

# SAFETY DATA SHEET

according to 91/155/EEC

Date of issue/date of revision: 11.11.2003

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## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

- 1.1 **Product name:** *Disinfectant for amalgam separator collector*  
1.2 **Manufacturer:** **METASYS Medizintechnik GmbH**  
Florianistrasse 3, A-6063 Rum bei Innsbruck  
Tel.: +43-512-20 54 20 0 Fax: +43-512-20 54 20 7  
[www.metasys.com](http://www.metasys.com) [info@metasys.com](mailto:info@metasys.com)

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

### 2.1. Hazardous components:

Chemical expression	CAS-No.	Contents (%)	Symbol	R-phrases
N-(2-Aminopropyl)-N-dodecylpropan-1,3-diamine	2372-82-9	14 – 16	C, N ;	R22, R35; R50
N-(3-(Dodecylamino)propyl)glycine hydrochloride	93778-80-4	11 - 13		
Ethane-1,2-diol	107-21-1	2 - 3	Xn	R22
Benzyl alcohol	100-51-6	1 - 2	Xn	R20, R22
Water	7732-18-5	ca. 70		

## 3. POTENTIAL HAZARDS

Harmful if swallowed. Causes burns. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 4. FIRST AID MEASURES

- 4.1. **Inhalation:** Move to fresh air. If breathing is irregular or stopped, administer artificial respiration. Give oxygen. First aider needs to protect himself. Call a physician immediately.
- 4.2. **Skin contact:** Take off all contaminated clothing immediately. After contact with skin, wash immediately with plenty of soap and water. Call a physician immediately.
- 4.3. **Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. 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.
- 4.5. **Notes to physician:** Symptoms: Causes severe irritation of eyes, skin and mucous membranes.

## 5. FIRE-FIGHTING MEASURES

- 5.1. **Suitable extinguishing media:** dry powder, water spray, 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.

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5.4. **Additional advice:** Water mist may be used to cool closed containers.

### 6. ACCIDENTAL RELEASE MEASURES

- 6.1. **Personal precautions:** Use respirator when performing operations involving potential exposure to vapor of the product.
- 6.2. **Environmental precautions:** Do not flush into surface water or sanitary sewer system.
- 6.3. **Methods for cleaning up:** Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see section 13).

### 7. HANDLING AND STORAGE

- 7.1. **Handling:** Safe handling advice: Avoid contact with skin and eyes. Provide sufficient air exchange and/or exhaust in work rooms.  
Advice on protection: against fire and explosion: Take precautionary measures against static discharges.
- 7.2. **Storage:** Requirements fro 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 wellventilated place.

### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

#### 8.1. Componentes with workplace control parameters

N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine (CAS-No.: 2372-82-9)

Remarks: None established

Ethane-1,2-diol (CAS-No. 107-21-1) :

#### SUVA-MAK (2003)

Exposure limit(s) : 10 ml/m<sup>3</sup> 26 mg/m<sup>3</sup>

H (Dermal absorption possible)

Short term exposure limit : Short-term exposure limit : Cat. I(2)

ACGIH-TLV

Exposure Limit(s): Carcinogenicity: group A4

Maximum limit value: 100 mg/m<sup>3</sup>

Ceiling

#### 8.2. Personal protective equipment:

Hygiene measures: Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

Respiratory protection: Use respirator when performing operations involving potential exposure to vapor of the product.

Hand protection: rubber or plastic gloves

Eye protection: Wear eye/face protection.

Skin and body protection: Wear suitable protective clothing, gloves and eye/face protection.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

**9.1. Appearance:**

Form: liquid

Colour: light yellow

Odour: odorless

**9.2. Changes of physical state:**

Boiling point:

ca. 100 °C

Setting point:

< 5 °C

**9.3. Flash point:**

closed cup: > 100 °C; Method: Pensky-Martens c.c.

(DIN 51758)

**9.4. Density:**

1,0 g/cm<sup>3</sup> (23 °C)

**9.5. Viscosity, dynamic:**

20 – 60 mPa.s (20 °C); Method: OECD 114

**9.6. Water solubility:**

completely soluble

**9.7. pH-value:**

7 – 9 (10 g/l; 20 °C)

**9.8. Further information:**

none

### 10. STABILITY AND REACTIVITY

**10.1. Conditions to avoid:** No data available

**10.2. Hazardous reactions:** Stable under normal conditions.

**10.3. Additional information:** None.

### 11. TOXICOLOGICAL INFORMATION

**11.1. Acute oral toxicity (LD50):** 1680 mg/kg

Species: rat

Method: OECD Test Guideline 401

**11.2. Skin irritation:** corrosive

Species: rabbit

Exposure time: 4 h

Method: OECD Test Guideline 404

**11.3. Eye irritation:** corrosive

Species: rabbit

### 12. ECOLOGICAL INFORMATION

**12.1. Ecotoxicity effects:**

Toxicity to fish (LC50): 2 – 4 mg/l

Species: zebra fish

Acute toxicity

Exposure time: 96 h

Toxicity to bacteria (EC50): 2,7 mg/l

Method: DIN 38412 Part 8

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### 12.2. Persistence and degradability

Biodegradability: OECD Confirmatory Test: ca. 92,0 %

Testing period: 1 – 28 d

Method: OECD 303 A

Zahn-Wellens Test: 30,0 – 70,0 %

Testing period: 28 d

Method: OECD 302 B

### 13. DISPOSAL CONSIDERATION

**13.1. Waste from residues:** The organic ingredients can be incinerated in a suitable installation when in accordance with local regulations.

**13.2. Contaminated packaging:** Where possible recycling is preferred to disposal or incineration.

### 14. TRANSPORT INFORMATION

**14.1. Chemical characterisation:** alcohol, flammable, not otherwise mentioned.

ADR/RID/IATA Cargo/IATA Passenger/IMDG-Code:

Class: 8

Packaging group: II

Labels: Corrosive No. 8

Risk no. : 80

UN/ID No. : 3267

Proper shipping name: Corrosive liquid, basic, organic, n.o.s.

(Alkylaminoalkylglycine and Alkylamine)

IATA Cargo: Argo Aircraft Only; Packing instruction (cargo aircraft): 812

IATA Passenger: Packing instruction (passenger aircraft): 808

IMDG-Code: EmS: 8-15

### 15. REGULATORY INFORMATION

**15.1. Labelling according to EC-regulations:** Labelling according to Directive 88/379/EEC

*Warning symbol/Warning expression:* F+ (highly flammable) on outer packaging

*R-phrases:*

R20/22: Harmful by inhalation and if swallowed.

R20: Harmful if swallowed.

R34: Causes burns.

R35: Causes severe burns.

R50: Very toxic to aquatic organisms.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

*S-phrases:*

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 soap and water.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

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S45: In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

S61: Avoid release to the environment. Refer to special instructions/safety data sheets.

**15.2. National legislation:** Water contaminating class (Germany): WGK 2: water endangering

### **16. ADDITIONAL INFORMATION**

The present information is based on our present knowledge and refers to the product as it is delivered. The present information serves to describe our product in terms of safety requirements and therefore does not guarantee certain product properties.