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

1.1 Product identifier

Identification on the label/Trade name

label designation/Name of product

Photopolymer E-Poxy Part B

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

Relevant identified uses

remark

Light curing resin for EnvisionTec's family Computer Aided Modeling Devices

1.3 Details of the supplier of the safety data sheet

Importer/Only Representative

Envisiontec GmbH
Brusseler str., 51
Germany-D 45968 Gladbeck
P.O. Box:
Telephone: +49204398750
Telefax: +492043987599
E-mail: info@envisiontec.com
Information telephone: +49204398750
www.envisiontec.com

1.4 Emergency telephone number

This number is serviced during office hours.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

health hazards

Skin Corr. 1A

hazard statements for health hazards

H314 Causes severe skin burns and eye damage.

health hazards

Eye Dam. 1

hazard statements for health hazards

H318 Causes serious eye damage.

health hazards

STOT SE 3

hazard statements for health hazards

H335 May cause respiratory irritation.

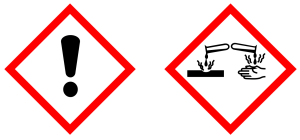
2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard components for labelling

Polyoxypropylenediamine

Hazard pictograms



GHS07 GHS05

Signal word

Danger

Hazard statements

hazard statements for health hazards

H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

Precautionary statements

General:

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.

Prevention:

P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P260 Do not breathe dusts or mists.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water/.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal:

P501 Dispose of contents/container to .

2.3 Other hazards

Other adverse effects

People who suffer from skins problems, asthma, allergies, chronic or recurring respiratory illnesses must not be deployed in processes, which use this substance.

SECTION 3: Composition / information on ingredients

3.1/3.2 Substances/Mixtures

Hazardous ingredients

Polyoxypropylenediamine >70 - 100 %

CAS 9046-10-0

Skin Corr. 1A, H314 / Eye Dam. 1, H318 / STOT SE 3, H335

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Change contaminated, saturated clothing.

Following inhalation
In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still. If breathing is irregular or stopped, administer artificial respiration. Consult a doctor immediately in the case of inhaling spray mist and show him packing or label.

Following skin contact
After contact with skin, wash immediately with plenty of water and soap. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

After eye contact
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
Do not induce vomiting. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms
No known symptoms to date.

4.3 Indication of any immediate medical attention and special treatment needed

Special treatment
Treat symptomatically.

SECTION 5: Firefighting measures

Additional information
The product itself is not combustible. In case of fire and/or explosion do not breathe fumes. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

5.1 Extinguishing media

Suitable extinguishing media
Carbon dioxide (CO_2)
Dry extinguishing powder
Foam.

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products
Can be released in case of fire:
Carbon monoxide
Carbon dioxide (CO_2).

5.3 Advice for firefighters

Special protective equipment for firefighters
In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

Additional information
Eliminate leaks immediately. Clear spills immediately.

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Personal precautions
Provide adequate ventilation. Wear personal protection equipment. Remove all sources of ignition.

For emergency responders

Personal protection equipment
Use appropriate respiratory protection.

6.2 Environmental precautions
Do not allow to enter into surface water or drains.

6.3 Methods and material for containment and cleaning up

For containment

Suitable material for taking up
Absorbing material, organic
Sand
Chemical binding agents, containing acids

6.4 Reference to other sections
Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on general occupational hygiene
When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing immediately. Wash contaminated clothing prior to re-use. Wash hands before breaks and after work.
Provide eye shower and label its location conspicuously

Protective measures

Advices on safe handling
Do not breathe gas/fumes/vapour/spray.
Avoid:
Skin contact
Eye contact
Always close containers tightly after the removal of product.

Measures to prevent fire
Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Take precautionary measures against static discharges. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep/Store only in original container. Keep container tightly closed.

Hints on joint storage

Materials to avoid
Oxidising agent
Reducing agent
Strong alkali
Alcohols.

Further information on storage conditions
Keep container tightly closed in a cool, well-ventilated place. Protect containers against damage. UV-radiation/sunlight.

7.3 Specific end use(s)

Recommendation
Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
No data available

8.2 Exposure controls

Personal protection equipment

Eye/face protection

Suitable eye protection
Eye glasses with side protection
Goggles.

Skin protection

Suitable gloves type
Disposable gloves

Suitable material
NBR (Nitrile rubber)
Butyl rubber.

Unsuitable material
NR (natural rubber, natural latex)

Body protection

Suitable protective clothing
Lab apron. Lab coat.

Respiratory protection
With correct and proper use, and under normal conditions, breathing protection is not required.
Respiratory protection necessary at:
insufficient ventilation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state
liquid

Colour
colourless

yellow

Odour
Ammonia

Odour threshold
not determined

		parameter	Method - source - remark
pH	11.5	Temperature 25 °C	
Melting point/freezing point			not determined
Initial boiling point and boiling range	>260 °C		
Flash point (°C)	>163 °C		
Evaporation rate			not determined
flammability			not determined
Upper explosion limit			No data available
lower explosion limit			No data available
Vapour pressure			No data available
Vapour density	>1		
Density			not determined
Fat solubility (g/L)			not determined
Water solubility (g/L)			Yes.
Soluble (g/L) in			Soluble in: cold water.
Partition coefficient: n-octanol/water			No data available
Auto-ignition temperature			No data available
Decomposition temperature			No data available
Dynamic viscosity	10 - 20 mPa*s	Temperature 30 °C	
flow time			not determined
Kinematic viscosity			not determined

9.2 Other safety 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 stable under storage at normal ambient temperatures.

10.3 Possibility of hazardous reactions
None under normal conditions of use and storage.

10.4 Conditions to avoid
No data available

10.5 Incompatible materials

Materials to avoid
No data available

10.6 Hazardous decomposition products
No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute dermal toxicity
ingredient Polyoxypropylenediamine
Acute dermal toxicity 2980 mg/kg
Species:
Rabbit

Acute inhalation toxicity (dust/mist)
ingredient Polyoxypropylenediamine
Acute inhalation toxicity (dust/mist) 74 mg/kg
Effective dose
LC50:
Exposure time 8 h
Species:
Rat

Acute oral toxicity
ingredient Polyoxypropylenediamine
Acute oral toxicity 2885.3 mg/kg
Species:
Rat

skin corrosion/irritation
ingredient Polyoxypropylenediamine
Assessment/classification
Corrosive.
Exposure time 1 - 4 h
Species:
Rabbit
Result / evaluation
Scores:1 C

Eye damage/irritation
In vitro eye test
Corrosive
Species:
Rabbit

Respiratory or skin sensitisation

Sensitisation to the respiratory tract

remark
This information is not available.

Skin sensitisation

Practical experience/human evidence
This information is not available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity

Assessment/classification
This information is not available.

Carcinogenicity

remark
This information is not available.

Reproductive toxicity

Practical experience/human evidence
This information is not available.

SECTION 12: Ecological information

Additional information
Do not allow uncontrolled discharge of product into environment. Do not allow to enter into surface water or drains. The product has not been tested. The statement is derived from the properties of the components.

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity
ingredient Polyoxypropylenediamine
Acute (short-term) fish toxicity >15 mg/L

Effective dose
LC50:
Test durarion 96 h

species
Oncorhynchus mykiss (Rainbow trout)

Acute (short-term) toxicity to crustacea
ingredient Polyoxypropylenediamine
Acute (short-term) toxicity to crustacea >80 mg/L

Effective dose
EC50
Test durarion 48 h

species
Daphnia magna (Big water flea)

12.2 Persistence and degradability

Biodegradation
ingredient 197112083
Degradation rate (%): 22 %

Method
OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D
ingredient 209462545

parameter
This material is not readily biodegradable.

12.3 Bioaccumulative potential

Assessment/classification
The product has not be tested.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

The product has not be tested.

12.6 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product
Waste disposal according to official state regulations.

Appropriate disposal / Package
Handle contaminated packaging in the same way as the substance itself.

Waste code packaging 070208
hazardous waste Yes.

Waste name
other still bottoms and reaction residues

Waste code product 070208
hazardous waste Yes.

Waste name
other still bottoms and reaction residues

SECTION 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1 UN-No.	2735	2735	2735
14.2 Proper Shipping Name	AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylenediamine)	AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylenediamine)	Polyamines, liquid, corrosive, n.o.s. (Polyoxypropylenediamine)
14.3 Class(es)	8	8	8
14.4 Packing group	II	II	II
14.5 ENVIRONMENTALLY HAZARDOUS	No	No	No
14.6 Special precautions for user	not applicable	not applicable	not applicable
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	not applicable	not applicable	not applicable

Additional information - Land transport (ADR/RID)
Hazard label(s) 8

Limited quantity (LQ)	1 L
Hazard identification number (Kemler No.)	80
tunnel restriction code	E
transport category	2

Additional information - Air transport (ICAO-TI / IATA-DGR)

Limited quantity (LQ)	0.5

SECTION 15: Regulatory information

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

National regulations

Further details

Follow national regulation for work with chemical agents.

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Additional information

Observe labels and safety data sheets for chemicals used in processing. Notice the directions for use on the label.

Relevant R-, H- and EUH-phrases (Number and full text)

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

Key literature references and sources for data

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.