

SAFETY DATA SHEET
(according to EC directive 93/112/EC)

Version: 2.0

Update : 14.07.2002
Date : 07.03.2003

TEGOAMIN BDE 100

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

Trade name : TEGOAMIN BDE 100

Information on manufacturer/supplier : Goldschmidt AG
Goldschmidtstr. 100
45127 Essen
Telephone: +492011730
Telefax: +492011733000

Information provided by : ZA-UW Produktsicherheit
Telephone: (+49) (0) 2 01/1 73-27 70
Telefax: (+49) (0) 2 01/22 19 68

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

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization : Bis(2-dimethylaminoethyl)ether

CAS-No. : 3033-62-3

EINECS-No. : 221-220-5

Hazardous components :

Components	CAS-No.	EINECS	Symbol(s):	R-phrases)	Concentration [%]
Bis(2-dimethylaminoethyl)ether	3033-62-3	221-220-5	T	23/24-34-22	> 97
2-dimethylaminoethanol	108-01-0	203-542-8	C	10-20/21/22-34	< 1

3. HAZARDS IDENTIFICATION

Toxic

Risk advice to man and the environment

Toxic by inhalation and in contact with skin.

Harmful if swallowed.

Causes burns.

SAFETY DATA SHEET
(according to EC directive 93/112/EC)

Version: 2.0

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TEGOAMIN BDE 100

4. FIRST AID MEASURES

- General advice : Remove contaminated, soaked clothing immediately and dispose of safely.
In case of intensive contact with the product -especially contact with skin and respiratory tract- medical attention is necessary.
- After inhalation : Ensure supply of fresh air.
Take medical treatment.
- After contact with skin : After skin contact wash off immediately with 1 % acetic acid solution, then clean thoroughly with soap and water.
Immediate medical treatment necessary, as untreated burns can result in slow-healing wounds
- After contact with eyes : Flush immediately with eyelids retracted with isotonic eye rinse solution or large quantities of water.
Summon a doctor immediately.
- After ingestion : drink large quantities of water; do not induce vomiting. consult a physician immediately.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : foam, carbon dioxide, dry powder.
- 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 (NOx)
- Special protective equipment for firefighters : Use self-contained breathing apparatus
- Further information : Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SAFETY DATA SHEET
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TEGOAMIN BDE 100

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Use personal protective equipment.
Keep away sources of ignition.
- 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.

7. HANDLING AND STORAGE

Handling

- Advice on safe handling : Heated product evolves combustible vapours.
Provide good ventilation of working area (local exhaust ventilation if necessary).
- Advice on protection against fire and explosion : Keep away from sources of ignition - no smoking
Take precautionary measures against electrostatic loading.
Cool endangered containers by water spray

Storage

- Further information : Keep container tightly closed
Protect from heat
storage according to EEC regulations concerning toxic substances and preparations.
- German storage class : 6.1

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment

- General protective measures : Avoid contact with eyes and skin
- Hygiene measures : Wash hands before breaks and after work.
Remove soiled or soaked clothing immediately.
At work do not eat, drink, smoke or take drugs.
- Respiratory protection : in case of formation of vapours/dusts:
Self-contained breathing apparatus

SAFETY DATA SHEET
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TEGOAMIN BDE 100

Hand protection : gloves made of nitril (NBR)
Eye protection : tightly fitting safety glasses
Skin and body protection : emergency eye wash fountains and safety showers should be available.
rubber apron

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Liquid
Colour : yellowish
Odour : amine-like
Melting temperature : < -80 °C
Boiling temperature : 189 °C
Flash point : 68 °C
Method: ASTM D 93
Ignition temperature : not measured
Lower explosion limit : 1 %(V)
Upper explosion limit : 5,1 %(V)
Vapour pressure : < 70 mbar
at 38 °C
Density : 0,853 g/cm3
at 20 °C
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.

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TEGOAMIN BDE 100

Hazardous decomposition : None with proper storage and handling.
products

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 Species: rat
Dose: 1.048 - 1.202 mg/kg

Acute dermal toxicity : LD50 Species: rabbit
Dose: 213 - 537 mg/kg

Skin irritation : Species: rabbit
corrosive

Eye irritation : Species: rabbit eye
strongly irritant

Note : toxic in contact with skin.
Toxic by inhalation.
Causes burns
Harmful if swallowed.
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

Note : 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:

SAFETY DATA SHEET
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TEGOAMIN BDE 100

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



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



Inland waterway transport

ADNR:
Class : 8
Item : 76 b
Description of the goods : 2922 Corrosive liquid, toxic, n.o.s.
Harzard release : bis(2-Dimethylaminoethyl)ether
Label : 8 corrosive



Sea transport

IMDG:
Class : 8
Packaging group : II UN-No: 2922
EmS : 8-15
Correct technical name : CORROSIVE LIQUID, TOXIC, N.O.S.
Harzard release : bis(2-Dimethylaminoethyl)ether
Label : 8 corrosive, 6.1 toxic



Air transport

ICAO/IATA:
Class : 8
Packaging group : II UN-No: 2922

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TEGOAMIN BDE 100

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

Hazard symbol(s) :



T

Toxic

Hazardous components which must be listed on the label : • Bis(2-dimethylaminoethyl)ether
EINECS-No.: 221-220-5

R-phrases) : 23/24 Toxic by inhalation and in contact with skin.
22 Harmful if swallowed.
34 Causes burns.

S-phrases) : 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
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

Risk classification according to German VbF : German regulations on flammable substances: is not subjected to the regulations on flammable substances.

TA Luft (Germany) : Class: III Paragraph 3.1.7

Water Hazard Class (Germany) : 2 (Classification acc. to german law)
KBwS-No.: 3.576

Other regulations : ZH 1/118 "Working with health hazard substances (for the workers) (M 050)"
ZH 1/229 "Data Sheet: Irritating substances / corrosive substances (M 004)"

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TEGOAMIN BDE 100

16. OTHER INFORMATION

none

R-phrases of components from chapter 2 - Full wording

10	Flammable.
20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
22	Harmful if swallowed.
23/24	Toxic by inhalation and in contact with skin.
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!