

MATERIAL SAFETY DATA SHEET

EPOXY PUTTY - PACK A

1. Identification of the substance/preparation and company.

Product Name : Epoxy Products Epoxy Putty- Pack A
Product Type : Epoxy Resin
Application : Epoxy resin joint/crack filler and adhesive.
Supplier : Epoxy Products Limited
Address : Unit 7, Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ England
Contact numbers : 01202 891899
Emergency Telephone Number : 01202 891899

2. Hazards Identification

Main Hazards : Irritant
Dangerous for the environment.

Human Health Hazards : Irritating to eyes and skin. May cause sensitisation by skin contact
Safety Hazards : Not classified as flammable but will burn
Environmental Hazards : Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

3. Composition/Information on Ingredients

Chemical Nature Mixture of epoxy resin liquids

Preparation - Hazardous Ingredients (Europe)

Component	CAS/EINECS	Concentration %	Classification	Risk Phrases
Epoxy Resin Bisphenol Type A (Mol. Wt. <700)	25068-38-6	60-70	Xi, N	R36/38, R43, R51/53
Epoxy Resin Bisphenol Type F (Mol. Wt. = <700)	28064-14-4	30-40	Xi, N	R36/38, R43, R51/53
Aliphatic glycidyl ether	68609-97-2	2.50 - 10.00	Xi, N	R38, R43, R51/53

4. first-aid Measures

Eye Contact : Immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held apart during irrigation to ensure water contact with entire surface of eyes and lids. Seek immediate medical attention.

Skin Contact : Wipe off as much as possible with a clean cloth. Wash skin thoroughly with soap and water. Solvents should not be used to clean the skin because they may increase the penetration of the material.

Ingestion : Wash out mouth with water. If accidentally swallowed, give large quantities of water or milk or dilute the effects on the stomach. Do not induce vomiting. Seek immediate medical attention.

Inhalation : Remove from exposure to fresh air. In cases of possible respiratory irritation or if feeling unwell in cases of prolonged exposure, obtain medical attention.

5. Fire-fighting Measures

Extinguishing Media : Use foam, water spray or carbon dioxide.
Extinguishing Media – Not suitable : Do not use water jet.
Special Hazards of Product : Combustion will produce smoke, carbon dioxide and carbon monoxide.
Protective Equipment for Fire-Fighting : Wear full protective clothing and self-contained breathing apparatus.

6. Accidental Release Measures

Personal Precautions : Avoid contact with skin, eyes and clothing
Environmental Precautions and Clean-up methods : Try to prevent the material from entering the drains or water courses.
Spillages : Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal

7. Handling and Storage

Handling : Avoid contact with eyes, skin and clothing
Storage : Store in the original container securely closed.
Storage temperature : Ambient

8. Exposure Controls/Personal Protection

Engineering Control Measures : Use of the basic principles of Industrial Hygiene will enable this material to be used safely.
Respiratory Protection : Not normally required. In confined areas a half mask respirator with organic vapour cartridge and particulate filter NPF 20 (gas only)
Hand Protection : Butyl or nitrile type gloves or any impermeable gloves must be worn. The inside of the gloves must be kept clean
Eye Protection : Safety eye glasses must be worn.
Skin and Body Protection : Standard issue work clothes.

9. Physical and Chemical Properties

Physical State	Liquid
Colour	Various
Odour	Slight
Ph	ca. 7
Boiling Point	>200° C
Flash Point	>150° C
Auto Ignition Temperature	>300° C
Vapour Pressure	< 0,01 Pa at 20° C
Water Solubility	Negligible
Density	1.80g/cm ³ at 20° C
Viscosity	Not applicable

10. Stability and Reactivity

Conditions to avoid	Caustic soda can induce vigorous polymerisation at temperatures around 200° C.
Materials to avoid	Strong oxidising agents. Caustic soda.
Hazardous Decomposition Products	Hazardous decomposition products are not expected to form during normal storage.
Hazardous Reactions	Stable under normal use conditions. Reacts with strong oxidising agents. Polymerises exothermically with amines, mercaptans at ambient temperatures. Polymerises in contact with caustic soda. Reacts exothermically with bases (eg. caustic soda), ammonia, primary and secondary amines, alcohols and acids.

11. Toxicological Information

Acute Oral Toxicity	Expected to be of low toxicity. LD50 > 2000 mg/kg
Acute Dermal Toxicity	Expected to be of low toxicity. LD50 > 2000 mg/kg
Eye Irritation	Expected to be slightly irritant.
Skin Irritation	Expected to be slightly irritant.
Sensitisation	Expected to be a skin sensitiser.
Carcinogenicity	Not expected to be carcinogenic.
Mutagenicity	Not considered to be a mutagenic hazard.

12. Ecological Information

<u>Persistence/Degradability</u>	
Biodegradable	This product is expected to be not readily biodegradable.
Bioaccumulation	Has the potential to bioaccumulate.
<u>Ecotoxicity Effects</u>	
Toxicity to fish	Expected to be very toxic. LC/EC/IC 50 > 1 mg/l
Toxicity to algae	Expected to be toxic 1. LC/EC/IC 50 > 10 mg/l
Acute toxicity to invertebrates	Expected to be toxic 1. LC/EC/IC 50 > 10 mg/l
Mobility	The product is insoluble in water and sinks in water.
Sewage treatment	Expected to be practically non toxic 1. LC/EC/IC 50 > 100 mg/l
Basis for assessment	Information given is based on knowledge of all the components and the toxicology of similar products

13. Disposal

Product Disposal	Recover and recycle if possible. Arrange for disposal via a licensed waste contractor.
Container Disposal	Dispose of containers with care. Empty packaging should be removed by a licensed waste contractor.
Local legislation	The recommendations given are considered appropriate for safe disposal. However, local regulations maybe more stringent and these must be complied with.

14. Transport Information

ADR / RID

UN Number	3082
Class	9
Classification Code	M6
Packaging Group	111
Labelling Number	9
Risk Number	90
Description of the goods contains	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. EPOXY RESIN

ICAO / IATA-DGR

UN Number	3082
Class	9
Packaging Group	111
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. EPOXY RESIN

IMDG

UN Number	3082
Class	9
Packaging Group	111
Labelling Number	9
Description of the goods contains	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. EPOXY RESIN

15. Regulatory Information

Labelling according to EC Directives
Classification

EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT < 700)
Irritant
Dangerous for the environment

Symbol (s)



X - IRRITANT



N - DANGEROUS FOR THE ENVIRONMENT

Risk Phrases - R

R36/38
R43
R51/53

Irritating to eyes and skin
May cause sensitisation by skin contact.
Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment

Safety Phrases - S

S24
S26

S28A
S37/39
S46

S61

Avoid contact with skin
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
After contact with skin, wash immediately with plenty of water.
Wear suitable gloves and eye/face protection.
If swallowed seek medical advice immediately and show this container or label.
Avoid release to the environment. Refer to special instructions/safety data sheet.

Notification Status

TSCA

All components listed

AICS

All components listed

DSL

All components listed

IECSC

All components listed

EINECS

All components listed or polymer exempt

KECI (KR)

All components listed

PICCS (PH)

All components listed

16. Other Information

Date Issued

01.04.2008

Reference

EPA/03

Product Code

Epoxy Products Epoxy Putty (Resin - Pack A)

Intended Use

Epoxy Resin Putty.

The information is based on our current knowledge and is intended to describe the product for the purpose of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

MATERIAL SAFETY DATA SHEET

EPOXY PUTTY - PACK B

1. Identification of the substance/preparation and company.

Product Name : Epoxy Putty (Hardener - Pack B)
Product Type : Epoxy Resin Curing Agent
Application : Epoxy Resin Repair Compound
Supplier: Emergency Telephone Number: (01202) 891899
Epoxy Products Limited, 7 Haviland Road, Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ

2. Hazards Identification

Irritating to skin
Risk of serious damage to eyes
May cause sensitisation by skin contact
Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.

3. Composition/Information on Ingredients

Chemical Nature

Polyaminoamide preparation

Hazardous Components	CAS No	%	Symbols	R - Phrases
Polyaminoamide adduct		> 90	Xi	R41
Tetraethylenepentamine (EC –No 203-986-2)	112-57-2	< 10	C, N	R21/22, R34, R43, R51/53

4. First-aid Measures

INGESTION : Immediately give plenty of water. If person vomits when lying on his back, place him in the recovery position. Oxygen or artificial respiration if needed. Do not induce vomiting.
INHALATION : Move to fresh air. If symptoms persist seek medical advice.
SKIN CONTACT : Remove product and immediately flush affected area with water for at least 15 minutes.
EYE CONTACT : Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Seek medical advice immediately.

5. Fire-fighting Measures

Suitable Extinguishing Media

Water Spray, Carbon Dioxide (Co²), Dry Powder, Foam.

Extinguishing media which must not be used.

High volume water jet

Special Protective equipment for fire fighters

Wear self contained breathing apparatus and protective suit

Further information

Burning produces obnoxious, and toxic fumes, carbon oxides and nitrogen oxides.

6. Accidental Release Measures

Personal precautions : Keep away from sources of ignition. – No smoking.
Avoid contact with skin, eyes and clothing.
Do not breathe vapours/dust.
Environmental precautions : Prevent product from entering drains.
Do not contaminate surface water and avoid subsoil penetration.
Methods of Clean up : Soak up with inert absorbent material and dispose of as hazardous waste

7. Handling and Storage

Handling

Advice on safe handling : Sensitizing
Avoid formation of aerosol
Ensure adequate ventilation
Handle and open container with care
Keep away from sources of ignition – No smoking

Storage

Further information : Keep away from food, drink and animal feeding stuffs.
Keep containers tightly closed
Keep at temperatures between 2 and 40⁰ C
Hazard Class : 12, Liquids, not dangerous

8. Exposure Controls/Personal Protection

Respiratory Protection : Not required. under normal application conditions. In case of insufficient ventilation wear suitable equipment.
Hand Protection : Nitrile rubber gloves or any impermeable gloves must be worn.
Eye Protection : Protective glasses, goggles or face shield
Skin Protection : Protective long sleeved overalls must be worn. Safety shoes
Protective Measures : Do not breathe vapours/dust.
Keep away from sources of ignition – No smoking
Avoid contact with skin, eyes and clothing.

9. Physical and Chemical Properties

Appearance	:	Liquid of various colours
Odour	:	Amine like
pH	:	11
Boiling Point	:	200°C
Flash Point	:	200°C
Vapour Pressure	:	<10@ 20°C
Relative Density	:	1.05
Water Solubility	:	Slightly

10. Stability and Reactivity

Conditions to avoid	:	Take necessary action to avoid static electricity discharge
Materials to avoid	:	Strong acids and strong bases. Strong oxidising agents
Hazardous Decomposition Products	:	Carbon oxides. Nitrogen oxides. Burning produces obnoxious and toxic fumes.

11. Toxicological Information

Acute oral toxicity	:	LD50 rat Dose: > 8,000 mg/kg
Eye irritation	:	Risk of serious damage to eyes (Rabbit)
Skin Irritation	:	Irritating (Rabbit –dermal)
Sensitization	:	Causes sensitisation (Guinea pig – dermal)

12. Ecological Information

Ecotoxicity effects	:	
Further information	:	Avoid sub soil penetration. From entering drains. Do not contaminate surface water.

13. Disposal Considerations

Product	:	Waste key Number : 55903
Container	:	Empty containers can be land filled

14. Transport Information

<u>Land Transport</u>		
ADR/RID	:	Not dangerous goods
<u>Sea Transport</u>		
IMDG	:	Not dangerous goods
<u>Air Transport</u>		
IATA/ DGR	:	Not dangerous goods

15. Regulatory Information

Labelling according to EEC Directive

Symbols	:	Xi : Irritant
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R-Phrases	:	R38 Irritating to skin R41 Risk of serious damage to eyes R43 May cause sensitisation by skin contact R52/53 Harmful to aquatic organisms may cause long term adverse effects in the aquatic environment.
S-Phrases	:	S24 Avoid contact with skin. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37/39 Wear suitable gloves and eye face protection. S61 Avoid release to the environment. Refer to special instructions/safety data sheets.
Hazardous Components which must be Listed on the label	:	Polyaminoamide adduct (R41) Tetraethylenepentamine (EC-No. 203-986-2)

16. Other Information

Date Issued	:	26.02.2010
Reference	:	SD/EP/B/04
Intended Use	:	Epoxy Curing Agent
Product Code	:	Epoxy Putty (Pack B - Hardener)

The information is based on our current knowledge and is intended to describe the product for the purpose of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.