

# Safety data sheet

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



Trading name: Sealing compound for external use,  
component B (hardener)

Created on: 23.10.2015

Changed on: 24.05.2018

Number of pages: 10

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

### 1.1 Product identifier

Trading name: Sealing compound for external use, component B (hardener)

Item number: 7203858

Type: VMS-VA 1

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

#### Identified use

Moisture-resistant casting for cable glands and cable insulation, as well as electrical and mechanical components (e.g. busbars). 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)



GHS08 Danger to health

Resp. Sens. 1 H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carc. 2 H351: Suspected of causing cancer.

STOT RE 2 H373: May cause damage to organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H332: Harmful to health if inhaled.

Skin Irrit. 2 H315: Causes skin irritation.

Eye Irrit. 2 H319: Causes serious eye irritation.

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

STOT SE 3 H335: May cause respiratory irritation.

## 2.2 Labelling elements

### EC Directive 1272/2008 (CLP)

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

### Hazard pictograms



GHS 07 GHS 08

### Signal word

Danger

### Hazardous components for labelling

Diphenylmethane diisocyanate, isomers and similar

Oligomeric MDI

### Risk information

H332: Harmful to health if inhaled.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317: May cause allergic skin reactions.

H351: Suspected of causing cancer.

H335: May cause respiratory irritation.

H373: May cause damage to organs through prolonged or repeated exposure.

### Safety information

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

P280: Wear protective gloves/protective clothing/eye protection/face protection.

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

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.

P314: Get medical advice/attention if you feel unwell.

P405: Store locked up.

### Additional data:

Contains isocyanates. Can cause allergic reactions.

## 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

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

##### Hazardous contents

Content	Designation	Content
9016-87-9	Diphenylmethane diisocyanate, isomers and similar ⚠ Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	>50–<75%
32055-14-4	Oligomeric MDI ⚠ Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	>25–<50%

##### Additional notes

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

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

##### After inhalation

Move the affected person into the fresh air immediately and let them rest.

If there are breathing difficulties, obtain medical treatment.

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

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. If feeling unwell for longer periods of time, consult a doctor.

##### After ingestion

If feeling unwell for longer periods of time, consult a doctor.

#### 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

Can be released if there is a fire: Carbon monoxide (CO)

### 5.3 Advice for firefighters

Special protective equipment: Wear breathing protection device.

## 6. Measures in the case of unintentional release

### 6.1 Personal precautions, protective equipment and emergency procedures

Not required.

### 6.2 Environmental protection measures

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).

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

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

#### Information on storage conditions

Keep the containers closed tightly.

#### 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

### Additional information on the design of technical systems:

No further data, see Section 7.

### 8.1 Parameters to be monitored

<b>Components with workplace-related limit values to be monitored:</b>	
9016-87-9 diphenylmethane diisocyanate, isomers and similar	
AGW	0.05 E mg/m <sup>3</sup> 1;=2=(I);DFG, H, Sah, Y, 12

### 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

## 9. Physical and chemical properties

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### 9.1 Information on basic physical and chemical properties

#### Appearance

Form: Liquid

Colour: Brown

Odour: Characteristic

Odour threshold: N/D.

#### Safety-relevant data

pH value: Not determined.

Melting point/freezing point: Not determined:

Boiling start/range: >300 °C

Ignition point: >200 °C

Flammability (solid, gaseous): N/A.

Ignition temperature: 400 °C

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

Upper explosion limit: Not determined.

Lower explosion limit: Not determined.

Vapour pressure at 20 °C: 11 hPa

Density at 20 °C: 1.23 g/cm<sup>3</sup>

Relative density: Not determined.

Vapour density: Not determined.

Vaporisation speed: Not determined.

Solubility in water: Not or barely mixable.

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

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

Decomposition temperature: Not determined.

Viscosity:

- Dynamic: Not determined.
- Kinematic at 20 °C: 150 mm<sup>2</sup>/s

Solvent content:

- Organic solvents: 0.0%
- VOC (EU) 0.00%

## 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.

Reactions with alcohols, amines, aqueous acids and alkalis.

Reactions with waters.

### 10.4 Conditions to avoid

No other relevant information available.

### 10.5 Incompatible materials

No other relevant information available.

### 10.6 Hazardous decomposition products

No dangerous decomposition products known.

## 11. Toxicological data

### 11.1 Data on toxicological effects

#### Acute toxicity

Harmful to health if inhaled.

Categorisation-relevant LD/LC50 values		
9016-87-9 diphenylmethane diisocyanate, isomers and similar		
Oral	LD50	>5,000 mg/kg (rat)
Inhalative	LC50/4 h	0.49 mg/l (rat)

**Primary irritant effect:****Corrosive/irritating to the skin**

Causes skin irritation.

**Serious eye damage/irritation**

Causes serious eye irritation.

**Sensitisation of the airways/skin**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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: Suspected of causing cancer.
- Reproductive toxicity: On the basis of the available data, the classification criteria are not fulfilled.

**Specific target organ toxicity with single exposure**

May cause respiratory irritation.

**Specific target organ toxicity with repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

**Aspiration risk**

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

**12. Environmental data****12.1 Toxicity**

<b>Aquatic toxicity:</b>	
32055-14-4 Oligomeric MDI	
EC50	>1,000 mg/kg (daphnia) (24 h)

**12.2 Persistence and degradability**

No other relevant information available.

**12.3 Bioaccumulation potential**

No other relevant information available.

**12.4 Mobility in soil**

No other relevant information available.

**General information:**

Water hazard class 1 (self-categorisation): Slightly hazardous to water

Do not let the product enter the groundwater, waterways or sewerage system, either undiluted or in large quantities.

**12.5 Results of PBT and vPvB assessment**

PBT: N/A.

vPvB: N/A.

**12.6 Other adverse effects**

No other relevant information available.

**13. Disposal information****13.1 Waste treatment method****Recommendation:**

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

**Uncleaned packaging:**

**Recommendation:**

Disposal according to official regulations.

## 14. Transport information

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**14.1 UN number**

**ADR, ADN, IMDG, IATA**

N/A

**14.2 Current UN shipment designation**

**ADR, ADN, IMDG, IATA**

N/A

**14.3 Transport risk classes**

**ADR, IMDG, IATA**

N/A

**14.4 Packaging group**

**ADR, ADN, IMDG, IATA**

N/A

**14.5 Environmental risks**

**Marine pollutant**

No

**14.6 Special precautionary measures for the user**

N/A.

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

N/A.

**UN "Model Regulation"**

N/A

## 15. Legal specification

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**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**



GHS07    GHS08

**Signal word:**

Danger

**Hazardous components for labelling**

Diphenylmethane diisocyanate, isomers and similar  
Oligomeric MDI

**Risk information**

H332: Harmful to health if inhaled.

H315: Causes skin irritation.



H319: Causes serious eye irritation.  
 H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H317: May cause allergic skin reactions.  
 H351: Suspected of causing cancer.  
 H335: May cause respiratory irritation.  
 H373: May cause damage to organs through prolonged or repeated exposure.

**Safety information**

P260: Do not breathe dust/fumes/gas/mist/vapours/aerosol.  
 P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 P304+P340: IF INHALED: Take the person into the fresh air and make sure breathing is not hindered.  
 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.  
 P314: Get medical advice/attention if you feel unwell.  
 P405: Store locked up.

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

**National specifications – Germany**

**Technical Instructions on Air Quality Control**

Class	Ratio in %
I	100%

**Water hazard class:**

WHC 1 (Self-categorisation) – Slightly 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**

H315: Causes skin irritation.  
 H317: May cause allergic skin reactions.  
 H319: Causes serious eye irritation.  
 H332: Harmful to health if inhaled.  
 H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H335: May cause respiratory irritation.  
 H351: Suspected of causing cancer.  
 H373: May cause damage to organs through prolonged or repeated exposure.

**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  
 ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin irritant/corrosive effect – Category 2

Eye Irrit. 2: Serious eye damage/irritation – Category 2

Resp. Sens. 1: Sensitisation of the airways – Category 1

Skin Sens. 1: Sensitisation of the skin – Category 1

Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT SE 2: Specific target organ toxicity (repeated exposure) – Category 2