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 Code EQ/A Product Type Epoxy Resin

Supplier **Epoxy Products Limited**

Address Unit 7, Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ England

Contact numbers 01202 891899

Hazards Identification

Non classifiable Physical Hazard

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

CAS/Registry No. Material Description % Content 25068-38-6 *4,4`-ISOPROPYLINDENEDIPHENOL-50-70

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

*PHENOL-FORMALDEHYDE POLYMER GLYCIDYL ETHER 25-35 28064-14-4

> Physical Hazard: Non classifiable Health Hazard: Irritant (Xi).

R Phrases: R36, R38, R43, R51 and R53

OEL: None Established

First Aid Measures

Irritation of the skin and eyes. Symptoms and effects 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.

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.

Accidental Release Measures

Avoid contact with skin, eyes and clothing. Personal precautions

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.

Handling and Storage

Handling Avoid contact with skin, eyes and clothing.

Keep container tightly closed and store in a dry cool place. Storage

Ambient. Storage temperatures

Exposure Controls/Personal Protection

Occupational exposure standards : None established Respiratory protection Not required. Hand Protection **PVC Gloves** Eve Protection Safety glasses

Body Protection Standard issue work clothes

9. Physical and Chemical Properties

Appearance : Wet sand, slightly sweet odour

Boiling Point : $>150^{\circ}$ C Flammability : $>200^{\circ}$ 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.

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 ecotoxicolgy 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 HARMFUL /IRRITANT ENVIRONMENT

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
 : 02.02.2015

 Reference
 : SDS/ EQ/A/09

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 OUARTZ - PACK B**

1. Identification of the substance/preparation and company.

Epoxy Products Epoxy Quartz - Pack B Product Name

Product Code EO/B

Product Type **Epoxy Resin Curing Agent Epoxy Products Limited** Supplier

Address Unit 7, Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ England

01202 891899 Contact numbers

Web Site www.epoxyproducts.co.uk E Mail sales@epoxyproducts.co.uk

2. Hazards Identification

Classification Corrosive Harmful

Dangerous for the environment

Human Health Hazards Harmful by inhalation, in contact with skin and if swallowed.

Causes severe burns. May cause sensitization by skin contact

Not classified as flammable but will burn. Safety Hazards

Environmental Hazards Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.

3. Composition/Information on Ingredients

<u>Chemical Nature</u> Mixture of cycloaliphatic amines and benzyl alcohol

Preparation - Hazardous Ingredients (Europe)

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

4. first-aid Measures

Do not delay Flush eyes with plenty of water for at least 15 minutes. Eyelids should be held apart during irrigation Eve Contact

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.

Remove to fresh air. If rapid recovery does not occur, obtain medical attention. Inhalation

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, eyesand 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.

Absorb or contain liquid with sand, earth or spill control material. Shovel up and place in a labelled, sealable Clean Up Methods -Small Spillage 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

Avoid contact with skin, eyes and clothing. Avoid breathing vapours. Handling

Keep containers tightly closed and in a cool, well ventilated place. Keep away from direct sunlight Storage

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

Eve Protection Safety eye glasses must be worn.

9. Physical and Chemical Properties

Appearance Liquid Odour Aminic pН

Flash Point 102°C ASTM D-93 / PMCC) Density $1.010 \text{ kg/m}^3 \text{ at } 25^{\circ}\text{C}$

Water Solubility Slightly

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

Expected to be moderately toxic, 200 < LD50 <= 2000mg/kg Acute Oral Toxicity Acute Inhalation Toxicity Expected to be moderately toxic, 1 < LD50 < = 5mg/lExpected to be moderately toxic, 400 < LD50 < = 2000 mg/kgAcute dermal toxicity

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.

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

Expected to be slightly toxic, 10 < LC/EC/IC 50 <= 100mg/l Toxicity to fish Toxicity to algae Expected to be slightly toxic, 10 < LC/EC/IC 50 <= 100mg/l Expected to be slightly toxic, 10 < LC/EC/IC 50 <= 100mg/l Acute toxicity to invertebrates

Sinks in fresh water, but will float on seawater. Partly dissolves, but a significant proportion will remain after one Mobility

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 > 100 mg/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.

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 80 Risk Number

POLYAMINES, LIQUID, CORROSIVE, N.O.S. Description of the goods contains

ISOPHORONE DIAMINE, M-XYLYLENEDIAMINE

ICAO / IATA-DGR

UN Number 2735 Class 8 Packaging Group 11 Labelling Number

POLYAMINES, LIQUID, CORROSIVE, N.O.S. Description of the goods contains

ISOPHORONE DIAMINE, M-XYLYLENEDIAMINE

IMDG

UN Number 2735 Class 8 11 Packaging Group

POLYAMINES, LIQUID, CORROSIVE, N.O.S. Description of the goods contains ISOPHORONE DIAMINE, M-XYLYLENEDIAMINE

15. Regulatory Information

Label requirements to EC Directives

Contains m-xylene diamine and isophorone diamine Classification Corrosive

Harmful

Dangerous for the environment



Risk Phrases - R R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R35 Causes severe burns

R43 May cause sensitization by skin contact.

Harmful to aquatic organisms, may cause long term adverse effects in the aquatic

environment.

Safety Phrases - S S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical

advice

S28A After contact with skin, wash immediately with plenty of soap and water.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S45 If case of accident or if you feel unwell, seek medical advice immediately (show the label

where possible).

S61 Avoid release to the environment. Refer to special instructions/safety data sheet.

16. Other Information

Date Issued 021.02.2015 Reference EQ/B/09

Product Code Epoxy Products Epoxy Quartz (Hardener - Pack B)

R52/53

Intended Use Epoxy resin floor topping

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.