

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 16.09.2021

Version number 5 (replaces version 4)

Revision: 16.09.2021

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- **1.1 Product identifier**
- **Trade name** *EPOXY VERSIEGELUNG EP 20 KOMP.A*
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** *Epoxy resin*
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
*MUREXIN GmbH*  
*Franz v. Furtenbachstr. 1*  
*A-2700 Wiener Neustadt*  
*Tel.: +43 (0)2622/27401*
- **Informing department:** *chemikalieninfo@murexin.com*
- **1.4 Emergency telephone number:**  
*UK National poisons Emergency number.: +44 (0) 870 600 6266*

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



environment

*Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.*



*Skin Irrit. 2            H315 Causes skin irritation.*  
*Eye Irrit. 2            H319 Causes serious eye irritation.*  
*Skin Sens. 1           H317 May cause an allergic skin reaction.*

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
*The product is classified and labelled according to the CLP regulation.*
- **Hazard pictograms**



GHS07 GHS09

- **Signal word** *Warning*
- **Hazard-determining components of labelling:**  
*reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)*  
*formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol*  
*1,6-bis(2,3-epoxypropoxy)hexane*  
*bis[4-(2,3-epoxypropoxy)phenyl]propane*
- **Hazard statements**  
*H315 Causes skin irritation.*  
*H319 Causes serious eye irritation.*  
*H317 May cause an allergic skin reaction.*  
*H411 Toxic to aquatic life with long lasting effects.*
- **Precautionary statements**  
*P101                    If medical advice is needed, have product container or label at hand.*  
*P102                    Keep out of reach of children.*

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- P103 Read carefully and follow all instructions.  
 P261 Avoid breathing mist/vapours/spray.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves / eye protection / face protection.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

Contains epoxy constituents. May produce an allergic reaction.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.











· **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

· **Description:** Mixture consisting of the following components with harmless additives.

· **Dangerous components:**

CAS: 1675-54-3 EINECS: 216-823-5	bis[4-(2,3-epoxypropoxy)phenyl]propane   EUH205 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 %	25-50%
CAS: 13463-67-7 EINECS: 236-675-5	titanium dioxide 	5-10%
	Bisphenol F Diglycidylether, Isomerengemisch  	5-10%
CAS: 933999-84-9 EC number: 618-939-5 Reg.nr.: 01-2119463471-41	1,6-bis(2,3-epoxypropoxy)hexane  Aquatic Chronic 3, H412	5-10%
CAS: 100-51-6 EINECS: 202-859-9 Reg.nr.: 01-2119492630-38-xxxxx	Benzyl alcohol 	2.5-5%
CAS: 111-76-2 EINECS: 203-905-0	2-butoxyethanol  ATE: LD50 oral: 1,200 mg/kg	2.5-5%
CAS: 9003-36-5 NLP: 500-006-8 Reg.nr.: 01-2119454392-40-0001	formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol   EUH205	0.5-1%

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### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information** Instantly remove any clothing soiled by the product.
- **After inhalation**  
Supply fresh air; consult doctor in case of symptoms.  
In case of unconsciousness bring patient into stable side position for transport.
- **After skin contact**  
Instantly wash with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.
- **After swallowing** In case of persistent symptoms consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**  
Use fire fighting measures that suit the environment.  
CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture**  
No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.
- **6.2 Environmental precautions:**  
Do not allow product to reach sewage system or water bodies.  
Do not allow to enter the ground/soil.  
Inform respective authorities in case product reaches water or sewage system.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Keep containers tightly sealed.  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.

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- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** Store only in the original container.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Storage class 10**
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

- **Components with critical values that require monitoring at the workplace:**

##### 111-76-2 2-butoxyethanol

WEL	Short-term value: 246 mg/m <sup>3</sup> , 50 ppm Long-term value: 123 mg/m <sup>3</sup> , 25 ppm Sk, BMGV
-----	-----------------------------------------------------------------------------------------------------------------

- **Ingredients with biological limit values:**

##### 111-76-2 2-butoxyethanol

BMGV	240 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: butoxyacetic acid
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- **Additional information:** The lists that were valid during the compilation were used as basis.

#### 8.2 Exposure controls

- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures**  
The usual precautionary measures should be adhered to in handling the chemicals.  
Keep away from foodstuffs, beverages and food.  
Instantly remove any soiled and impregnated garments.  
Wash hands during breaks and at the end of the work.  
Avoid contact with the eyes and skin.
- **Breathing equipment:**  
In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.
- **Hand protection** Protective gloves.
- **Material of gloves**  
Butyl rubber, BR  
Nitrile rubber, NBR
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye/face protection** Tightly sealed safety glasses.
- **Body protection:** Protective work clothing.

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

- **General Information**

- **Colour:** According to product specification

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· <b>Smell:</b>	Characteristic
· <b>Boiling point or initial boiling point and boiling range</b>	>200 °C (25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))
· <b>Lower and upper explosion limit</b>	
· <b>Lower:</b>	n.a. Vol %
· <b>Upper:</b>	n.a. Vol %
· <b>Flash point:</b>	>100 °C
· <b>Self-inflammability:</b>	Product is not selfigniting.
· <b>Decomposition temperature:</b>	Not determined.
· <b>pH at 20 °C</b>	n.a.
· <b>Viscosity:</b>	
· <b>dynamic at 20 °C:</b>	30,000 mPas
· <b>Solubility</b>	
· <b>Water:</b>	Not miscible or difficult to mix
· <b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
· <b>Steam pressure at 23 °C:</b>	>0 hPa
· <b>Density and/or relative density</b>	
· <b>Density at 20 °C</b>	1.4-1.6 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.

· **9.2 Other information**

· <b>Appearance:</b>	
· <b>Form:</b>	Fluid
· <b>Important information on protection of health and environment, and on safety.</b>	
· <b>Ignition temperature:</b>	435 °C
· <b>Explosive properties:</b>	Product is not explosive.
· <b>Solvent content:</b>	
· <b>Solids content:</b>	49.9 %
· <b>Change in condition</b>	
· <b>Evaporation rate</b>	Not determined.

· **Information with regard to physical hazard classes**

· <b>Explosives</b>	Void
· <b>Flammable gases</b>	Void
· <b>Aerosols</b>	Void
· <b>Oxidising gases</b>	Void
· <b>Gases under pressure</b>	Void
· <b>Flammable liquids</b>	Void
· <b>Flammable solids</b>	Void
· <b>Self-reactive substances and mixtures</b>	Void
· <b>Pyrophoric liquids</b>	Void
· <b>Pyrophoric solids</b>	Void
· <b>Self-heating substances and mixtures</b>	Void
· <b>Substances and mixtures, which emit flammable gases in contact with water</b>	Void
· <b>Oxidising liquids</b>	Void
· <b>Oxidising solids</b>	Void
· <b>Organic peroxides</b>	Void
· <b>Corrosive to metals</b>	Void

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· **Desensitised explosives**

Void

**SECTION 10: Stability and reactivity**

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** None

**SECTION 11: Toxicological information**

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values that are relevant for classification:**

**1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane**

Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

**100-51-6 Benzyl alcohol**

Oral	LD50	1,230 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rft)

**111-76-2 2-butoxyethanol**

Oral	LD50	1,200 mg/kg (ATE)
		1,480 mg/kg (rat)
Dermal	LD50	400 mg/kg (rab)
Inhalative	LC50/4 h	450 mg/l (rat)

**9003-36-5 formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol**

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation**  
Causes serious eye irritation.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** 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.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) -**
- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

None of the ingredients is listed.

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### SECTION 12: Ecological information

#### 12.1 Toxicity

##### Aquatic toxicity:

#### 111-76-2 2-butoxyethanol

EC 50 1,840 mg/l (*Pseudokirchneriella subcapitata* (Alge))

1,550 mg/l (*Daphnia magna* (Großer Wasserfloh))

LC50 1,474 mg/l (*Oncorhynchus mykiss* (Regenbogenforelle))

#### 9003-36-5 formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

EC 50 1.8 mg/l (*Desmodesmus subspicatus* (Alge))

1.6 mg/l (*Daphnia magna* (Großer Wasserfloh))

IC 50 >100 mg/l (bacteria)

LC50 0.55 mg/l (*Lepomis macrochirus* (Fisch))

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Endocrine disrupting properties

For information on endocrine disrupting properties see section 11.

12.7 Other adverse effects

Remark: Toxic for fish

Additional ecological information:

General notes:

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

Water hazard class (Germany) 1 (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

##### Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

##### Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

### SECTION 14: Transport information

#### 14.1 UN number or ID number

ADR, IMDG, IATA

UN3082

#### 14.2 UN proper shipping name

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· <b>ADR</b>	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700), formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol)
· <b>IMDG</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700), formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol), MARINE POLLUTANT
· <b>IATA</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700), formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol)

· **14.3 Transport hazard class(es)**· **ADR, IMDG, IATA**· **Class**

9 Miscellaneous dangerous substances and articles.

· **Label**

9

· **14.4 Packing group**· **ADR, IMDG, IATA**

III

· **14.5 Environmental hazards:**

Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)

· **Marine pollutant:**

No

· **Special marking (ADR):**

Symbol (fish and tree)

· **Special marking (IATA):**

Symbol (fish and tree)

Symbol (fish and tree)

· **14.6 Special precautions for user**

Warning: Miscellaneous dangerous substances and articles.

· **Kemler Number:**

90

· **EMS Number:**

F-A,S-F

· **Stowage Category**

A

· **14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

· **Transport/Additional information:**· **ADR**· **Limited quantities (LQ)**

5L

· **Transport category**

3

· **Tunnel restriction code**

(-)

· **UN "Model Regulation":**

UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL-A-(EPICHLORHYDRIN) EPOXY RESIN (NUMBER AVERAGE

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MOLECULAR WEIGHT = 700), FORMALDEHYDE,  
OLIGOMERIC REACTION PRODUCTS WITH 1-  
CHLORO-2,3-EPOXYPROPANE AND PHENOL),  
9, III

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category E2** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
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.

- **Contact:** chemikalieninfo@murexin.com (+43 02622/27401)

- **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 relatif au transport international 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

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

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1A: Skin sensitisation – Category 1A

Carc. 2: Carcinogenicity – Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

- **\* Data compared to the previous version altered.**

