

MATERIAL SAFETY DATA SHEET

WATER MISCIBLE EPOXY COATING - PACK A

1. Identification of the substance/preparation and company.

Product Name : Epoxy Products Water Miscible Epoxy Coating - Pack A
Product Code : WMEC/B
Product Type : Epoxy Resin
Supplier : Epoxy Products Limited
Address : Unit 7 Haviland Rd, Ferndown Industrial Estate, Wimborne, Dorset. England
Contact numbers : 01202 891899
Emergency Telephone Number : 01202 891899

2. Hazards Identification

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

3. Composition/Information on Ingredients

Preparation description : Liquid epoxy resin.

Dangerous components/constituents

CAS/Registry No.	Material Description	% Content
25068-38-6	*4,4'-ISOPROPYLLINDENEDIPHENOL-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 : Monogoggles
Body Protection : Standard issue work clothes

9. Physical and Chemical Properties

Physical state : Viscous liquid
Colour : Clear
Density : 1050 kg/m³ @ 25°C
Solubility in Water : Not miscible
Solubility in Other Solvents : Readily soluble in various organic solvents
Dynamic Viscosity : 0.7 to 2 Pa.s @ 25°C

10. Stability and Reactivity

Stability	:	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	:	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 bioaccumulate.
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 rinsing 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 Classification	:	Dangerous for the environment. Harmful/Irritant.
EC Symbols	:	N Xi
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	:	10. 04.2008
Reference	:	SDS/ WMEC/A/03

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

WATER MISCIBLE EPOXY COATING - PACK B

1. Identification of the substance/preparation and company.

Product Name : Epoxy Products Water Miscible Epoxy Coating - Hardener - Pack B
Product Code : WMEC/B
Product Type : Epoxy Resin Curing Agent
Supplier : Epoxy Products Limited
Address : Unit 7 Haviland Rd, Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ England
Contact Numbers : 01202 891899
Emergency Telephone Number : 01202 891899

2. Hazards Identification

Irritating to skin (R38). Risk of serious damage to eyes (R41). May cause sensitisation by skin contact (R43).

2.1. Signs and Symptoms of Exposure (Possible Longer Term Effects)

Repeated and/or prolonged contact with the skin may cause allergic reaction/sensitisation.

Repeated and/or prolonged exposure may result in: adverse eye effects (such as conjunctivitis or corneal damage), adverse skin effects (such as defatting, rash, irritation or corrosion), and adverse respiratory effects (such as cough, tightness of chest or shortness of breath).

3. Composition/Information on Ingredients

Preparation description : Epoxy amine adduct emulsion

CAS Number and Chemical Name	%	Classification
7732-18-5 Water	35 - 69	None
Polyamino-amide	30 - 60	Xi; R41
Polyethylene amines	1 - 5	C; Xn; R21/22. R34. R43

4. first-aid Measures

Contact with eyes causes severe irritation and pain.

Contact with skin causes severe irritation and pain.

Inhalation of vapours may cause irritation in the respiratory tract.

Ingestion : If swallowed seek medical advice immediately. Induce vomiting or remove stomach contents by gastric suction only as directed by Medical personnel.

Inhalation : In case of inhalation, move patient at once to fresh air and 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

5.1. Suitable Extinguishing Media

Ignition will give rise to a Class B fire. In case of fire use: Water Spray, Carbon Dioxide (Co²), Dry Chemical Alcohol Foam.

5.2. Special Exposure Hazards (Fire Fighting)

May generate toxic, irritating or flammable combustion products. May generate carbon monoxide gas. May generate toxic nitrogen oxide gases.

5.3. Special Fire Fighting Procedures

Keep containers cool with water spray. Avoid skin contact. Wear complete body protective butyl rubber clothing. Use water spray to reduce vapours. Fire-fighters should wear butyl rubber boots, gloves and body suit and self contained breathing apparatus.

6. Accidental Release Measures

Prevent accidental spillages to enter streams or drinking water supplies.

7. Handling and Storage

Handling : Avoid contact with eyes. Avoid breathing vapours.

Storage : Keep away from oxidisers, heat or flames. Protect containers from physical damage and from freezing.

8. Exposure Controls/Personal Protection

8.1. Personal Protection

- a) Respiratory Protection : Under normal conditions - not required.
- b) Hand Protection : Nitrile rubber gloves or any impermeable gloves must be worn.
- c) Eye Protection : Goggles or chemical safety glasses.
- d) Skin Protection : Protective long sleeved overalls must be worn.

9. Physical and Chemical Properties

Appearance : Mobile viscous liquid
Colour : Various
Odour : Ammoniacal
pH : Alkaline
Boiling Point : 100C (212F)
Flash Point : Not determined
Flammability : Not applicable
Auto flammability : >150C (>302F)
Explosive Limits : No data
Vapour Pressure : Not determined.
Relative Density : 1.500 @ 25C (77F)
Water Solubility : Completely

10. Stability and Reactivity

Materials to Avoid

Oxidising Agents (i.e. perchlorates, nitrates etc.); Amines. A reaction accompanied by large heat release occurs when the product is mixed with acids.

Hazardous Decomposition Products

Carbon Monoxide in a fire. Carbon Dioxide in a fire. Nitrogen Oxides in a fire. Irritating and toxic fumes at elevated temperatures.

Hazardous Polymerisation

Will not occur.

11. Toxicological Information

Oral LD50 (rat) : >2000 mg/kg (estimate)
Dermal LD50 (rabbit) : > 5000 mg/kg (estimate)
Inhalation LC50 (rat) : No Data

11.1 Irritation Effects Data

Moderate irritant to the skin of a rabbit. Severe irritant to the eyes of a rabbit.

12. Ecological Information

Information on this mixture is insufficient to classify.

13. Disposal Considerations

Dispose of in accordance with local and national regulations. For example, in the UK regulations made under the Control of Pollution Act 1974 and the Environmental Protection Act 1990. Wear protective clothing during disposal operations. If disposal is by a waste contractor, make sure that he has sufficient information and that waste containers are properly labelled.

14. Transport Information

Adr/Rid Shipping Data : Not Regulated
Imo Shipping Data : Not Regulated
Icao/Iata Shipping Data : Not Regulated
Is The Product Classed As A Marine Pollutant? No

15.Regulatory Information



HARMFUL /IRRITANT

EEC Symbol : Harmful/Irritant

EEC Council Directive relating to the classification, packaging and labelling of dangerous substances and preparations Risk ® and Safety (S) phrases
Irritating to skin (R38). Risk of serious damage to eyes (R41). May cause sensitisation by skin contact (R43). In case of contact with eyes, rinse well with plenty of water and seek medical advice (S26). After contact with skin, wash immediately with plenty of soap and water (S28). Wear suitable protective clothing, gloves and eye/face protection (S36/37/39).

16. Other Information

Date Issued : 10. 04.2008
Reference : SD/WMEC/B/03
Intended Use : Epoxy Resin Curing Agent
Product Code : Epoxy Products Water Miscible Epoxy Coating (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.