

# MATERIAL SAFETY DATA SHEET

## EPOXY LINE COATING - PACK A

### 1. Identification of the substance/preparation and company.

Product Name : Epoxy Products Epoxy Line Coating - Pack A  
Product Type : Epoxy Resin  
Application : Epoxy Resin Line Marking Paint  
Supplier : Telephone Number: (01202) 891899  
Epoxy Products Limited, 7 Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ England

### 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 with 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<sup>3</sup> at 20° C  
Viscosity Not applicable

### 10. Stability and Reactivity

Conditions to avoid  
 Materials to avoid  
 Hazardous Decomposition Products  
 Hazardous Reactions

Caustic soda can induce vigorous polymerisation at temperatures around 200°C.  
 Strong oxidising agents. Caustic soda.  
 Hazardous decomposition products are not expected to form during normal storage.  
 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  
 Acute Dermal Toxicity  
 Eye Irritation  
 Skin Irritation  
 Sensitisation  
 Carcinogenicity  
 Mutagenicity

Expected to be of low toxicity. LD50 > 2000 mg/kg  
 Expected to be of low toxicity. LD50 > 2000 mg/kg  
 Expected to be slightly irritant.  
 Expected to be slightly irritant.  
 Expected to be a skin sensitiser.  
 Not expected to be carcinogenic.  
 Not considered to be a mutagenic hazard.

**12. Ecological Information**

Persistence/Degradability

Biodegradable  
 Bioaccumulation  
Ecotoxicity Effects  
 Toxicity to fish  
 Toxicity to algae  
 Acute toxicity to invertebrates  
 Mobility  
 Sewage treatment  
 Basis for assessment

This product is expected to be not readily biodegradable.  
 Has the potential to bioaccumulate.  
 Expected to be very toxic. LC/EC/IC 50 > 1 mg/l  
 Expected to be toxic 1. LC/EC/IC 50 > 10 mg/l  
 Expected to be toxic 1. LC/EC/IC 50 > 10 mg/l  
 The product is insoluble in water and sinks in water.  
 Expected to be practically non toxic 1. LC/EC/IC 50 > 100 mg/l  
 Information given is based on knowledge of all the components and the toxicology of similar products

**13. Disposal**

Product Disposal  
 Container Disposal  
 Local legislation

Recover and recycle if possible. Arrange for disposal via a licensed waste contractor.  
 Dispose of containers with care. Empty packaging should be removed by a licensed waste contractor.  
 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  
 Class  
 Classification Code  
 Packaging Group  
 Labelling Number  
 Risk Number  
 Description of the goods contains

3082  
 9  
 M6  
 111  
 9  
 90  
 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. EPOXY RESIN

**ICAO / IATA-DGR**

UN Number  
 Class  
 Packaging Group  
 Proper Shipping Name

3082  
 9  
 111  
 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. EPOXY RESIN

**IMDG**

UN Number  
 Class  
 Packaging Group  
 Labelling Number  
 Description of the goods contains

3082  
 9  
 111  
 9  
 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

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.

S46	If swallowed seek medical advice immediately and show this container or label.
S61	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	06.06.2008
Reference	ELC/A/03
Product Code	Epoxy Products Epoxy Line Coating (Resin - Pack A)
Intended Use	Epoxy Resin Line Marking Paint.

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 LINE COATING - PACK B

### 1. Identification of the substance/preparation and company.

Product Name : Epoxy Products Epoxy Line Coating - Pack B  
 Product Code : ELC/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

Human health hazards : Harmful by inhalation and if swallowed (R20/22) May cause sensitisation by skin contact (R43).  
 Signs and symptoms of exposure (Acute effects) : Product vapour in low concentrations can cause lacrimation, conjunctivitis and corneal edema when absorbed into the tissue of the eye from the atmosphere. Contact with the eye may cause dryness (defatting), itching and/or rash. Contact with the skin causes mild irritation and discomfort. Inhalation of mists may cause irritation in the respiratory tract. Product is absorbed through the skin and may cause nausea, headache and general discomfort.  
 Signs and symptoms of exposure (Possible longer term effects) : Repeated and/or prolonged exposure may cause allergic reaction/sensitization. Repeated and/or prolonged exposure may result in: adverse eye effects (such as conjunctivitis or corneal damage), adverse skin effects (such as defatting, rash or irritation), adverse skin effects (such as rash, irritation or corrosion). Dryness of nasal passages may be experienced when material is inhaled over a long period of time.

### 3. Composition/Information on Ingredients

Preparation description : Cycloaliphatic amine  
 Dangerous components/constituents  

CAS / Registry Number	Materials Description	%		
100-51-6	Benzyl Alcohol	> 45	Irritant: Xn	R Phrases: R20/22
1761-71-3	Methylenedi (cyclohexylamine)	<5	Corrosive: C	R Phrases: R35 R22 R37 R43

### 4. First Aid Measures

Inhalation : Move patient to fresh air. If breathing has stopped or is laboured give assisted respiration (mouth to mouth). Supplemental oxygen may be indicated. Prevent aspiration of vomit. Turn victim's head to the side. Seek medical advice.  
 Skin contamination : Wash affected area with mild soap and water. Remove contaminated clothing and shoes. Destroy contaminated leather apparel. Launder contaminated clothing prior to reuse.  
 Eye contamination : Rinse immediately with plenty of water.  
 Ingestion : If swallowed call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.

### 5. Fire-fighting Measures

Suitable extinguishing media : Ignition will give rise to a class B fire. In case of large fire use: water spray, alcohol foam. In case of small fires use carbon dioxide (CO<sub>2</sub>), dry chemical, dry sand or limestone. Extinguishing media - small fires : Dry chemical powder, carbon dioxide, foam, water spray or fog, sand or earth.  
 Special exposure hazards (Fire fighting) : May generate toxic, irritating or flammable combustion products. Sudden reaction and fire may result if product is mixed with an oxidising agent. May generate toxic nitrogen oxide gases. May generate ammonia gas. Personnel in vicinity and downwind should be evacuated.  
 Special fire fighting procedures : Fire fighters should wear butyl rubber boots, gloves, body suit and self contained breathing apparatus.

### 6. Accidental Release Measures

Precautions : Wear protective clothing, boots, gloves, and eye protection  
 Methods for cleaning up : If recovery is not feasible, admix with dry soil, sand or non-reactive absorbent and place in an appropriate chemical waste container. Transfer to containers by suction, preparatory for later disposal. Flush area with water spray. Clean-up personnel must be equipped with self contained breathing apparatus and butyl rubber, protective clothing. For large spills, recover spilled material with a vacuum truck.

### 7. Handling and Storage

Handling : Avoid contact with skin, eyes. When handling, do not eat, drink or smoke.  
 Storage : Keep away from: acids, alkalis, oxidizers. Keep in cool, dry, ventilated storage and in closed containers. Store in steel containers preferably located outdoors, above ground, and surrounded by dikes to contain spills and leaks. Do not store in reactive metal containers.

### 8. Exposure Controls/Personal Protection

Occupational exposure standards : None established  
 Respiratory protection : Not required under normal conditions in a well ventilated workplace. .  
 Hand protection : PVC, neoprene rubber, butyl rubber or nitrile rubber gloves.  
 Eye protection : Safety glasses  
 Skin protection : Long sleeved work clothes

### 9. Physical and Chemical Properties

Physical state : Low viscosity liquid  
 Colour : Amber  
 Odour : Ammoniacal  
 pH : Alkaline

Density : 1050 kg/m<sup>3</sup> @ 25°C  
 Solubility in Water : Slight  
 Solubility in Other Solvents : Readily soluble in various organic solvents  
 Flash Point : 103°C

**10.Stability and Reactivity**

Stability : Stable  
 Conditions to avoid : Not applicable  
 Incompatibility (Materials to avoid) : Mineral acids (i.e., Sulphuric, Phosphoric, etc. Alkalis (Sodium or Potassium Hydroxide etc.) Organic acids,i.e., Acetic, Citric etc. Reducing agents (i.e. hydrides, sulphites etc) Oxidising agents i.e., perchlorates nitrates etc.) Reactive metals (i.e. zinc, sodium, calcium etc.) Sodium Hypochlorite.  
 N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes into contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Product slowly corrodes copper, aluminium, zinc and galvanised surfaces. Amines. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Materials reactive with hydroxyl compounds. Nitrites, nitrosating agents. A reaction accompanied by large heat release occurs when the product is mixed with acids. Heat generated may be sufficient to cause vigorous boiling creating a hazard due to splashing or spattering of hot material.  
 Hazardous decomposition products : Carbon Monoxide in a fire. Carbon Dioxide in a fire. Ammonia when heated. Nitrogen Oxides in a fire. Irritating and toxic fumes at elevated temperatures. Nitric acid in a fire. Nitrosamines. Aldehydes. Organic acid vapours. Nitrogen oxide can react with water vapours to form corrosive nitric acid.

**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, Rat : 1200 mg/kg  
 Acute toxicity -dermal : LD50, Rabbit : > 2800 mg/kg  
 Acute toxicity - Inhalation : LC50, Rat : No data  
 Irritation effects data : Mild irritant to the skin of a rabbit  
 Chronic / Subchronic data : No delayed, subchronic or chronic test data are known.

**12.Ecological Information**

Ecotoxicity : No data

**13.Disposal Considerations**

legislation : 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**

ADR/RID Shipping Data : Not regulated  
 IMO Shipping Data : RESIN COMPOUND - Not regulated  
 ICAO/IATA : RESIN COMPOUND - Not regulated  
 Other Information : Not classed as a marine pollutant

**15.Regulatory Information**



**HARMFUL**

EC Label name : Epoxy Curing Agent  
 EC Classification : Harmful  
 EC Symbols : Xn.  
 EC Risk phrases : R20/22 Harmful by inhalation and if swallowed.  
 R43 May cause sensitisation by skin contact  
 EC Safety phrases : 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.

**16.Other Information**

Date Issued : 24.06.2008  
 Reference : SDS/ ELC/B/03  
 Other information : Technical Services Department

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