

Safety Data Sheet

according to UK REACH Regulation

DOTAEt

Revision date: 20.06.2022

Product code: 7301

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

DOTAEt

Further trade names

1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, tetraethyl ester

Synonyms:

Tetraethyl 2,2',2'',2'''-(1,4,7,10-tetraazacyclododecane-1,4,7,10-tetrayl)tetraacetate

CAS No: 137076-50-7

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

Use of the substance/mixture

Cation complexation agent

1.3. Details of the supplier of the safety data sheet

Company name:	ABX advanced biochemical compounds	
	Biomedizinische Forschungsreagenzien GmbH	
Street:	Heinrich-Gläser-Straße 10-14	
Place:	01454 Radeberg	
Telephone:	+49 3528 4041 60	Telefax: +49 3528 4041 65
e-mail:	info@abx.de	
Contact person:	Dr. Christoph Meyer	Telephone: +49 3528 4041 8732
e-mail:	meyer@abx.de	
Internet:	http://www.abx.de	

1.4. Emergency telephone number:

+49 3528 4041 60

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Skin Irrit. 2; H315

Eye Irrit. 2; H319

STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, tetraethyl ester

Signal word: Warning

Pictograms:



Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

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Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

2.3. Other hazards

Warning - substance not yet tested completely.

SECTION 3: Composition/information on ingredients**3.1. Substances****Chemical characterization**

1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, tetraethyl ester

Sum formula: C₂₄H₄₄N₄O₈

Molecular weight: 516.63

Hazardous components

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	Classification (GB CLP Regulation)	
137076-50-7	1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, tetraethyl ester	95 - < 100 %
	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335	

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****After inhalation**

Provide fresh air.

After contact with skin

After contact with skin, wash immediately with: Water. Change contaminated clothing.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

If swallowed, immediately drink: Water. Call a physician immediately.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings. Suitable extinguishing media: Foam. Extinguishing powder. Carbon dioxide (CO₂). Atomized water.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

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6.3. Methods and material for containment and cleaning up

Other information

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Do not breathe dust. Conditions to avoid: skin contact. Eye contact. Wear personal protection equipment. When using do not eat, drink, smoke, sniff.

Advice on general occupational hygiene

Change contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container dry. Keep container tightly closed.

Further information on storage conditions

Recommended storage temperature:

of °C: 2

up to °C: 8

Protect against: Light.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	colourless; light yellow

Changes in the physical state

Melting point/freezing point:	115 - 121 °C
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Solubility in other solvents

Chloroform; Ethanol

SECTION 10: Stability and reactivity

10.4. Conditions to avoid

Light.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

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Information on likely routes of exposure

Toxicological data are not available.

Further information

Toxicological data are not available.

SECTION 12: Ecological information**12.5. Results of PBT and vPvB assessment**

This substance does not meet the PBT/vPvB criteria of UK REACH.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

160508 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded organic chemicals consisting of or containing hazardous substances; hazardous waste

List of Wastes Code - used product

160508 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded organic chemicals consisting of or containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled.

SECTION 14: Transport information**Other applicable information**

Not a hazardous material with respect to these transportation regulations.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulatory information**

Water hazard class (D): 3 - highly hazardous to water

SECTION 16: Other information**Relevant H and EUH statements (number and full text)**

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