

SAFETY DATA SHEET

EPOXY PUTTY HARDENER

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

1.1. Product identifier

Product name EPOXY PUTTY HARDENER

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

Identified uses Epoxy Resin (Hardener Component)

1.3. Details of the supplier of the safety data sheet

Supplier PAREX Ltd
Holly Lane Industrial Estate
Atherstone
Warwickshire
CV9 2QZ
Tel: +44 (0)1827 711755
(Mon-Fri 08:30-16:30)
Fax: +44 (0)1827 711330
sds@parex.co.uk

1.4. Emergency telephone number

Emergency telephone + 44 (0)1827 711755 (Mon-Fri 08:30 - 16:30)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361 STOT RE 1 - H372

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Pictogram



Signal word

Danger

Hazard statements

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H361 Suspected of damaging fertility or the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

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Precautionary statements

P260 Do not breathe vapour/ spray.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 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.
 P405 Store locked up.
 P501 Dispose of contents/ container in accordance with national regulations.

Contains

AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION, BENZYL ALCOHOL, 2-PIPERAZIN-1-YLETHYLAMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL, PHENOL, STYRENATED

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

AMINES, POLYETHYLENEPOLY-, ,TRIETHYLENETETRAMINE FRACTION	50 - 100%
CAS number: 90640-67-8	EC number: 292-588-2
REACH registration number: 01-2119487919-13-0000	
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412	
2-PIPERAZIN-1-YLETHYLAMINE	10 - 25%
CAS number: 140-31-8	EC number: 205-411-0
REACH registration number: 01-2119471486-30-0000	
Classification Acute Tox. 4 - H302 Acute Tox. 3 - H311 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361 STOT RE 1 - H372 Aquatic Chronic 3 - H412	

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BENZYL ALCOHOL		10 - 25%
CAS number: 100-51-6	EC number: 202-859-9	REACH registration number: 01-2119492630-38-0000
Classification		
Acute Tox. 4 - H302		
Acute Tox. 4 - H332		
Eye Irrit. 2 - H319		
PHENOL, STYRENATED		2.5 - 10%
CAS number: 61788-44-1	EC number: 262-975-0	REACH registration number: 01-2119980970-27-0000
Classification		
Skin Irrit. 2 - H315		
Skin Sens. 1 - H317		
Aquatic Chronic 2 - H411		
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL		2.5 - 10%
CAS number: 90-72-2	EC number: 202-013-9	REACH registration number: 01-2119560597-27-0000
Classification		
Acute Tox. 4 - H302		
Skin Irrit. 2 - H315		
Eye Irrit. 2 - H319		

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Rinse immediately with plenty of water. While rinsing, remove clothing not adhering to the affected area.
Inhalation	Remove person to fresh air and keep comfortable for breathing. Get medical attention if any discomfort continues.
Ingestion	Give plenty of water to drink. Get medical attention immediately. Remove person to fresh air and keep comfortable for breathing.
Skin contact	Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

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

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Carbon dioxide (CO₂). Powder. Larger fires: Alcohol-resistant foam.

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Unsuitable extinguishing media Do not use water with a full water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards Formation of toxic gases is possible during heating or in case of fire.

Hazardous combustion products Toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with sand or other inert absorbent. Collect and place in suitable waste disposal containers and seal securely. Ensure adequate ventilation.

6.4. Reference to other sections

Reference to other sections Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Observe good chemical hygiene practices. Provide adequate ventilation.

Advice on general occupational hygiene Wash at the end of each work shift and before eating, smoking and using the toilet.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store in a demarcated bunded area to prevent release to drains and/or watercourses. Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Protective equipment



Eye/face protection Wear tight-fitting, chemical splash goggles or face shield. Ensure that an eye wash station is close at hand.

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Hand protection	Wear protective gloves made of the following material: Nitrile rubber. Viton rubber (fluoro rubber). The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Thickness: At least 0.5 mm
Other skin and body protection	Wear protective clothing.
Respiratory protection	Combination filter A-P2
Environmental exposure controls	Keep container tightly sealed when not in use.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Clear, yellowish liquid.
Odour	Amine.
Melting point	Not determined.
Initial boiling point and range	>100°C
Flash point	>100°C
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.3 Vol % Upper flammable/explosive limit: 13.0 Vol %
Vapour pressure	0.1 hPa @ 20°C
Bulk density	1.003 g/cm ³
Solubility(ies)	Immiscible with water.
Auto-ignition temperature	140°C
Viscosity	30 mPa s @ 23°C

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Stability	Stable under the prescribed storage conditions.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	None known.
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10.4. Conditions to avoid

10.5. Incompatible materials

Materials to avoid	Avoid contact with strong oxidising agents.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Toxic and/or corrosive gases and/or vapours.
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SECTION 11: Toxicological information

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11.1. Information on toxicological effects

Toxicological effects Harmful if swallowed or in contact with skin.

Acute toxicity - oral

ATE oral (mg/kg) 689.66

Acute toxicity - inhalation

ATE inhalation (gases ppm) 45,000.0

ATE inhalation (vapours mg/l) 110.0

ATE inhalation (dusts/mists mg/l) 15.0

Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Carcinogenicity

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

Reproductive toxicity

Reproductive toxicity - fertility Suspected of damaging fertility or the unborn child.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

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

SECTION 12: Ecological Information

Ecotoxicity Harmful to aquatic life.

12.1. Toxicity

Toxicity The product contains substances which are harmful to aquatic organisms. Do not discharge into drains, water courses or onto the ground.

12.2. Persistence and degradability

Persistence and degradability No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential No information available.

12.4. Mobility in soil

Mobility No data available.

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Dispose of waste product or used containers in accordance with local regulations
Disposal methods	Dispose of waste via a licensed waste disposal contractor.
Waste class	EWC 08 00 00 EWC 08 02 00 EWC 08 02 99

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	2735
UN No. (IMDG)	2735
UN No. (ADN)	2735

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	AMINES, LIQUID, CORROSIVE, N.O.S., (TRIETHYLENETETRAMINE)
Proper shipping name (IMDG)	AMINES, LIQUID, CORROSIVE, N.O.S., (TRIETHYLENETETRAMINE)
Proper shipping name (ADN)	AMINES, LIQUID, CORROSIVE, N.O.S., (TRIETHYLENETETRAMINE)

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID classification code	C7
ADR/RID label	8
IMDG class	8
ICAO class/division	8
ADN class	8

Transport labels



14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ADN packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS	F-A, S-B
ADR transport category	2

EPOXY PUTTY HARDENER

Hazard Identification Number 80
(ADR/RID)

Tunnel restriction code (E)

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

Transport in bulk according to Not applicable.

**Annex II of MARPOL 73/78
and the IBC Code**

SECTION 15: Regulatory information

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

National regulations Control of Substances Hazardous to Health Regulations 2002 (as amended).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18
December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of
Chemicals (REACH).

EU legislation Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16
December 2008 on classification, labelling and packaging of substances and mixtures (as
amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Issued by QSHE Manager

Revision date 24/05/2018

Supersedes date 13/10/2017

SDS number 21018

Hazard statements in full H302 Harmful if swallowed.
H311 Toxic in contact with skin.
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.
H332 Harmful if inhaled.
H361 Suspected of damaging fertility or the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.