

**SAFETY DATA SHEET**  
(according to EC directive 1907/2006)

Version: 3.0

Update : 04.02.2009  
Date : 11.08.2009

**TEGOAMIN BDE**

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

Trade name : TEGOAMIN BDE

Usage : Amine Catalyst for the Manufacturing of Polyurethane Foam

Information on manufacturer/supplier : Evonik Goldschmidt GmbH  
Goldschmidtstr. 100  
45127 Essen  
Telephone: +4920117301  
Telefax: +492011733000

Information provided by : Product Safety Goldschmidt  
Telephone: (+49) (0) 201/173-2770  
Telefax: (+49) (0) 201/173-1994

Email address : productsafety.goldschmidt@evonik.com

Emergency information : Telephone: (+49) (0) 2 01/1 73-01  
Telefax: (+49) (0) 2 01/1 73-18 54

**2. HAZARDS IDENTIFICATION**

**II** Corrosive  
**Risk advice to man and the environment**

**III** Harmful by inhalation, in contact with skin and if swallowed.  
**III** Causes burns.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical characterization : Amine Mixture

Hazardous components :

Components	CAS-No.	EINECS	Symbol(s):	R-phrase(s)	Concentration [%]
Ethanamine, 2,2'-oxybis[N,N-dimethyl	3033-62-3	221-220-5	<b>C</b>	20/21/22-34	70

The full text of the R phrases is contained in section 16.  
All existing information on exposure limits is contained in section 8.

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#### 4. FIRST AID MEASURES

- After inhalation : Ensure supply of fresh air.  
Take medical treatment.
- After contact with skin : In case of contact with skin wash off immediately with soap and water  
Summon a doctor immediately.
- After contact with eyes : In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice
- After ingestion : Thoroughly clean the mouth with water  
Do not induce vomiting.  
Summon a doctor immediately.

#### 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : foam, carbon dioxide, dry powder, water spray.
- Extinguishing media which must not be used for safety reasons : not applicable
- Special hazards from the substance itself, its combustion products or from its vapours : In the event of fire the following can be released:  
- carbon dioxide, carbon monoxide  
- Nitrogen oxides (NO<sub>x</sub>)  
Under certain conditions of combustion traces of other toxic substances cannot be excluded
- Special protective equipment for firefighters : Use self-contained breathing apparatus

#### 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Use personal protective equipment.
- Environmental precautions : Do not discharge into the subsoil/soil.  
Do not allow to enter drains or waterways
- Methods for cleaning up/taking up : Take up with absorbent material (eg sand, kieselguhr, universal binder)  
Dispose of absorbed material in accordance with the regulations.

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## 7. HANDLING AND STORAGE

### Handling

- Advice on safe handling : Ensure adequate ventilation.
- Advice on protection against fire and explosion : Vapours may form explosive mixtures with air  
Keep away from sources of ignition - no smoking  
Cool endangered containers by water spray

### Storage

- Further information : Keep container tightly closed  
Protect from heat
- German storage class : 8

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Personal protection equipment

- General protective measures : Avoid contact with eyes and skin  
Do not inhale vapours
- Hygiene measures : At work do not eat, drink, smoke or take drugs.  
Remove soiled or soaked clothing immediately.  
Wash hands before breaks and after work.
- Respiratory protection : in case of formation of vapours/aerosols:  
Self-contained breathing apparatus
- Hand protection : gloves made of nitril (NBR)
- Eye protection : goggles, or face shield if necessary  
have eye bath available.
- Skin and body protection : Impermeable protective clothing  
emergency eye wash fountains and safety showers should be available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : Liquid  
Colour : yellow  
Odour : amine-like

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Melting temperature	: < -60 °C
Boiling temperature	: 188 °C at 1.013 hPa
Flash point	: 74 °C Method: ASTM D 93
Ignition temperature	: not measured
Lower explosion limit	: not measured
Upper explosion limit	: not measured
Vapour pressure	: not measured
Density	: not measured
Water solubility	: soluble
pH	: not measured
Viscosity, dynamic	: not measured

**10. STABILITY AND REACTIVITY**

Thermal decomposition	: Not measured
Hazardous reactions	: Reactions with acids. Reactions with strong oxidizing agents. Reactions with alkalies.
Hazardous decomposition products	: None with proper storage and handling.

**11. TOXICOLOGICAL INFORMATION**

Acute oral toxicity	: LD50 Species: rat Dose: 570 - 609 mg/kg
Acute inhalation toxicity	: LC50 Species: rat Dose: 2,2 - 4,4 mg/l Exposure time: 4 h
Acute dermal toxicity	: LD50 Species: rabbit Dose: 400 - 2.000 mg/kg

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- Skin irritation : Species: rabbit  
corrosive
- Eye irritation : Species: rabbit eye  
corrosive
- Sensitization : non-sensitizing
- Remarks : Harmful by inhalation, in contact with skin and if swallowed.  
Causes burns  
With nitrites or nitrous acid nitrosamines may be formed under special conditions. These have been proven to be carcinogenic in animal experiments.

**12. ECOLOGICAL INFORMATION****Further ecological information**

- Remarks : The product is considered to be a water pollutant (German law).  
Do not allow to enter soil, waterways or waste water canal.

**13. DISPOSAL CONSIDERATIONS**

- Product : In accordance with local authority regulations, take to special waste incineration plant
- Contaminated packaging : If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.

**14. TRANSPORT INFORMATION****Land transport**

- ADR:  
Class : 8  
Packaging group : II  
Orange plate : Hazard no.: 86  
Substance number: 2922  
Description of the goods : 2922 CORROSIVE LIQUID, TOXIC, N.O.S.  
Hazard release : bis(2-Dimethylaminoethyl)ether  
Label : 8 corrosive substance, 6.1 toxic substance

- RID:  
Class : 8  
Packaging group : II

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Orange plate : Hazard no.: 86  
Substance number: 2922  
Description of the goods : 2922 CORROSIVE LIQUID, TOXIC, N.O.S.  
Hazard release : bis(2-Dimethylaminoethyl)ether  
Label : 8 corrosive substance, 6.1 toxic substance

**Inland navigation transport**

ADNR:  
Class : 8  
Item : CT1  
Description of the goods : 2922 CORROSIVE LIQUID, TOXIC, N.O.S.  
Hazard release : bis(2-Dimethylaminoethyl)ether  
Label : 8 corrosive

**Sea transport**

IMDG:  
Class : 8  
Packaging group : II UN-No: 2922  
EmS : F-A S-B  
Correct technical name : CORROSIVE LIQUID, TOXIC, N.O.S.  
Hazard release : bis(2-Dimethylaminoethyl)ether  
Label : 8 corrosive, 6.1 toxic

**Air transport**

ICAO/IATA:  
Class : 8  
Packaging group : II UN-No: 2922  
Correct technical name : Corrosive liquid, toxic, n.o.s.  
Hazard release : bis(2-Dimethylaminoethyl)ether  
Label : 8 Corrosive, 6.1 Toxic

**15. REGULATORY INFORMATION**


|| Labelling in accordance with : The product is classified and labelled in accordance with EC  
|| GefStoffV/EC directives/German regulations on dangerous substances.

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Hazard symbol(s)	:	 <b>C</b> Corrosive
Hazardous component(s) for labelling	:	<ul style="list-style-type: none"> <li>• Ethanamine, 2,2'-oxybis[N,N-dimethyl EINECS-No.: 221-220-5</li> </ul>
R-phrase(s)	:	20/21/22 Harmful by inhalation, in contact with skin and if swallowed. 34 Causes burns.
S-phrase(s)	:	24/25 Avoid contact with skin and eyes. 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 28 After contact with skin, wash immediately with water and soap. 36/37/39 Wear suitable protective clothing, gloves and eye/face protection. 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**National legislation / regulations**

TA Luft (Germany)	:	Class: Paragraph 5.2.5 (no class)
Observe local authority regulations corresponding to the german incident regulation (StörfallV).	:	---
Water contaminating class	:	2 (Classification acc. to German law) KBwS-No.: 3.576
Risk classification according to BetrSichV (Germany)	:	---
Other regulations	:	Special local regulations must be adhered to when using products containing irritating or corrosive substances. Special local regulations must be adhered if using harmful substances.

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**16. OTHER INFORMATION**

none

**R-phrases of components from chapter 3 - Full wording**

20/21/22

Harmful by inhalation, in contact with skin and if swallowed.

34

Causes burns.

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application. Changes compared to the previous version are marked before the section number!