

## Safety Data Sheet

according to UK REACH Regulation

## PL-POX 25, Part A

Revision date: 06.09.2021

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

PL-POX 25, Part A

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Chemical product for construction and industry.

For use in industrial installations and professional treatment only.

**Uses advised against**

The product is not intended for private use.

**1.3. Details of the supplier of the safety data sheet**

Company name: Bodenbender GmbH  
Street: Goldbergstraße 32  
Place: D-35216 Biedenkopf  
Telephone: +49 (0)6461 98520  
e-mail: info@bodenbender.com  
Internet: www.bodenbender.com

**1.4. Emergency telephone number:** +49 (0)6461 98520 (Mo-Fr 07:00 – 16:00 h (CET))**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory or skin sensitisation: Skin Sens. 1

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

**2.2. Label elements****GB CLP Regulation****Hazard components for labelling**

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-

[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)

**Signal word:**

Warning

**Pictograms:****Hazard statements**

H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P391 Collect spillage.

**Special labelling of certain mixtures**

EUH205 Contains epoxy constituents. May produce an allergic reaction.  
EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

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**2.3. Other hazards**

No further relevant information available.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
1675-54-3	2,2'-[[1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane			25 - < 50 %
	216-823-5	603-073-00-2	01-2119456619-26	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H319 H317 H411			
	Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl)oxirane			10 - < 25 %
	701-263-0		01-2119454392-40	
	Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H317 H411			
933999-84-9	reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)			5 - < 10 %
	618-939-5		01-2119463471-41	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 3; H315 H319 H317 H412			
13463-67-7	titanium dioxide			1 - < 5 %
	236-675-5	022-006-00-2	01-2119489379-17	
	Carc. 2; H351			

Full text of H and EUH statements: see section 16.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Remove affected person from the danger area and lay down. In case of allergic symptoms, especially in the breathing area, seek medical advice immediately. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**After inhalation**

Remove casualty to fresh air and keep warm and at rest.

**After contact with skin**

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin irritation, consult a physician.

**After contact with eyes**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

**After ingestion**

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Let 1 glass of water be drunken in little sips (dilution effect). Do NOT induce vomiting. Call a physician immediately.

**4.2. Most important symptoms and effects, both acute and delayed**

Allergic reactions

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

- alcohol resistant foam.
- Water spray jet.
- Carbon dioxide (CO<sub>2</sub>).
- Dry extinguishing powder.

**Unsuitable extinguishing media**

- Full water jet.

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**5.2. Special hazards arising from the substance or mixture**

In case of fire may be liberated:

- Carbon monoxide
- Carbon dioxide.
- Nitrogen oxides (NOx).

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment (refer to section 8). Safe handling: see section 7. Provide adequate ventilation as well as local exhaustion at critical locations.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Cover drains. Clean contaminated articles and floor according to the environmental legislation. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

**6.3. Methods and material for containment and cleaning up**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Take up mechanically, placing in appropriate containers for disposal.

**6.4. Reference to other sections**

Personal protection equipment: see section 8

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advice on safe handling**

People who suffer from skin sensitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this preparation.

Avoid contact with skin, eyes and clothes. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Use personal protection equipment.

Never use pressure to empty container. Keep/Store only in original container.

Do not allow to enter into surface water or drains.

**Advice on protection against fire and explosion**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Further information on handling**

Wash hands before breaks and after work. Used working clothes should not be worn outside the work area. Street clothing should be stored separately from work clothing.

**7.2. Conditions for safe storage, including any incompatibilities**

**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Keep/Store only in original container. Protect against direct sunlight.

**Hints on joint storage**

Keep away from: Food and feedingstuffs

**Further information on storage conditions**

Protect against:

- Frost.
- Humidity.
- Heat.

**7.3. Specific end use(s)**

No data available

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
13463-67-7	Titanium dioxide, respirable	-	4		TWA (8 h)	WEL

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**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
1675-54-3	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane			

**8.2. Exposure controls**

**Appropriate engineering controls**

Provide adequate ventilation. If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

**Protective and hygiene measures**

Avoid contact with skin, eyes and clothes. Use protective skin cream before handling the product. Remove contaminated, saturated clothing immediately. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

**Eye/face protection**

Wear eye protection/face protection.

**Hand protection**

Suitable material:

- NBR (Nitrile rubber)
- Butyl caoutchouc (butyl rubber)

DIN-/EN-Norms: DIN-/EN-Norms: EN ISO 374

Use gloves only once. Replace when worn. Use protective skin cream before handling the product.

**Skin protection**

For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

**Respiratory protection**

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

**Environmental exposure controls**

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	various
Odour:	characteristic
pH-Value:	No data available
<b>Changes in the physical state</b>	
Melting point/freezing point:	No data available
Boiling point or initial boiling point and boiling range:	No data available
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
Flash point:	> 95 °C
Sustaining combustion:	No data available
<b>Flammability</b>	
Solid:	No data available
Gas:	No data available
<b>Explosive properties</b>	
No data available	
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Auto-ignition temperature:	No data available
<b>Self-ignition temperature</b>	
Solid:	No data available

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Gas:	No data available
Decomposition temperature:	No data available
<b>Oxidizing properties</b>	
No data available	
Vapour pressure:	No data available
Vapour pressure:	No data available
Density (at 23 °C):	~ 1,4 g/cm <sup>3</sup>
Bulk density:	No data available
Water solubility:	No data available
<b>Solubility in other solvents</b>	
No data available	
Partition coefficient n-octanol/water:	No data available
Viscosity / dynamic: (at 23 °C)	~ 3400 mPa·s
Viscosity / kinematic:	No data available
Flow time:	No data available
Relative vapour density:	No data available
Evaporation rate:	No data available

**9.2. Other information**

No data available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

**10.2. Chemical stability**

The product is chemically stable under recommended conditions of storage, use and temperature.

**10.3. Possibility of hazardous reactions**

Reaction with:

- Amines.
- Acid.
- Alkali (lye)

**10.4. Conditions to avoid**

No data available

**10.5. Incompatible materials**

No data available

**10.6. Hazardous decomposition products**

No data available

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

Based on available data, the classification criteria are not met.

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CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
1675-54-3	2,2'-[[1-methylethylidene]bis(4,1-phenyleneoxymethylene)]bisoxirane					
	oral	LD50 mg/kg	15000	Rat		
	dermal	LD50 mg/kg	23000	Rabbit		
	Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane					
	oral	LD50 mg/kg	> 5000	Rat		
	dermal	LD50 mg/kg	> 2000	Rat		
933999-84-9	reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)					
	oral	LD50 mg/kg	2190	Rat		
	dermal	LD50 mg/kg	> 2000	Rabbit		

**Irritation and corrosivity**

Causes skin irritation.  
Causes serious eye irritation.

**Sensitising effects**

Contains epoxy constituents. May produce an allergic reaction. May cause an allergic skin reaction. (2,2'-[[1-methylethylidene]bis(4,1-phenyleneoxymethylene)]bisoxirane; Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane; reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2))  
May cause heavy allergic reactions with chronic effects after a sensitization and a later exposure by very low amounts.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**SECTION 12: Ecological information**

**12.1. Toxicity**

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
1675-54-3	2,2'-[[1-methylethylidene]bis(4,1-phenyleneoxymethylene)]bisoxirane					
	Acute fish toxicity	LC50	2,0 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute crustacea toxicity	EC50	1,8 mg/l	48 h	Daphnia magna (Big water flea)	
	Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane					
	Acute fish toxicity	LC50	2,54 mg/l	96 h		
	Acute algae toxicity	ErC50	1,8 mg/l	72 h		
	Acute crustacea toxicity	EC50	2,55 mg/l	48 h		
933999-84-9	reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)					
	Acute fish toxicity	LC50	30 mg/l	96 h	Leuciscus idus (golden orfe)	

**12.2. Persistence and degradability**

No information available.

**12.3. Bioaccumulative potential**

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**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
1675-54-3	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	3,242
	Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-{2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane	3,6

**12.4. Mobility in soil**

No information available.

**12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**12.6. Other adverse effects**

No further relevant information available.

**Further information**

Toxic to aquatic life with long lasting effects. Do not allow to enter into surface water or drains.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. The waste code has to be identified in agreement with the disposal company or the competent authority.

**Contaminated packaging**

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

**SECTION 14: Transport information****Land transport (ADR/RID)**

<b>14.1. UN number:</b>	UN 3082
<b>14.2. UN proper shipping name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)
<b>14.3. Transport hazard class(es):</b>	9
<b>14.4. Packing group:</b>	III
Hazard label:	9
Classification code:	M6
Special Provisions:	274 335 375 601
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	90
Tunnel restriction code:	-

**Inland waterways transport (ADN)**

<b>14.1. UN number:</b>	UN 3082
<b>14.2. UN proper shipping name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)
<b>14.3. Transport hazard class(es):</b>	9
<b>14.4. Packing group:</b>	III
Hazard label:	9
Classification code:	M6
Special Provisions:	274 335 375 601
Limited quantity:	5 L
Excepted quantity:	E1

**Marine transport (IMDG)**

<b>14.1. UN number:</b>	UN 3082
<b>14.2. UN proper shipping name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)
<b>14.3. Transport hazard class(es):</b>	9
<b>14.4. Packing group:</b>	III
Hazard label:	9
Marine pollutant:	yes
Special Provisions:	274, 335, 969
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-A, S-F

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**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number:</b>	UN 3082
<b>14.2. UN proper shipping name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)
<b>14.3. Transport hazard class(es):</b>	9
<b>14.4. Packing group:</b>	III
Hazard label:	9
Special Provisions:	A97 A158 A197
Limited quantity Passenger:	30 kg G
Passenger LQ:	Y964
Excepted quantity:	E1
IATA-packing instructions - Passenger:	964
IATA-max. quantity - Passenger:	450 L
IATA-packing instructions - Cargo:	964
IATA-max. quantity - Cargo:	450 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS:	Yes
Danger releasing substance:	epoxy resin

**14.6. Special precautions for user**

No data available

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

No data available

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3

2004/42/EC (VOC):	< 500 g/l (A+B)
Subcategory according to Directive 2004/42/EC:	Two-pack reactive performance coatings for specific end use such as floors - Solvent-borne coatings, VOC limit value: 500 g/l

**National regulatory information**

Water hazard class (D):	2 - obviously hazardous to water
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**SECTION 16: Other information**

**Changes**

This data sheet contains changes from the previous version in section(s): 2,3,8,9.

**Classification for mixtures and used evaluation method according to GB CLP Regulation**

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 2; H411	Calculation method

**Relevant H and EUH statements (number and full text)**

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH205	Contains epoxy constituents. May produce an allergic reaction.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

**Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is



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singularly responsible for adhering to existing laws and regulations.

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*