

MATERIAL SAFETY DATA SHEET

GROUT T - PACK A

1. Identification of the substance/preparation and company.

Product Name : Epoxy Products Grout T
Product Type : Epoxy Resin
Application : Epoxy resin injection grout.
Supplier: Emergency Telephone Number: (01202) 891899

Epoxy Products Limited, 7 Haviland Rd, Ferndown Industrial Estate, Wimborne, Dorset BH21 7RZ

2. Hazards Identification

Physical Hazard : None-classifiable
Health Hazard : Irritant (Xi)
Irritating to eyes and skin. (R36/38)
May cause sensitisation by skin contact. (R43)
Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment. (R51/53)

3. Composition/Information on Ingredients

Modified Liquid Bisphenol A/F-Epichlorohydrin Epoxide Resin and thickening agent.
BEFORE USING OR HANDLING, READ AND UNDERSTAND THE MATERIAL SAFETY DATA SHEET.

| <u>CAS/Registry No.</u> | <u>Material Description</u> | <u>% Content</u> |
|-------------------------|---|------------------|
| 25068-38-6 | *4,4'-ISOPROPYLINDENEDIPHENOL-EPICHLOROHYDRIN COPOLYMER Physical Hazard: Non-classifiable Health Hazard: Irritant (Xi) Irritating to eyes. (R36) Irritating to skin. (R38) May cause sensitisation by skin contact. (R43) OEL: None Established | 35-50 |
| 55492-52-9 | *BISPHENOL F-EPICHLOROHYDRIN COPOLYMER Physical Hazard: Non-classifiable Health Hazard: Irritant (Xi) Irritating to eyes. (R36) Irritating to skin. (R38) May cause sensitisation by skin contact. (R43) OEL: None Established | 35-50 |

4. First-aid Measures

Ingestion : If accidentally swallowed, give large quantities of water or milk or dilute the effects on the stomach. Do not induce vomiting. Seek medical advice.
Inhalation : If inhalation causes adverse effects, remove to fresh air. If problem persists, seek medical advice.
Skin Contact : In case of contact, immediately flush with plenty of water, remove contaminated clothing. Seek medical attention.
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 immediately medical attention.

5. Fire-fighting Measures

Non-flammable at room temperature, but will burn. In case of fire, use water spray, dry chemical, foam or carbon dioxide extinguishers. Use water to keep fire-exposed containers cool. For large fires, fire-fighters should wear full emergency protective equipment including self-contained breathing apparatus.

6. Accidental Release Measures

Always wear appropriate protective clothing (refer to Section 8.2).

Large Quantities : Contain and absorb with sand or sawdust and prevent from entering drains or watercourses should this occur, the relevant Local Authority must be notified.

Small Quantities : Soak up with absorbent material and remove to a chemical disposal area.

7. Handling and Storage

7.1. Handling

Handle in accordance with good industrial hygiene and safety practices. Refer to Section 8 for appropriate personal protection equipment. Wash thoroughly after handling.

Inhalation : Avoid prolonged or repeated breathing of vapour.
Skin Contact : Avoid contact with skin or clothing.
Eyes : Avoid contact with eyes.

7.2. Storage

Keep in tightly sealed containers and store in a cool dry place avoiding exposure to heat, light, moisture and air.

8. Exposure Controls/Personal Protection

8.1. Personal Protection

Where air contaminants can exceed acceptable criteria, use approved respiratory protection equipment. Use goggles if contact is likely. Wear impervious gloves as required to prevent skin contact.

9. Physical and Chemical Properties

| | |
|---------------------------|---------------------------------------|
| Appearance | Off white paste, slightly sweet odour |
| Boiling Point | >150° C |
| Flammability | Combustible |
| Auto-ignition Temperature | >200° C |
| Relative Density | 1.05g/cm ³ at 25° C |
| Water Solubility | Not miscible |

10. Stability and Reactivity

Normally considered stable and inert.

| | |
|---|--|
| Hazardous polymerisation: | Will not occur. |
| Materials to avoid: | Mineral acids, bases, amines and mercaptans. |
| Conditions to avoid: | None known to Epoxy Products Ltd. |
| Thermal decomposition products may include: | Oxides of carbon. |
| Other Hazards: | None known to Epoxy Products Ltd. |

11. Toxicological Information

| | | |
|------------|---|--|
| Ingestion | : | May be harmful if accidentally swallowed. |
| Inhalation | : | Not expected to be harmful under normal conditions of use. |
| Skin | : | Irritating to skin. |
| Eyes | : | Irritating to eyes. |
| 25068-38-6 | : | *4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN COPOLYMER May cause sensitisation by skin contact. |
| 55492-52-9 | : | *BISPHENOL F-EPICHLOROHYDRIN COPOLYMER May cause sensitisation by skin contact. |

12. Ecological Information

| | |
|-----------------------------|--|
| Mobility: | Not determined. |
| Degradability: | Not determined. |
| Bio-accumulative potential: | Not determined. |
| Aquatic toxicity: | Toxicity to bacteria, algae and higher marine organisms not tested. COD: Not determined. |

13. Disposal Considerations

DO NOT reuse containers containing residual product without thorough cleaning. All waste should be disposed of using a Registered Waste Carrier operating under the Environmental Protection Act (Duty of Care) Regulations 1992. (S.I. No 2839).

14. Transport Information

UK Supply Classification (Xi) Irritant

15. Regulatory Information



DANGEROUS FOR THE ENVIRONMENT



HARMFUL /IRRITANT

| | | |
|-------------------|---|---|
| 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 | : | 03.05.2008 |
| Reference | : | SDS/ GT/A/03 |
| 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

GROUT T - PACK B

1. Identification of the substance/preparation and company.

Product Name : Epoxy Products Grout T (Hardener - Pack B)
Product Type : Epoxy Resin Curing Agent
Application : Epoxy resin injection grout
Supplier : Emergency Telephone Number: (01202) 891899

Epoxy Products Limited, 7 Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ.

2. Hazards Identification

Harmful by Inhalation and if swallowed (R20/22). May cause sensitisation by skin contact (R43).

3. Composition/Information on Ingredients

| CAS Number and Chemical Name | % | Classification |
|------------------------------|------|----------------|
| 100-51-6 Benzyl Alcohol | > 45 | Xn; R20/22 |

Description : Cycloaliphatic Amine

4. First-aid Measures

INGESTION : If swallowed seek medical advice immediately. Induce vomiting or remove stomach contents by gastric suction only as directed by Medical personnel.
INHALATION : Move patient to fresh air. If breathing has stopped or is laboured give assisted respiration (e.g. mouth to mouth). Supplemented oxygen may be indicated. Seek medical advice. Assure mucus does not obstruct airway. Prevent aspiration of vomit. Turn victim's head to one side.
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

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.

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 acids, Epoxy Resins, heat and oxidizers. Protect containers from physical damage.

8. Exposure Controls/Personal Protection

100-51-6 TWA Values : Not established

8.2. Personal Protection

a) Respiratory Protection : Not required.
b) Hand Protection : Nitrile rubber gloves or any impermeable gloves must be worn.
c) Eye Protection : Safety Eye Glasses
d) Skin Protection : Protective long sleeved overalls must be worn.

9. Physical and Chemical Properties

Appearance : Translucent paste
Odour : Ammoniacal
pH : Alkaline
Boiling Point : 222C (432F)
Flash Point : 103C (219F) (Closed Cup Method)
Flammability : Not applicable
Auto-ignition Temperature : No data
Explosive Limits : No data
Vapour Pressure : 13 @ 54C (130F)
Relative Density : 1.05
Water Solubility : Slightly
Partition Coefficient : n-Octanol/Water : not applicable

10. Stability and Reactivity

Oxidizing Agents (i.e. perchlorates, nitrates etc.). A reaction accompanied by large heat release occurs when the product is mixed with acids or Epoxy Resins. Heat generated may be sufficient to cause a hazard due to splashing of hot material.

HAZARDOUS DECOMPOSITION PRODUCTS

Ammonia when heated. Carbon Monoxide in a fire. Carbon Dioxide in a fire. Nitrogen Oxides in a fire. Hydrogen Cyanide when heated. Combustion of product under oxygen-starved conditions can be expected to produce numerous toxic products including: nitriles, cyanic acid, isocyanates, amides and carbamates.

HAZARDOUS POLYMERISATION

Will not occur.

11. Toxicological Information

Oral LD50 (rat) : 620 mg/kg (estimate) Data available on components only.
Dermal LD50 (rabbit) : > 1000 mg/kg (estimate) Data available on components only.
Inhalation LC50 (rat) : No Data (Estimate) Data available on components only.

12. Ecological Information

Waste from this product may present long term environmental hazards, thus landfill must be considered less acceptable than incineration.

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 CLASSIFIED AS A MARINE POLLUTANT? No

15. Regulatory Information



HARMFUL/IRRITANT

EEC SYMBOL Harmful (Xn)

EEC Council Directive relating to the classification, packaging and labelling of dangerous substances and preparations Risk ® and Safety (S) phrases
Harmful by inhalation and if swallowed (R20/220. May cause sensitization by skin contact (R43).

In case of contact with eyes, rinse thoroughly with plenty of water and seek medical advice (S26). Wear suitable gloves and eye/face protection (S37/39).

16. Other Information

Date Issued : 1.05.2008
Reference : SD/GT/B/03
Intended Use : Epoxy Curing Agent
Product Code : Epoxy Grout T (Pack B - Hardener)