

MATERIAL SAFETY DATA SHEET

EPOXY QUARTZ - PACK A

1. Identification of the substance/preparation and company.

Product Name : Epoxy Products Epoxy Quartz - Pack A
Product Type : Epoxy Resin
Application : Epoxy Resin Floor Screed.
Supplier : Emergency Telephone Number: (01202) 891899
Epoxy Products Limited, 7 Haviland Road, Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ

2. Hazards Identification

Physical Hazard : Non classifiable
Health hazards : Irritant.(Xi). Irritating to eyes and skin. (R36/38) May cause sensitisation by skin contact (R43)
Safety hazards : Not classified as dangerous under EC criteria
Environmental hazards : Toxic to aquatic organisms. (R51) May cause long term adverse effects in the aquatic environment.(R53)

3. Composition/Information on Ingredients

Preparation description : Blend of liquid epoxy resin, inert fillers, pigments and reactive diluent

Dangerous components/constituents

<u>CAS/Registry No.</u>	<u>Material Description</u>	<u>% Content</u>
25068-38-6	*4,4'-ISOPROPYLDINEDIPHENOL-EPICHLOROHYDRIN COPOLYMER (Number average molecular weight less than 700) Physical Hazard: Non classifiable Health Hazard: Irritant (Xi). R Phrases: R36, R38, R43, R51 and R53 OEL: None Established	50-70
28064-14-4	*PHENOL-FORMALDEHYDE POLYMER GLYCIDYL ETHER Physical Hazard: Non classifiable Health Hazard: Irritant (Xi). R Phrases: R36, R38, R43, R51 and R53 OEL: None Established	25-35

4. First Aid Measures

Symptoms and effects : Irritation of the skin and eyes.
First aid - inhalation : No specific measures.
First aid - skin : DO NOT DELAY. Remove contaminated clothing. Wash skin with water using soap if available. If persistent irritation occurs, obtain medical attention.
First aid - eye : DO NOT DELAY. Flush eye with water. OBTAIN MEDICAL ATTENTION IMMEDIATELY.
First aid - ingestion : DO NOT INDUCE VOMITING. If rapid recovery does not occur, obtain medical attention.
Advice to Physicians : If skin sensitisation has developed and a casual relationship has been confirmed, further exposure should not be allowed.

5. Fire-fighting Measures

Specific hazards : Carbon monoxide may be evolved if incomplete combustion occurs.
Extinguishing media - small fires : Dry chemical powder, carbon dioxide, foam, water spray or fog, sand or earth.
Extinguishing media - large fires : Foam, water spray or fog.
Unsuitable extinguishing media : Water jet.
Protective equipment : Full protective clothing and self contained breathing apparatus.

6. Accidental Release Measures

Personal precautions : Avoid contact with skin, eyes and clothing.
Personal protection : Wear protective clothing specified for normal operations (see section 8). Use barrier cream.
Environmental precautions : Prevent contamination of soil and water. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers. If material enters drains, it should be pumped out into an open vessel. Emergency services may need to be called to assist in this operation.
Clean up methods - small spillage : Absorb or contain liquid with sand, earth or spill control material. Shovel up and place in a labelled, sealable container for subsequent safe disposal. Put leaking containers in a labelled drum. Scrub contaminated surfaces with a detergent solution.
Clean up methods - large spillage : Transfer to a labelled container for product recovery or safe disposal. Treat residues as for small spillage.

7. Handling and Storage

Handling : Avoid contact with skin, eyes and clothing.
Storage : Keep container tightly closed and store in a dry cool place.
Storage temperatures : Ambient.

8. Exposure Controls/Personal Protection

Occupational exposure standards : None established
Respiratory protection : Not required.
Hand Protection : PVC Gloves
Eye Protection : Safety glasses
Body Protection : Standard issue work clothes

9. Physical and Chemical Properties

Appearance	:	Wet sand, slightly sweet odour
Boiling Point	:	>150° C
Flammability	:	>200° C
Water Solubility	:	Not miscible

10. Stability and Reactivity

Stability	:	Normally considered stable and inert.
Conditions to avoid	:	Temperatures above 90°C.
Materials to avoid	:	Strong oxidising agents. Amines mercaptans, mineral acids and caustic soda.
Hazardous decomposition	:	
Products may include	:	Oxides of carbon

11. Toxicological Information

Basis for assessment	:	Information given is based on data on the components and the toxicology of similar products.
Acute toxicity - oral	:	LD50 : > 2000 mg/kg
Acute toxicity -dermal	:	LD50 : > 2000 mg/kg
Eye irritation	:	Irritant.
Skin irritation	:	Irritant.
Skin sensitisation	:	Skin sensitiser
Mutagenicity	:	Not mutagenic

12. Ecological Information

Basis for assessment	:	Information given is based on data on the components and the ecotoxicology of similar products
Mobility	:	Sinks in water.
Persistence/Degradability	:	Not readily biodegradable.
Bioaccumulation	:	Has the potential to bio accumulate.
Ecotoxicity	:	Toxic, 1< LC50 or EC50< or = 10mg/l, to aquatic organisms.
Sewage Treatment	:	Data not available

13. Disposal Considerations

Product disposal	:	Recover or recycle if possible. Otherwise incinerate or dispose to licensed disposal contractor.
Container disposal	:	Drain container thoroughly, rinse three times with suitable solvent and treat rinsings as for product disposal. Dispose to licensed disposal contractor.
Local legislation	:	The UK. All waste should be disposed of using a registered waste carrier operating under the Environmental Protection Act (Duty and Care) Regulations 1992 (S.I. No 2839)

14. Transport Information

UK Carriage Classification	:	Environmentally Hazardous Substance
UN Conveyance Classification	:	Environmentally Hazardous Substance
UN Class	:	9
UN Packaging Group	:	111
UN Number	:	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE (Contains Epoxy Resin)
ADR/RID Proper Shipping Name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains Epoxy Resin)
HS Code Number	:	390730 00

15. Regulatory Information



DANGEROUS FOR THE ENVIRONMENT



HARMFUL /IRRITANT

EC Label name	:	Contains Epoxy Resin (number average molecular weight <700)
EC Classification	:	Harmful/Irritant. Dangerous for the environment.
EC Symbols	:	Xi, N
EC Risk phrases	:	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.
Safety phrases	:	S24 Avoid contact with skin. S26 In case of contact with eyes; rinse immediately with plenty of water and seek medical advice S28 After contact with skin; wash immediately with plenty of soap and water. S37/39 Wear suitable gloves and eye/face protection. S61 Avoid release to the environment.

16. Other Information

Date Issued	:	03.05.2008
Reference	:	SDS/ EQ/A/07
Other information	:	Technical Services Department

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 QUARTZ - PACK B

1. Identification of the substance/preparation and company.

Product Name : Epoxy Products Epoxy Quartz - Pack B
 Product Code : EQ/B
 Product Type : Epoxy Resin Curing Agent
 Supplier : Epoxy Products Limited
 Address : Unit 7, Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ England
 Contact numbers : 01202 891899
 Web Site : www.epoxyproducts.co.uk
 E Mail : sales@epoxyproducts.co.uk
 Emergency Telephone Number : 01202 891899

2. Hazards Identification

Classification : Corrosive
 Harmful
 Dangerous for the environment
 Human Health Hazards : Harmful by inhalation, in contact with skin and if swallowed.
 Safety Hazards : Causes severe burns. May cause sensitization by skin contact
 Not classified as flammable but will burn.
 Environmental Hazards : Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.

3. Composition/Information on Ingredients

Chemical Nature Mixture of cycloaliphatic amines and benzyl alcohol

Preparation - Hazardous Ingredients (Europe)

Component	CAS/EINECS	Concentration %	Classification	Risk Phrases
Benzyl Alcohol	100-51-6 202-859-9	35 - 40	Xn	R20/22
Isophoronediamine	2855-13-2 220-666-8	25 - 30	C	R21/22, R34, R43, R52/53
Cycloaliphatic Amine (Modified)	212580-83-1	25 - 30	C, N	R21/22, R34, R43, R51/53
M-Xylylenediamine	1477-55-0 216-032-5	7 - 10	C	R20/22, R35, R43, R52/53

4. first-aid Measures

Eye Contact : **Do not delay** 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 : **Do not delay.** Wash skin thoroughly with soap and water.
 Ingestion : **Do not delay** Wash out mouth with water. Give nothing by mouth. Do not induce vomiting. Seek immediate medical attention.
 Inhalation : Remove to fresh air. If rapid recovery does not occur, obtain medical attention.

5. Fire-fighting Measures

Extinguishing Media : Use foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
 Extinguishing Media – Not suitable : Do not use water jet.
 Special Hazards of Product : Combustion products may include oxides of nitrogen, carbon monoxide. Keep adjacent containers cool by spraying with water.
 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
 Do not breathe fumes, mists, aerosols, spray.
 Take off immediately all contaminated clothing.
 Evacuate the area of all non essential personnel.
 Shut off leaks, if possible without personal risk.
 Environmental Precautions : Prevent contamination of soil and water.
 Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers.
 Clean Up Methods –Small Spillage : Absorb or contain liquid with sand, earth or spill control material. Shovel up and place in a labelled, sealable container for subsequent safe disposal. Put leaking containers in a labelled drum or overdrum. Scrub contaminated surfaces with water. Retain washings as contaminated waste.
 Clean Up Methods –Large Spillage : Transfer to a labelled, sealable container for product recovery or safe disposal. Treat residues as for small spillage.

7. Handling and Storage

Handling : Avoid contact with skin, eyes and clothing. Avoid breathing vapours.
 Storage : Keep containers tightly closed and in a cool, well ventilated place. Keep away from direct sunlight and other sources of heat or ignition.

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 an air supplied respirator should always be used.
 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.

9. Physical and Chemical Properties

Appearance	Liquid
Odour	Aminic
pH	12
Flash Point	102°C ASTM D-93 / PMCC)
Density	1.010 kg/m ³ at 25°C
Water Solubility	Slightly
Partition Coefficient (n-Octanol/Water)	Not available
Viscosity	450 mPa-s at 25°C

10. Stability and Reactivity

Conditions to avoid	Exposure to water vapour.
Materials to avoid	Strong oxidising agents. Strong acids.
Hazardous Decomposition Products	Not expected to form during normal storage.
Hazardous Reactions	Stable. Hygroscopic

11. Toxicological Information

Acute Oral Toxicity	Expected to be moderately toxic, 200 < LD50 <= 2000mg/kg
Acute Inhalation Toxicity	Expected to be moderately toxic, 1 < LD50 <= 5mg/l
Acute dermal toxicity	Expected to be moderately toxic, 400 < LD50 <= 2000mg/kg
Eye Irritation	Corrosive
Skin Irritation	Expected to be severe irritant.
Sensitisation	Expected to be a skin sensitiser
Human Effects	See section 4 for information regarding acute effects to humans.
Basis for Assessment	Information given is based on data on the components and toxicology of similar products.

12. Ecological Information

Elimination information (persistence and degradability)

Biodegradability	The solvent is readily biodegradable, but the product contains components that are persistent in the environment.
Bioaccumulation	Not expected to bioaccumulate significantly

Ecotoxicity Effects

Toxicity to fish	Expected to be slightly toxic, 10 < LC/EC/IC 50 <= 100mg/l
Toxicity to algae	Expected to be slightly toxic, 10 < LC/EC/IC 50 <= 100mg/l
Acute toxicity to invertebrates	Expected to be slightly toxic, 10 < LC/EC/IC 50 <= 100mg/l
Mobility	Sinks in fresh water, but will float on seawater. Partly dissolves, but a significant proportion will remain after one day. If product enters soil, one or more constituents will be mobile and may contaminate groundwater.
Sewage Treatment	Expected to be practically non toxic, LC/EC/IC 50 > 100mg/l
Basis for Assessment	Ecotoxicological data have not been determined specifically for this product. The information given is based on data on the components and toxicology of similar products.

13. Disposal

Product Disposal	Recover or recycle if possible. Otherwise incineration with wet scrubbing facilities. Dispose to licensed disposal contractor
Container Disposal	Keep container labelled until cleaned and then remove or deface labels. Drain container thoroughly and rinse well with water. Treat rinsings as for product disposal. Empty packaging should be removed by a licensed waste contractor.

14. Transport Information

ADR / RID

UN Number	2735
Class	8
Classification Code	C7
Packaging Group	11
Labelling Number	8
Risk Number	80
Description of the goods contains	POLYAMINES, LIQUID, CORROSIVE, N.O.S. ISOPHORONE DIAMINE, M-XYLYLENEDIAMINE

ICAO / IATA-DGR

UN Number	2735
Class	8
Packaging Group	11
Labelling Number	8
Description of the goods contains	POLYAMINES, LIQUID, CORROSIVE, N.O.S. ISOPHORONE DIAMINE, M-XYLYLENEDIAMINE

IMDG

UN Number	2735
Class	8
Packaging Group	11
Description of the goods contains	POLYAMINES, LIQUID, CORROSIVE, N.O.S. ISOPHORONE DIAMINE, M-XYLYLENEDIAMINE

