

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

Printing date 24.04.2015

Version No. 4

Revision: 24.04.2015

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

- **1.1 Product identifier**
- **Trade name:** UZIN PE 480 Comp. A
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**
 SU19 Building and construction work
 SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
 For professional use only.
- **Product category** PC1 Adhesives, sealants
- **Application of the substance / the mixture** 2-Component Epoxy Moisture Barrier (Component A)
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 Uzin Ltd.
 Unit 2, Mitchell Court
 Central Park, Rugby
 Warwickshire, CV23 0UY,
 Telephone +44 (0) 1788 530 080
 Fax +44 (0) 1788 536508
 Email info@uzin.co.uk
- **Further information obtainable from:**
 Product safety department
 email: msds.info@uzin-utz.com
- **1.4 Emergency telephone number:**
 Medical emergencies: +49 30 30 686 790
 Transportation emergencies: +49 621 60 43 333

SECTION 2: Hazards identification

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



GHS09 environment

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



GHS07

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.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xi; Irritant

R36/38: Irritating to eyes and skin.



Xi; Sensitising

R43: May cause sensitisation by skin contact.



N; Dangerous for the environment

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

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· **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· **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 (with an average molecular weight ≤ 700)

1,6-Hexanediol diglycidyl ether

· **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**

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

P273 Avoid release to the environment.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

· **Additional information:**

EUH205 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 Chemical characterisation: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 25068-38-6 NLP: 500-033-5 Reg.nr.: 01-2119456619-26	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (with an average molecular weight ≤ 700) ☒ Xi R36/38; ☒ Xi R43; ☒ N R51/53 ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	50-75%
CAS: 16096-31-4 EINECS: 240-260-4 Reg.nr.: 01-2119463471-41	1,6-Hexanediol diglycidyl ether ☒ Xi R36/38; ☒ Xi R43 R52/53 ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412	10 - <25%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:** Immediately remove any clothing soiled by the product.

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- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Do not induce vomiting; call for medical help 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**
Also observe the safety data sheet of component B.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂ powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
- **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 disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Wear suitable protective clothing, gloves and eye/face protection.
Immediately remove all soiled and contaminated clothing
Keep away from foodstuffs, beverages and feed.
Avoid contact with the eyes and skin.
Wash hands before breaks and at the end of work.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Protect from frost.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

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- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Immediately remove all soiled and contaminated clothing
Wear suitable protective clothing, gloves and eye/face protection.
Keep away from foodstuffs, beverages and feed.
Avoid contact with the eyes and skin.
Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not necessary. Ensure that room is well-ventilated during processing.
- **Protection of hands:**



Use gloves of stable material (e.g. Nitrile) - if necessary tricoted to improve the wearability.

- **Material of gloves**
Butyl rubber, BR
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.5 mm
- **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 protection:**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

- | | |
|---------------------------|----------------------|
| · Form: | Fluid |
| · Colour: | Yellowish |
| · Odour: | Weak, characteristic |
| · Odour threshold: | Not determined. |

- | | |
|--------------------|-----------------|
| · pH-value: | Not determined. |
|--------------------|-----------------|

· Change in condition

- | | |
|---------------------------------------|---------------|
| · Melting point/Melting range: | Undetermined. |
| · Boiling point/Boiling range: | Undetermined. |

- | | |
|-----------------------|----------|
| · Flash point: | > 100 °C |
|-----------------------|----------|

- | | |
|---|-----------------|
| · Flammability (solid, gaseous): | Not applicable. |
|---|-----------------|

- | | |
|--------------------------------|----------|
| · Ignition temperature: | > 200 °C |
|--------------------------------|----------|

- | | |
|-------------------------------------|-----------------|
| · Decomposition temperature: | Not determined. |
|-------------------------------------|-----------------|

- | | |
|-------------------------|------------------------------|
| · Self-igniting: | Product is not selfigniting. |
|-------------------------|------------------------------|

- | | |
|-------------------------------|---|
| · Danger of explosion: | Product does not present an explosion hazard. |
|-------------------------------|---|

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· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	Not determined.
· Density at 20 °C:	1.1 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic at 20 °C:	400 mPas
Kinematic:	Not determined.
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
May produce violent reactions with bases and numerous organic substances including alcohols and amines. Exothermic polymerisation.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
Irritant gases/vapours
At elevated temperatures hazardous decomposition products such as carbon dioxide, carbon monoxide, smoke or nitric oxids may be evolved.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitisation:** Sensitisation possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **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.

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- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
Do not allow product to reach ground water, water course or sewage system.
Toxic for aquatic organisms
Also poisonous for fish and plankton in water bodies.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
The product contains materials that are harmful to the environment.
Do not allow product to reach ground water, water course or sewage system.
Disposal should be in accordance with local, state or national legislation.
- **Uncleaned packaging:**
- **Recommendation:**
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

SECTION 14: Transport information

- | | |
|--|--|
| · 14.1 UN-Number | UN3082 |
| · ADR, IMDG, IATA | |
| · 14.2 UN proper shipping name | 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A-epoxy resin (average molecular weight ≤ 700)) |
| · ADR | |
| · IMDG | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A-epoxy resin (average molecular weight ≤ 700)), MARINE POLLUTANT |
| · IATA | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A-epoxy resin (average molecular weight ≤ 700)) |
| · 14.3 Transport hazard class(es) | |
| · ADR, IMDG, IATA | |
| |  |
| · Class | 9 Miscellaneous dangerous substances and articles. |
| · Label | 9 |
| · 14.4 Packing group | III |
| · ADR, IMDG, IATA | |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | Yes
Symbol (fish and tree) |
| · Special marking (ADR): | Symbol (fish and tree) |

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· Special marking (IATA):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
· Danger code (Kemler):	90
· EMS Number:	F-A,S-F
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
· Transport category	3
· Tunnel restriction code	E
· UN "Model Regulation":	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A-epoxy resin (average molecular weight ≤ 700)), 9, III

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **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**
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.
H412 Harmful to aquatic life with long lasting effects.
- **R36/38 Irritating to eyes and skin.**
R43 May cause sensitisation by skin contact.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Recommended restriction of use** For professional use only.
- **Department issuing MSDS:** Product safety department
- **Contact:**
Dr. M. Zieger, phone +49 (0)731 4097 207
E-Mail: msds.info@uzin-utz.com
- **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)

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*Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2**Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2**Skin Sens. 1: Sensitisation - Skin, Hazard Category 1**Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2**Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3***· * Data compared to the previous version altered.**

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

· **1.1 Product identifier**

· Trade name: UZIN PE 480 Comp. B

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**

· **Sector of Use**

SU19 Building and construction work

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
For professional use only.

· **Product category** PC1 Adhesives, sealants

· **Application of the substance / the mixture** 2-Component Epoxy Moisture Barrier (Component B)

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

· **Manufacturer/Supplier:**

Uzin Ltd.

Unit 2, Mitchell Court

Central Park, Rugby

Warwickshire, CV23 0UY,

Telephone +44 (0) 1788 530 080

Fax +44 (0) 1788 536508

Email info@uzin.co.uk

· **Further information obtainable from:**

Product safety department

email: msds.info@uzin-utz.com

· **1.4 Emergency telephone number:**

Medical emergencies: +49 30 30 686 790

Transportation emergencies: +49 621 60 43 333

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Repr. 2 H361f Suspected of damaging fertility.



GHS05 corrosion

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.

Skin Sens. 1 H317 May cause an allergic skin reaction.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



C; Corrosive

R34: Causes burns.



Xn; Harmful

R20/22-62: Harmful by inhalation and if swallowed. Possible risk of impaired fertility.

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**Xi; Sensitising****R43:** May cause sensitisation by skin contact.**· Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· 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 GHS05, GHS07, GHS08**· Signal word Danger****· Hazard-determining components of labelling:**

Benzyl alcohol

3-aminomethyl-3,5,5-trimethylcyclohexylamine

4,4'-isopropylidenediphenol

m-phenylenebis(methylamine)

· Hazard statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H361f Suspected of damaging fertility.

· Precautionary statements

P201 Obtain special instructions before use.

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

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

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

· 2.3 Other hazards**· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****· 3.2 Chemical characterisation: Mixtures****· Description:** Mixture of substances listed below with nonhazardous additions.**· Dangerous components:**

CAS: 100-51-6	Benzyl alcohol	25-50%
EINECS: 202-859-9		
Reg.nr.: 01-2119492630-38		

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CAS: 2855-13-2 EINECS: 220-666-8 Reg.nr.: 01-2119514687-32	3-aminomethyl-3,5,5-trimethylcyclohexylamine C R34; Xn R21/22; Xi R43 R52/53 Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	10 - <25%
CAS: 80-05-7 EINECS: 201-245-8	4,4'-isopropylidenediphenol Xn R62; Xi R37-41; Xi R43 R52 Repr. Cat. 3 Repr. 2, H361f; Eye Dam. 1, H318; Skin Sens. 1, H317; STOT SE 3, H335	5 - <10%
CAS: 1477-55-0 EINECS: 216-032-5	m-phenylenebis(methylamine) T R23; C R34; Xn R22; Xi R43 R52/53 Acute Tox. 3, H331; Skin Corr. 1B, H314; Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Chronic 3, H412	3 - <5%
	Polyaminoamid Xi R41 Eye Dam. 1, H318	3 - <5%
CAS: 90-72-2 EINECS: 202-013-9 Reg.nr.: 01-2119560597-27	2,4,6-tris(dimethylaminomethyl)phenol C R34; Xn R22; Xi R36/38 R52/53 Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	1 - <3%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Do not induce vomiting; call for medical help 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**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂ powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

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- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
- **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 disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Wear suitable protective clothing, gloves and eye/face protection.
Immediately remove all soiled and contaminated clothing
Keep away from foodstuffs, beverages and feed.
Avoid contact with the eyes and skin.
Wash hands before breaks and at the end of work.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Protect from frost.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Immediately remove all soiled and contaminated clothing
Wear suitable protective clothing, gloves and eye/face protection.
Keep away from foodstuffs, beverages and feed.
Avoid contact with the eyes and skin.
Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not necessary. Ensure that room is well-ventilated during processing.
- **Protection of hands:**



Use gloves of stable material (e.g. Nitrile) - if necessary tricoted to improve the wearability.

- **Material of gloves**
Butyl rubber, BR
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.5 mm
- **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.

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· **Eye protection:**

Tightly sealed goggles

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:**

· Form:	Fluid
· Colour:	Brown
· Odour:	Fish-like
· Odour threshold:	Not determined.

· **pH-value at 20 °C:** 11· **Change in condition**

· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	Undetermined.

· **Flash point:** > 100 °C· **Flammability (solid, gaseous):** Not applicable.· **Ignition temperature:** > 200 °C· **Decomposition temperature:** Not determined.· **Self-igniting:** Product is not selfigniting.· **Danger of explosion:** Product does not present an explosion hazard.· **Explosion limits:**

· Lower:	Not determined.
· Upper:	Not determined.

· **Vapour pressure:** Not determined.· **Density at 20 °C:** 1 g/cm³· **Relative density** Not determined.· **Vapour density** Not determined.· **Evaporation rate** Not determined.· **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

· **Partition coefficient (n-octanol/water):** Not determined.· **Viscosity:**

· Dynamic at 20 °C:	1000 mPas
· Kinematic:	Not determined.

· **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity**· **10.2 Chemical stability**· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.· **10.3 Possibility of hazardous reactions** Strong exothermic reaction with acids.· **10.4 Conditions to avoid** No further relevant information available.

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- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
Corrosive gases/vapours
At elevated temperatures hazardous decomposition products such as carbon dioxide, carbon monoxide, smoke or nitric oxids may be evolved.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

100-51-6 Benzyl alcohol

Oral	LD50	1230 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)

80-05-7 4,4'-isopropylidenediphenol

Oral	LD50	3250 mg/kg (rat)
Dermal	LD50	3000 mg/kg (rabbit)

1477-55-0 m-phenylenebis(methylamine)

Oral	LD50	1040 mg/kg (rat)
Inhalative	LC50/4 h	2.4 mg/l (rat)

· **Primary irritant effect:**

· **on the skin:** Caustic effect on skin and mucous membranes.

· **on the eye:** Strong caustic effect.

· **Sensitisation:** Sensitisation possible through skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Corrosive

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

This product contains components which may damage fertility and cause harm to the unborn child.

Repr. 2

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **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.

· **Additional ecological information:**

· **General notes:** Do not allow product to reach ground water, water course or sewage system.

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

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

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SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Do not allow product to reach sewage system.
Disposal should be in accordance with local, state or national legislation.
- **Uncleaned packaging:**
- **Recommendation:**
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

SECTION 14: Transport information

- | | |
|---|---|
| · 14.1 UN-Number
· ADR, IMDG, IATA | UN2289 |
| · 14.2 UN proper shipping name
· ADR
· IMDG, IATA | 2289 ISOPHORONEDIAMINE, mixture
ISOPHORONEDIAMINE, mixture |
| · 14.3 Transport hazard class(es)
· ADR, IMDG, IATA | |
|  | |
| · Class
· Label | 8 Corrosive substances.
8 |
| · 14.4 Packing group
· ADR, IMDG, IATA | III |
| · 14.5 Environmental hazards:
· Marine pollutant: | No |
| · 14.6 Special precautions for user
· Danger code (Kemler):
· EMS Number: | Warning: Corrosive substances.
80
F-A,S-B |
| · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | |
| · ADR
· Limited quantities (LQ)
· Transport category
· Tunnel restriction code | 5L
3
E |
| · UN "Model Regulation": | UN2289, ISOPHORONEDIAMINE, mixture, 8, III |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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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.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H361f Suspected of damaging fertility.
- H412 Harmful to aquatic life with long lasting effects.
- R20/22 Harmful by inhalation and if swallowed.
- R21/22 Harmful in contact with skin and if swallowed.
- R22 Harmful if swallowed.
- R23 Toxic by inhalation.
- R34 Causes burns.
- R36/38 Irritating to eyes and skin.
- R37 Irritating to respiratory system.
- R41 Risk of serious damage to eyes.
- R43 May cause sensitisation by skin contact.
- R52 Harmful to aquatic organisms.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R62 Possible risk of impaired fertility.

· **Recommended restriction of use** For professional use only.

· **Department issuing MSDS:** Product safety department

· **Contact:**

Dr. M. Zieger, phone +49 (0)731 4097 207
E-Mail: msds.info@uzin-utz.com

· **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)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- Acute Tox. 4: Acute toxicity, Hazard Category 4
- Acute Tox. 3: Acute toxicity, Hazard Category 3
- 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
- Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
- Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
- Repr. 2: Reproductive toxicity, Hazard Category 2
- STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
- Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

· *** Data compared to the previous version altered.**