MATERIAL SAFETY DATA SHEET
EPOXY LINE PAINT - PACK A

1. Identification of the substance/preparation and company.

Product Name : Epoxy Products Epoxy Line Paint - Pack A
Product Type : Epoxy Resin
Application : Epoxy Resin Floor Line Coating.
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

Preparation - Hazardous Ingredients (Europe)

Component	CAS/EINECS	Concentration %	Classification	Risk Phrases
Epoxy Resin Bisphenol Type A (Mol..Wt.<700)	25068-38-6	15 - 20	Xi, N	R36/38, R43, R51/53
Epoxy Resin Bisphenol Type F (Mol. Wt.=<700)	28064-14-4	10 - 15	Xi, N	R36/38, R43, R51/53
Aliphatic glycidyl ether	68609-97-2	<1	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. Was 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^{o}C
Flash Point	>150^{o}C
Auto Ignition Temperature	>300^{o}C
Vapour Pressure	< 0,01 Pa at 20˚C
Water Solubility	Negligible
Density	1.80g/cm^{3} at 20^{o}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

Persistence/Degradability

Biodegradable	This product is expected to be not readily biodegradable.
Bioaccumulation	Has the potential to bioaccumulate.

Ecotoxicity Effects

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

X – IRRITANT

N - DANGEROUS FOR THE ENVIRONMENT

Risk Phrases - R	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 - S	S24	Avoid contact with skin
	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 water.
	S37/39	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.

16. Other Information

Date Issued	19.02.2015
Reference	ELP/A/05
Product Code	Epoxy Products Epoxy Line (Resin - Pack A)

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 PAINT - PACK B

1. Identification of the substance/preparation and company.

Product Name	:	Epoxy Line Paint - Hardener - Pack B
Product Code	:	ELP/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

Xi : R 41: Risk of serious damage to eyes
Xi: R38: Irritating to skin

3. Composition/Information on Ingredients

Preparation description : Epoxy amine adduct emulsion

Preparation - Hazardous Ingredients (Europe)

Component	CAS	EC	Concentration %	Classification	Risk Phrases
3,6-Diazaoctanethylene-diamin; triethyletramine	112-24-3	203-950-6	0.25 -.50	Xi, C	R21,R34, R43, R52,R53/53
Acetic Acid	64-19-7	200-580-7	1.0 – 1.5	C	R10, R35
Triethylenetetramine,2,2'-Iminodi (ethylamine), Butanediol, Methylphenol, Phenol,Bisphenol A, Epichlorohydrin Formaldehyde Amine Func. CoPolymer	1312024-86-6	Polymer	50 -75	Xi	R41, R38

4. First-aid Measures

Eye Contact	:	Immediately flush eyes with water for at least 30 minutes. Seek medical advice
Skin Contact	:	Remove product and immediately flush affected area with soap and water.
Ingestion	:	If swallowed seek medical attention immediately. Do not induce vomiting unless directed to do so by medical personnel
Inhalation	:	In case of inhalation, move patient at once to fresh air and seek medical advice.
Emergency Personnel Protection	:	First Aid responders should pay attention to self protection and use the recommended protective clothing, (chemical resistant gloves, splash protection)

5. Fire-fighting Measures

Extinguishing Media	:	To extinguish combustible residues of this product use water spray, carbon dioxide, dry chemical, foam.
Fire Fighting Procedures	:	Keep people away. Isolate fire and deny unnecessary entry. To extinguish combustible residues of this product use water spray, carbon dioxide (Co^2), dry chemical and foam.
Special Protective Equipment For Firefighters	:	Wear positive-pressure self contained breathing apparatus (SCBA) and protective fire fighting clothing (includes helmet, coat, trousers, boots and gloves.) Avoid contact with this materialduring fire fighting operations.
Unusual Fire and Explosion Hazards	:	This material will not burn until the water has evaporated. The residue can burn.
Hazardous Combustion Products	:	Some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Combustion products may include and are not limited to: Nitrogen Oxides, Carbon Monoxide , Carbon Dioxide.

6. Accidental Release Measures

Steps to be taken if material is spilled	:	Contain spillage if possible. Absorb with sand. Collect in suitable labelled container.
Personal Precautions	:	Isolate area. Keep unnecessary and unprotected personnel from entering the area.
Environmental Precautions	:	Prevent from entering into soil, ditches, sewers, waterways and groundwater.

7. Handling and Storage

Handling	:	Avoid getting into eyes. Avoid breathing vapours.
Storage	:	Store in a cool dry place.

8. Exposure Controls/Personal Protection

Eye/Face Protection	:	Goggles or chemical safety glasses. Eye wash fountain available in area of work
Skin Protection	:	Protective long sleeved overalls, vinyl gloves. Face shield/full body suit will depend upon the task.
Respiratory Protection	:	Under normal conditions - not required.
Hand Protection	:	Vinyl gloves or any impermeable gloves.

9. Physical and Chemical Properties

Appearance	:	Liquid
Colour	:	Yellow
pH	:	Alkaline
Boiling Point	:	>100C (212F)
Flash Point	:	>100C (212F)
Flammability	:	Not applicable
Relative Density	:	1.00 @ 25C (77F)
Water Solubility	:	Soluble

10. Stability and Reactivity

Chemical Stability	:	Stable under recommended storage conditions.
Conditions to Avoid	:	Some components of this product can decompose at elevated temperatures.
Incompatible Materials	:	Avoid contact with Acids, Oxidisers.
Hazardous Polymerisation	:	Will not occur
Thermal Decomposition	:	Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include Aromatic compounds. Amines, Hydrocarbons.

11. Toxicological Information

Acute Toxicity

Ingestion	:	Low toxicity if swallowed. Small amounts swallowed will not cause injury. Large amounts may cause injury.
Dermal	:	Prolonged skin contact is unlikely to result in absorption of harmful amounts.
Inhalation	:	At room temperature exposure to vapour is minimal due to low volatility.
Eye Damage/Eye Irritation	:	May cause sever eye irritation
Skin Corrosion/Irritation	:	Prolonged contact may cause skin irritation with local redness.

Sensitisation

Skin	:	Prolonged skin contact may cause an allergic skin reaction

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

15.EC Classification and User Label Information

IRRITANT

EEC Symbol		Xi	Irritant
Risk Phrases		R41	Risk of serious damage to eyes.
		R38	Irritating to skin
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	:	19. 02 2015
Reference	:	SD/EL/B/06
Intended Use	:	Epoxy Resin Curing Agent
Product Code	:	Epoxy Products Epoxy Line Paint (Pack B - Hardener)
Other information	:	Technical Services Department

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