

SAFETY DATA SHEET

Diethyltoluenediamine(DETDA)

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

- 1.1 Product identifier**
Commercial Product Name
Diethyltoluenediamine(DETDA);
- Product code**
Substance name: Diethyltoluenediamine(DETDA)
CAS-No.: 68479-98-1
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
- 1.2.1 Recommended use**
Industrial use
- 1.3 Details of the supplier of the safety data sheet**
Supplier (Manufacturer):
Suzhou Xiangyuan New Materials Co., Ltd.
No. 25/27 Pingsi Road 215001 Suzhou city,
Jiangsu province P.R.China
Tel : +86-512-6753-6550
Fax: +86-512-6754-5159
Email: sales@chinamboca.com
Webpage: www.chinamboca.com
- 1.4 Emergency telephone number**
Tel : +86-512-6753-6550

SECTION 2. HAZARDS IDENTIFICATION

- 2.1 Classification**
Harmful in contact with skin and if swallowed.
Irritating to eyes.
Harmful: danger of serious damage to health by prolonged exposure if swallowed.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

- | 3.1 Components | Concentration |
|---------------------------------------------------------------------------------------------------------------|----------------------|
| Diethyltoluenediamine(DETDA) (CAS-No.: 68479-98-1)
(EEC-No.: 270-877-4) Xn, N; R21/22, R36, R48/22, R50/53 | ≥98% |

R-phrases) See chapter 16

SECTION 4. FIRST AID MEASURES

- 4.1 Inhalation:**
Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration.
- 4.2 Skin contact:**
After contact with skin, wash immediately with plenty of soap and water. Consult a physician.
- 4.3 Eye contact:**
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Call a physician immediately.
- 4.4 Ingestion:**
Call a physician immediately. Clean mouth with water and drink afterwards plenty of water.
Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

SECTION 5. FIREFIGHTING MEASURES

- 5.1 Suitable extinguishing media:**
Water spray, Dry powder, Foam
- 5.2 Specific hazards during fire fighting:**
Heating or fire can release toxic gas.
- 5.3 Special protective equipment for fire-fighters:**
In the event of fire, wear self-contained breathing apparatus.
- 5.4 Additional advice:**
Use water spray to cool unopened containers.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions:**
Use respirator when performing operations involving potential exposure to vapour of the product.
- 6.2 Environmental precautions:**
Do not flush into surface water or sanitary sewer system.
- 6.3 Methods and materials for containment and cleaning up**
Sweep up or vacuum up spillage and collect in suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

7.1 handling

7.1.1 Safe handling advice:

Avoid contact with skin and eyes. Provide sufficient air exchange and/or exhaust in work rooms.

7.1.2 Advice on protection against fire and explosion:

Take precautionary measures against static discharges.

7.2 Storage

7.2.1 Requirements for storage areas and containers:

Keep container tightly closed. To maintain product quality, do not store in heat or direct sunlight. Keep in a dry, cool and well- ventilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Personal protective equipment

8.1.1 Hygiene measures:

Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing.

8.1.2 Respiratory protection:

In the case of vapour formation use a respirator with an approved filter.

Respirator with a vapour filter (EN 141) Respirator with ABEK filter.

8.1.3 Hand protection:

Suitable material : Nitrile rubber

Break through time : > 480 min

Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

8.1.4 Eye protection:

Tightly fitting safety goggles.

8.1.5 Skin and body protection:

Choose body protection according to the amount and concentration of the dangerous substance at the work place. No special protective equipment required.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance

9.1.1	Physical state	liquid
9.1.2	Odour	amine-like
9.1.3	Colour	Clear, amber

9.2 Safety data

9.2.1	Boiling point	308
9.2.2	Pour Point, °C	-9
9.2.3	Flash Point °C	>135
9.2.4	Density at 20°C, g/ml	1.022
9.2.5	Viscosity (20 °C) mPa·s	280
9.2.6	Water solubility	slightly soluble in water
9.2.7	Solubility	Organic solvents: completely miscible

9.3 Other data

9.3.1	Hygroscopy	hygroscopic
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SECTION 10. STABILITY AND REACTIVITY

10.1 Conditions to avoid

No data available.

10.2 Materials to avoid

Oxidizing agents.

10.3 Hazardous decomposition products

nitrogen oxides (NO_x), Carbon oxides.

10.4 Hazardous reactions

Stable under normal conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1	Acute oral toxicity (LD50): 738 mg/kg Species: rat Method: OECD Test Guideline 401
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- 11.2** Acute dermal toxicity (LD50): > 2 000 mg/kg
Species: rat
Method: OECD Test Guideline 402
- 11.3** Skin irritation: non irritant: non irritant
Species: rabbit
Exposure time: 4 h
Method: OECD Test Guideline 404
- 11.4** Eye irritation: irritating
Species: rabbit
- 11.5** Sensitisation: not sensitizing
Species: guinea pig
Draize test
- 11.6** Additional advice: see section 16

SECTION 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity effects

- 12.1.1** Toxicity to fish (LC50):
194 mg/l
Species: Leuciscus idus (Golden orfe)
Acute toxicity
Exposure time: 48 h
Method: DIN 38412 Part 15
- 12.1.2** Toxicity to daphnia (EC50):
< 1 mg/l
Species: Daphnia magna (Water flea)
Immobilization
Exposure time: 48 h
Method: OECD Test Guideline 202
- 12.1.3** Toxicity to bacteria (EC10):
170 mg/l
Species: Pseudomonas putida
Cell multiplication inhibition test
Exposure time: 16 h
Method: DIN 38412 Part 8
- 12.2 Persistence and degradability**
- 12.2.1** Biodegradability:
Closed Bottle test: < 1 %
Not readily biodegradable.
Testing period: 28 d
Method: OECD 301 D

SECTION 13. DISPOSAL CONSIDERATIONS**13.1 Waste from residues**

Dispose of in accordance with local regulations.

Contact waste disposal services.

13.2 Contaminated packaging

Where possible recycling is preferred to disposal or incineration.

SECTION 14. TRANSPORT INFORMATION

14.1	ADR	Class: 9 Packaging group: III Classification Code: M6 Labels: Miscellaneous dangerous substances and articles No. 9 Hazard identification No : 9 UN/ID No.: UN 3082 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diethyltoluenediamine)
14.2	RID	Class: 9 Packaging group: III Classification Code: M6 Labels: Miscellaneous dangerous substances and articles No. 9 Hazard identification No : 9 UN/ID No.: UN 3082 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diethyltoluenediamine)
14.3	IATA Cargo	Class: 9 Packaging group: III Labels: Miscellaneous dangerous substances and articles No. 9 Packing instruction (cargo aircraft): 914 UN/ID No.: UN 3082 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diethyltoluenediamine)
14.4	IATA Passenger	Class: 9 Packaging group: III Labels: Miscellaneous dangerous substances and articles No. 9 Packing instruction (cargo aircraft): 914 UN/ID No.: UN 3082 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diethyltoluenediamine)
14.5	IMDG-Code	Class: 9 Packaging group: III Labels: Miscellaneous dangerous substances and articles No. 9 EmS: F-A , S-F UN 3082 UN/ID No.: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Proper shipping name: (Diethyltoluenediamine)

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14.6	49 CFR	Class: 9 Packaging group: III Labels: Miscellaneous dangerous substances and articles No. 9
	UN/ID No.:	UN 3082
	Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diethyltoluenediamine)
14.7	TDG	Class: 9 Packaging group: III Labels: Miscellaneous dangerous substances and articles No. 9
	UN/ID No.:	UN 3082
	Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diethyltoluenediamine)

SECTION 15. REGULATORY INFORMATION

15.1 Additional advice: Classification and labelling according to Directive 67/548/EEC, Annex I:

Index-No.: 612-130-00-0

Symbol(s):



Harmful

Dangerous for the environment

R-phrase(s): R21/22: Harmful in contact with skin and if swallowed.
R36: Irritating to eyes.
R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s): S 2: Keep out of the reach of children.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28: After contact with skin, wash immediately with plenty of water.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S60: This material and its container must be disposed of as hazardous waste.
S61: Avoid release to the environment. Refer to special instructions/ Safety data sheets.

General advice: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In Annex I, a general designation of the following type is sometimes used: "xylenol". In this case the manufacturer or any other person who markets such a substance must state on the label whether the substance is a specific isomer (a) or a mixture of isomers(b). Example: (a) 2,4-dimethylphenol(b) xyleneol (mixture of isomers).

National legislation

Water contaminating class: WGK 2: water endangering
(Germany)

Poison class (Switzerland): GK 3

SECTION 16. OTHER INFORMATION

16.1 Other regulations: Long-term toxicological studies showed serious health damage to laboratory animals.

16.2 List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements

R21/22 Harmful in contact with skin and if swallowed.

R36 Irritating to eyes.

R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

16.3 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.4 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and Safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.