_{10}$
Molecular Weight:	617.8 g/mol
CAS-No:	174267-71-1

Hazardous components

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Component	Classification
Diethylenetriamine-N,N,N",N"-tetra-tert-butyl	Skin irrit. 2; Eye Irrit. 2A
acetate-N'-acetic acid	STOT SE 3; H315, H319, H335
For full toxt of the U. Statements and Section 16	

For full text of the H-Statements see Section 16

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult physician. Present this safety data sheet to the physician in attendance.

If inhaled

Move person into fresh air. Consult physician.

In case of skin contact

Wash contacted area with soap and water.

In case of eye contact

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

If swallowed

Rinse mouth with water and consult a physician.

4.2 Most important symptoms and effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2,2) and/or section 11.

4.3 Indication of any immediate medical attention and special treatment No data available

5. FIRE FIGHTING MEASURES

- **5.1 Extinguishing media** Use water spray, alcohol resistant-foam, dry chemical or carbon dioxide.
- 5.2 Special hazards arising from the substance Carbon dioxide, nitrogen oxides
- **5.3** Advice for firefighters Wear self-contained breathing apparatus for fighting fire if necessary.
- 5.4 Further information No data available

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid breathing dust, vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe area. For personal protection see section 8.
- 6.2 Environmental precautions Do not allow product to enter water drains.
- 6.3 Methods and materials for containment and clean up Manage disposal without creating dust. Seep up and deposit in suitable, close container for disposal.
- 6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust might be formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including possible incompatibilities
 Keep container tightly closed in a dry and well-ventilated environment.
 Storage temperature: 25°C or below.

7.3 Specific end use(s)

Research and development

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 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.

Body protection

Impervious clothing. The type of lab coat or other protective equipment must be selected according the amount of product being handled and the specific laboratory conditions.

Respiratory protection

It is recommended to handle this material in an appropriate chemical fume hood if possible. For small exposures use dust mask or type P95 (US) or P1 (EU EN 143) particle respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a)	Appearance	solid
b)	Odor	no data available
c)	Odor threshold	no data available
d)	рН	no data available
e)	Melting/freezing point	no data available
f)	Boiling point	no data available
g)	Flash point	no data available
h)	Evaporation rate	no data available
i)	Flammability	no data available
j)	Explosive limits	no data available
k)	Vapor pressure	no data available
I)	Vapor density	no data available
m)	Relative density	no data available
o)	Partition coefficient	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

10. STABILITY DATA

- 10.1 Reactivity No data availability
- **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 availability
- **10.5** Incompatible materials Strong oxidizing agents
- **10.6 Hazardous decomposition products** No data availability

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity No data availability

Skin corrosion/irritation

No data availability

Eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data availability

Carcinogenicity

- IARC: No components of this product present at levels greater than or equal to 0.1% is Identified as probable, possible or confirmed human carcinogen.
- ACGIH: No components of this product present at levels greater than or equal to 0.1% is Identified as probable, possible or confirmed human carcinogen.
- OSHA: No components of this product present at levels greater than or equal to 0.1% is Identified as probable, possible or confirmed human carcinogen.

Reproductive toxicity

No data availability

Specific target organ toxicity - single exposure

Inhalation – May cause respiratory irritation.

Specific target organ toxicity – repeated exposure No data available

12. ECOLOGICAL INFORMATION

- 12.1 Toxicity No data available
- 12.2 **Persistence and degradability** No data availability
- 12.3 **Bioaccumulative potential** No data availability
- 12.4 **Mobility in soil** No data availability
- 12.5 **Results of PBT and vPvB assessment** No data availability
- 12.6 **Other adverse effects** No data availability

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product

Contact a licensed professional disposal service to dispose of non-recyclable material

Contaminated packaging and containers

Dispose of as unused product

14. TRANSPORTATION INFORMATION

DOT (US) Not dangerous goods

IMDG Not dangerous goods

ΙΑΤΑ

Not dangerous goods

15. REGULATORY INFORMATION

SARA 302 Components

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

SARA 313 Components

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

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Eye irritation
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
Skin irritation
Specific target organ toxicity - single exposure

HMIS Rating

Health hazard:	1
Flammability:	0
Physical hazard:	0

NFPA Rating

Health hazard:	1
Fire hazard:	0
Reactivity hazard	0

Further information

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. Macrocyclics shall not be held liable for any damage resulting from handling or from contact with the above product.

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