## Safety data sheet

# according to Directive (EC) no. 1907/2006 (REACH) and Directive (EU) no. 830/2015

Trading name: Sealing compound,

component B (hardener)

Created on: 23.10.2015

Changed on: 25.05.2018

Number of pages: 11

## 1. Designation of the substance of the mixture and the company

#### 1.1 Product identifier

Trading name: Sealing compound, component B (hardener)

Item number: 7203864 Type: VMS-VW 1

#### 1.2 Relevant identified uses of the substance or mixture and uses we would not recommend

#### Identified use

Epoxy resin moistener. Moisture-resistant casting for cable glands and cable insulation. For use in the PYROLIQ® casting compound system.

#### Uses we would not recommend

No other relevant information available.

#### 1.3 Details on the supplier providing the safety data sheet

#### Manufacturer/supplier

OBO Bettermann Holding GmbH & Co. KG

P.O. Box 1120 58694 Menden

Germany

#### **Division providing information**

**Customer Service** 

Tel.: +49 (0)2373 89-1700 E-mail: export@obo.de

#### 1.4 Emergency telephone number

REACH Registration of Chemicals GmbH

Tel.: +49 (0)700 2411 2112 (OBO)

#### 2. Possible risks

#### 2.1 Categorisation of substance or mixture

## EC Directive 1272/2008 (CLP)



GHS05 irrirtant

Skin Corr. 1B H314: Causes severe skin burns and eye damage.

Eye Dam. 1 H318: Causes serious eye damage.



GHS07

Acute Tox. 4 H302: Harmful if swallowed.

OPTO 180290

Acute Tox. 4 H312: Harmful in contact with skin.

Skin Sens. 1 H317: May cause allergic skin reactions.

Aquatic Chronic 3 H412: Harmful to aquatic life with long-lasting effects.

#### 2.2 Labelling elements

## EC Directive 1272/2008 (CLP)

#### **Hazard pictograms**





GHS 05 GHS 07

#### Signal word

Danger

### Hazardous components for labelling

3,6-Diazaoctane-1,8-diamine

3-Aminomethyl-3,5,5-trimethyl-cyclohexylamine

Benzylalcohol

1,3-Benzoldimethanamine

#### **Risk information**

H302+H312: Harmful if swallowed or in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause allergic skin reactions.

H412: Harmful to aquatic life with long-lasting effects.

#### Safety information

P260: Do not breathe dust/fumes/gas/mist/vapours/aerosol.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340: IF INHALED: Take the person into the fresh air and make sure breathing is not hindered.

P310: Call a POISON CENTRE or a doctor.

P305+P351+P338: IN CASE OF CONTACT WITH THE EYES: Rinse cautiously with water for several minutes. Remove any contact lenses where possible. Continue rinsing.

P321: Specific treatment (see ... on this label).

P362+364: Take off contaminated clothing. Wash contaminated clothing before reuse.

P405: Store locked up.

#### 2.3 Other risks

## Results of PBT and vPvB assessment

• PBT: N/A.

vPvB: N/A.

#### 3. Composition/details of component parts

### 3.1 Substances

This product is a mixture.

#### 3.2 Mixtures

Description: Mixture of the substances listed below with non-hazardous additions.

Hazardous contents:		
CAS: 112-24-3	3,6-Diazaoctane-1,8-diamine	>30-
EINECS: 203-950-6	Skin Corr. 1B, H314; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	<40%

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CAS: 100-51-6 EINECS: 202-859-9	Benzylalcohol  Acute Tox. 4, H302; Acute Tox. 4, H332	>15— <25%
CAS: 2855-13-2 EINECS: 220-666-8	3-Aminomethyl-3,5,5-trimethyl-cyclohexylamine  Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	>15- <25%
CAS: 1477-55-0 EINECS: 216-032-5	1,3-Benzoldimethanamine  Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H332	>4-<7%
CAS: 69-72-7 EINECS: 200-712-3	Salicylic acid	>3-<5%

#### Additional information:

The actual text of the listed hazard information can be found in Section 16.

#### 4. First aid measures

#### 4.1 Description of the first aid measures

#### **General information**

Remove articles of clothing soiled with the product immediately.

Toxicity symptoms may only occur after several hours. Therefore, ensure medical supervision for at least 48 hours after the accident.

#### After inhalation

Ensure a good supply of fresh air and, to be on the safe side, contact a doctor.

If unconscious, position and transport the patient in the recovery position.

#### After skin contact

In the case of longer-lasting skin contact, seek medical advice.

Wash off immediately with soap and water and rinse well.

#### After eye contact

With the eyelids open, rinse eyes under running water for several minutes and obtain medical advice.

#### After ingestion

Contact a doctor immediately.

Drink copious amounts of water and ensure a good supply of fresh air. Obtain immediate medical assistance.

#### 4.2 Most important acute and delayed symptoms and effects

No other relevant information available.

## 4.3 Information for immediate medical aid or special treatment

No other relevant information available.

#### 5. Fire protection measures

#### 5.1 Extinguishing media

#### Suitable extinguishing media

Agree fire extinguishing measures to the environment.

#### 5.2 Special hazards arising from the substance or mixture

If there is a fire, the following may be released:

Nitrogen oxide (NOx)

Carbon monoxide (CO)

Carbon dioxide (CO2)

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#### 5.3 Advice for firefighters

Wear a full protection suit.

Wear breathing protection which works independently of the ambient air.

#### 6. Measures in the case of unintentional release

## 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected people away.

#### 6.2 Environmental protection measures

Inform responsible authorities on entry into waterways or sewer system.

Dilute with plenty of water.

Do not let the product enter the sewerage system/surface water/groundwater.

#### 6.3 Methods and material for retention and cleaning

Collect the product with liquid-binding material (e.g. sand, diatomaceous earth, acid binder, universal binder,

sawdust).

Use a neutralisation agent.

Dispose of contaminated material as waste in accordance with Section 13.

Ensure sufficient ventilation.

#### 6.4 Reference to other sections

For information on safe handling, see Section 7.

For information on personal protective equipment, see Section 8.

For disposal information, see Section 13.

## 7. Handling and storage

#### 7.1 Protective measures for safe handling

Keep the containers closed tightly.

Ensure good ventilation/extraction at the workstation.

Avoid aerosol formation.

#### Information on fire and explosion protection

No special measures required.

#### 7.2 Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and containers

No special requirements.

## Joint storage information:

Store separately from foods.

#### Additional information on storage conditions:

Keep the containers closed tightly.

#### Storage class:

Classification according to operating safety directive (BetrSichV): -

#### 7.3 Specific end applications

No other relevant information available.

#### 8. Limitation and monitoring of the exposure/personal protective equipment

#### 8.1 Parameters to be monitored

Components with workplace-related limit values to be monitored:		
112-24-3 3,6-Diazaoctane-1,8-diamine		
MAK	As vapour and aerosol;cf. Sect. IV	

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111-40-0 3-Azapentane-1,5-diamine		
MAK	cf. Sect. IV	

#### Additional information:

The basis was the lists compiled during creation.

#### 8.2 Limitation and monitoring of exposure

## Personal protective equipment

#### General protection and hygiene measures:

Keep away from food, drinks and feed.

Take off soiled, saturated clothing immediately.

Wash your hands before breaks and after completing work.

Avoid contact with the eyes and skin.

#### Respiratory protection

For short-term or low exposure with breathing filter device; in cases of intensive or longer exposure, use a breathing protection device which works independently of the ambient air.

#### **Hand protection**

Not required.



Protective gloves

The glove material must be impermeable and resistant to the product/the substance/the preparation.

Due to missing tests, it is not possible to recommend a glove material for the product/the preparation/the chemical mixture.

The selection of the glove material must include observance of the penetration times, permeation rates and degradation.

#### Glove material

The selection of a suitable glove is not only dependent on the material, but on other quality characteristics, and differs from manufacturer to manufacturer. As the product is a combination of multiple substances, the resistance of glove materials cannot be calculated in advance and must therefore be checked before use.

#### Penetration time of the glove material

Contact the protective glove manufacturer for the exact penetration time, which must be complied with.

#### Eye protection



Tightly closed protective glasses

#### Physical protection

Protective work clothing

#### 9. Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

#### **Appearance**

Form: Liquid

Colour: Light yellow Odour: Amino-like Odour threshold: N/D.

#### Safety-relevant data

pH value: Alkaline Change of state

Melting point/melting range: N/D.

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• Boiling point/boiling range: >200 °C

Ignition point: >120 °C

Flammability (solid, gaseous): Not applicable.

Ignition temperature: 325 °C

Decomposition temperature: Not determined. Self-ignition: This product does not self-ignite.

Risk of explosion: This product poses no risk of explosion.

Explosion limits:Lower: 1.0 Vol %Upper: 10.0 Vol %

Vapour pressure at 20 °C: 0.5 hPa

Density at 20 °C: 1.03 g/cm³
Relative density: Not determined.
Vapour density: Not determined.
Vaporisation speed: Not determined.

Solubility/mixability in water: Completely mixable.

Distribution coefficient (n-octanol/water): Not determined.

Viscosity:

· Dynamic: Undetermined.

Kinematic at 20 °C: 1,000 mm<sup>2</sup>/s
 Solvent content: Organic solvents: 0.0%

#### 9.2 Other data

No other relevant information available.

## 10. Stability and reactivity

#### 10.1 Reactivity

No other relevant information available.

#### 10.2 Chemical stability

## Thermal decomposition/conditions to be avoided:

No decomposition if used correctly.

#### 10.3 Possibility of hazardous reactions

No dangerous reactions known.

#### 10.4 Conditions to avoid

No decomposition if used correctly.

#### 10.5 Incompatible materials

No other relevant information available.

#### 10.6 Hazardous decomposition products

Nitrogen oxide (NOx)

Carbon monoxide

### 11. Toxicological data

#### 11.1 Data on toxicological effects

## **Acute toxicity**

Harmful if swallowed or in contact with skin.

#### Categorisation-relevant LD/LC50 values:

#### 112-24-3 3,6-Diazaoctane-1,8-diamine

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Oral	LD50	2,500 mg/kg (rat)		
Dermal	LD50	805 mg/kg (rabbit)		
111-40-0 3-Azapentane-1,5-diamine				
Oral	LD50	1,080 mg/kg (rat)		
Dermal	LD50	1,090 mg/kg (rabbit)		

#### **Primary irritant effect:**

#### Corrosive/irritating to the skin

Causes severe skin burns and eye damage.

#### Serious eye damage/irritation

Avoid contact with the eyes.

Causes serious eye damage.

#### Sensitisation of the airways/skin

May cause an allergic skin reaction.

### CMS impacts (carcinogenic, DNA-modifying and reproductive system impact)

- · Germ cell mutagenicity: On the basis of the available data, the classification criteria are not fulfilled.
- · Carcinogenicity: On the basis of the available data, the classification criteria are not fulfilled.
- · Reproductive toxicity: On the basis of the available data, the classification criteria are not fulfilled.

#### Specific target organ toxicity with single exposure

On the basis of the available data, the classification criteria are not fulfilled.

## Specific target organ toxicity with repeated exposure

On the basis of the available data, the classification criteria are not fulfilled.

#### **Aspiration risk**

On the basis of the available data, the classification criteria are not fulfilled.

#### 12. Environmental data

#### 12.1 Toxicity

Aquatic toxicity: No other relevant information available.

#### 12.2 Persistence and degradability

Not easily biologically degradable.

#### 12.3 Bioaccumulation potential

No other relevant information available.

#### 12.4 Mobility in soil

No other relevant information available. Results of PBT and vPvB assessment

#### **Ecotoxic impacts:**

Note: Harmful to fish.

Additional ecological information:

#### General information:

## Water hazard class 2 (self-categorisation):

Very hazardous to water

Do not let the product enter the groundwater, the waterways or the sewerage system.

May not enter the wastewater or outlet channel in an undiluted or unneutralised form.

Hazardous to drinking water, even when small quantities escape into the soil.

Harmful to aquatic organisms.

#### 12.5 Other adverse effects

#### Results of PBT and vPvB assessment

PBT: N/A.

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vPvB: N/A.

## 13. Disposal information

#### 13.1 Waste treatment method

#### Recommendation:

Must be passed to an approved special waste incineration system, subject to compliance with the special waste regulations after pretreatment.

May not be disposed of together with domestic waste. Do not let them enter the sewerage system.

## **European Waste Directory**

07 02 04\*

Other organic solvents, washing fluids and bitterns

#### Soiled packaging

#### **Recommendation:**

Disposal according to official regulations.

## Recommended cleaning agent:

Alcohol

Water, possibly with addition of cleaning agents.

## 14. Transport information

#### 14.1 UN number

ADR, IMDG, IATA

**UN1760** 

#### 14.2 Current UN shipment designation

#### **ADR**

1760 CORROSIVE LIQUID, N.A.G. (TRIETHYLENTETRAMINE, DIETHYLENTRIAMINE)

#### IMDG, IATA

CORROSIVE LIQUID, N.O.S (TRIETHYLENTETRAMINE, DIETHYLENTRIAMINE)

## 14.3 Transport risk classes

#### ADR, IMDG, IATA



#### Class 8

Corrosive substances

Hazard label 8

#### 14.4 Packaging group

ADR, IMDG, IATA

П

#### 14.5 Environmental risks

#### Marine pollutant:

Nο

#### 14.6 Special precautionary measures for the user

Caution: Corrosive substances

#### Kemler number:

80

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#### EMS number:

F-A,S-B

#### Segregation groups:

Alkalis

## 14.7 Mass good transportation according to Appendix II of the MARPOL agreement 73/78 and according to the IBC code

N/A.

Transport/additional information:

**ADR** 

Limited quantity (LQ)

1 L

Excepted quantities (EQ) Code:

E2

Maximum net quantity per inner packaging:

30 ml

Maximum net quantity per outer packaging:

500 ml

**Transport category:** 

2

**Tunnel limitation code:** 

F

**IMDG** 

Limited quantities (LQ):

1 L

**Excepted quantities (EQ) Code:** 

E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

**UN "Model Regulation":** 

UN1760 CORROSIVE LIQUID, N. A.G. (TRIETHYLENTETRAMINE, DIETHYLENTRIAMINE), 8, II

## 15. Legal specification

## 15.1 Specifications regarding safety, health and environmental protection/specific legal specifications for the substance or the mixture

#### Labelling according to Directive (EU) No. 1272/2008

The product is classified and labelled according to the CLP directive.

#### **Hazard pictograms**





GHS05 GHS07

#### Signal word

Danger

#### Hazardous components for labelling:

3,6-Diazaoctane-1,8-diamine

3-Aminomethyl-3,5,5-trimethyl-cyclohexylamine

Benzylalcohol

#### 1,3-Benzoldimethanamine

#### **Risk information**

H302+H312: Harmful if swallowed or in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause allergic skin reactions.

H412: Harmful to aquatic life with long-lasting effects.

#### Safety information

P260: Do not breathe dust/fumes/gas/mist/vapours/aerosol.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340: IF INHALED: Take the person into the fresh air and make sure breathing is not hindered.

P310: Call the POISON CENTRE or a doctor.

P305+P351+P338: IN CASE OF CONTACT WITH THE EYES: Rinse cautiously with water for several minutes. Remove any contact lenses where possible. Continue rinsing.

P321: Specific treatment (see ... on this label).

P362+364: Take off contaminated clothing. Wash contaminated clothing before reuse.

P405: Store locked up.

#### DIRECTIVE (EC) No. 1907/2006 APPENDIX XVII Restriction conditions: 3

#### National specifications – Germany

#### Water hazard class:

WHC 2 (Self-categorisation): Very hazardous to water.

#### 15.2 Chemical safety assessment

A chemical safety assessment was not carried out.

#### 16. Other data

This data is provided according to our latest knowledge, but does not provide any guarantee of product properties and does not provide any legal guarantee.

#### Relevant statements

H302: Harmful if swallowed.

H312: Harmful in contact with skin.

H314: Causes severe skin burns and eye damage.

H315: Causes skin irritation.

H317: May cause allergic skin reactions.

H318: Causes serious eye damage.

H332: Harmful to health if inhaled.

H335: May cause respiratory irritation.

H412: Harmful to aquatic life with long-lasting effects.

#### Data sheet of issuing area

Department: Technical documentation

#### Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

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ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 3: Specific target organ toxicity – Single exposure, Hazard Category 3

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

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