

MATERIAL SAFETY DATA SHEET

PITCH EPOXY COATING - PACK A

1. Identification of the substance/preparation and company.

Product Name : Pitch Epoxy Coating - Pack A
Application : Epoxy Resin Tanking System
Supplier : Epoxy Products Limited, 7 Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ England
Emergency Contact Number : 01202 891899

2. Composition/Information on Ingredients

Chemical Nature Mixture of epoxy resins

Hazardous Components

	CAS/EINECS	Concentration %	Classification	Risk Phrases
Epoxy Resin Bisphenol Type A (Mol. Wt.<700)	25068-38-6	10 - 20	Xi N	R36/38, R43, R51/53
Epoxy Resin Bisphenol Type F (Mol. Wt.=<700)	28064-14-4	5 - 10	Xi, N	R36/38, R43, R51/53

3. 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.

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. Induce vomiting. Seek immediate medical attention.
Inhalation No specific measures

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 during Fire Not classified as flammable but will burn. 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, nitrile PVC type gloves or any impermeable gloves must be worn.
Eye Protection Safety eye glasses or goggles must be worn.
Skin and Body Protection Standard issue work clothes.

9. Physical and Chemical Properties

Physical State Liquid
Colour Off White, White
Odour Slight
Flash Point >150° C
Auto Ignition Temperature >400° C
Water Solubility Negligible
Density 1.80g/cm³ at 20° C

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
Carcinogenicity
Mutagenicity

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

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

Ecotoxicity Effects

Toxicity to fish
Toxicity to algae
Acute toxicity to invertebrates
Mobility
Sewage treatment

Expected to be toxic. $1 < LC/EC/IC 50 > 10 \text{ mg/l}$
Expected to be toxic. $1. LC/EC/IC 50 > 10 \text{ mg/l}$
Expected to be toxic. $1. LC/EC/IC 50 > 10 \text{ mg/l}$
Sinks in water.
Expected to be practically non toxic. $1. LC/EC/IC 50 > 100 \text{ mg/l}$

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 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

Land Transport 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. CONTAINS LIQUID EPOXY RESIN

Air Transport ICAO-TI / IATA-DGR

UN Number
ICAO/IATA Class
Packaging Group
Label
Correct Technical Name

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

Maritime Transport IMDG / GGVSea

UN Number
IMDG- CODE
EmS Number
Packaging Group
Description of the goods contains

3082
9
F-A/ S-B
111
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID
N.O.S. CONTAINS LIQUID EPOXY RESIN

15. Regulatory Information



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
S28
S37/39
S61

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

16. Other Information

Date Issued : 09.04.2011
Reference : SD/PEC/A/05
Product Code Pitch Epoxy Coating (Pack A- Resin)
Intended Use Epoxy Resin

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

PITCH EPOXY COATING - PACK B

1. Identification of the substance/preparation and company.

Product Name : Pitch Epoxy Coating - Pack B
Product Code : PEC/B
Product Type : Epoxy Curing Agent
Supplier : Epoxy Products Limited
Address : Unit 7, Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ England
Contact numbers : 01202 891899

2. Hazards Identification

Harmful in contact with skin and if swallowed. Causes burns. May cause sensitisation by skin contact. Possible risk of impaired fertility. Possible risk of harm to the unborn child. Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

Classification: Xn; R21/22. Rep 3; R62, R63. C; R34, R43. N; R50/53

3. Composition/Information on Ingredients

Name	ECNo	CAS-No	Content	Classification
Pitch, coal tar, high temp.	65996-93-2	266-028-2	20 - 30	Carcinogen Cat 2 R45
Creosote oil, acenaphthene fraction	90640-84-9	292-605-3	15 - 25	Carcinogen Cat 2 R45
Xylene, mixture of isomers	215-535-7	1330-20-7	10-20	Xn; R20/21
Formaldehyde, polymer with benzeneamine	-	135108-88-2	<5	Xn; R22, C; R34
Benzyl Alcohol	202-859-9	100-51-6	<5	Xn; R20/22

4. First-aid Measures

INHALATION When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. If breathing stops, provide artificial respiration. Move into fresh air. Get medical attention immediately

INGESTION Never give liquid to an unconscious person. DO NOT induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.

SKIN CONTACT Remove contaminated clothing immediately and wash skin with soap and water. Important to remove the substance from the skin immediately. Rinse with water. Contact physician if discomfort continues.

EYE CONTACT Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately.

5. Fire-fighting Measures

Extinguishing Media Extinguish with carbon dioxide or dry powder, dry chemicals or sand. Alcohol resistant foam

Special Fire Fighting Procedures Keep up-wind to avoid fumes. Keep run off water out of sewers and water sources. Dike for control.

Specific Hazards In case of fire, toxic gases maybe formed. Carbon monoxide (CO) Carbon Dioxide (CO2) Nitrous gases (NOx) Ammonia or amines.

Protective Measures in Fire Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental Release Measures

Personal Precautions Wear protective clothing as described in section 8 of this safety data sheet.

Environmental Precautions Do not discharge into drains, water courses or onto the ground. Contain spillages with sand, earth or any absorbent material.

Spill Clean Up Methods Stop leak if possible without risk. Absorb in vermiculate, dry sand or earth and place into containers.

7. Handling and Storage

Usage Precautions Avoid inhalation of vapours/spray and contact with skin and eyes. Provide good ventilation.

Storage Precautions Keep containers closed in a dry, cool and well ventilated place.

8. Exposure Controls/Personal Protection

Protective Equipment Protective eye glasses or safety goggles
Impervious gloves. In poorly ventilated environments – breathing apparatus.

Process Conditions Provide eye wash station and safety shower.

Engineering Measures Provide adequate ventilation.

Respiratory Equipment If ventilation is insufficient, suitable respiratory protection must be provided.

Hand Protection Use protective gloves made of:- Butyl rubber, Nitrile, Neoprene or Polyvinyl Chloride (PVC)

Eye Protection Wear approved safety goggles

Other Protection Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged contact.

Hygiene Measures Promptly remove any contaminated clothing. Wash contaminated clothing before reuse. Wash at end of each work shift and before eating, smoking and using the toilet. When using do not eat or drink.

9. Physical and Chemical Properties

Appearance : liquid
Colour: Black
Odour : Aromatic Odour
pH : Not available
Boiling Point : >200C
Flash Point : >100C
Water Solubility : Insoluble in water
Relative Density: 1.08 @ 25C (77F)

10. Stability and Reactivity

Stability Stable under normal temperature conditions and recommended use.

Materials to Avoid Avoid flames. Oxidizing agents (i.e. perchlorates, nitrates etc.).

Hazardous Decomposition Products Carbon Monoxide in a fire. Carbon Dioxide in a fire. Nitrous gases in a fire.

11. Toxicological Information

Inhalation

Harmful by inhalation. High concentrations of vapour may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

Ingestion

Harmful if swallowed. Nausea, vomiting, diarrhoea, headache. May cause chemical burns in mouth.

Skin contact

May cause sensitisation by skin contact.

Eye contact

Irritating and may cause redness and pain.

12. Ecological Information

Ecotoxicity

This product contains a substance which is very toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.

Mobility

The product is insoluble in water.

Bioaccumulation

May accumulate in soil and water systems.

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

Land Transport 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. (Orgol Tar No1)

Air Transport ICAO-TI / IATA-DGR

UN Number	3082
ICAO/IATA Class	9
Packaging Group	111
Label	9
Correct Technical Name	Environmentally hazardous substance, liquid, n.o.s. (Orgol Tar No1)

Maritime Transport IMDG / GGVSea

UN Number	3082
IMDG- CODE	9
EmS Number	F-A/ S-F
Marine Poll	LQ 51
Packaging Group	111
Description of the goods contains	Environmentally hazardous substance, liquid, n.o.s. (Orgol Tar No1)
Marine Pollutant	YES

15. Regulatory Information



TOXIC



DANGEROUS FOR THE ENVIRONMENT

CONTAINS

Pitch, coal tar, high temp

Risk Phrases - R

R23 Toxic by inhalation
R43 May cause sensitisation by skin contact
R45 May cause cancer
R51/53 Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment
R60 May impair fertility
R61 May cause harm to unborn child
R65 Harmful: may cause lung damage if swallowed.

Safety Phrases - S

S36/37 Wear suitable protective clothing and gloves.
S38 In case of insufficient ventilation, wear suitable respiratory equipment.
S45 In case of accident or if you feel unwell, seek medical advice immediately
S53 Avoid exposure – obtain special instructions before use.
S60 This material and its container must be disposed of as hazardous waste.
S61 Avoid release to the environment. Refer to special instructions/Safety data sheet.

16. Other Information

Date Issued	:	09.04.2011
Reference	:	SD/PEC/B/05
Intended Use	:	Epoxy Curing Agent
Product Code	:	Pitch Epoxy Coating (Pack B - Hardener)

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