

# MATERIAL SAFETY DATA SHEET

## EPOXY PUTTY - PACK A

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

Product Name : Epoxy Products Epoxy Putty- Pack A  
Product Type : Epoxy Resin  
Application : Epoxy resin joint/crack filler and adhesive.  
Supplier : Epoxy Products Limited  
Address : Unit 7, Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ England  
Contact numbers : 01202 891899  
Emergency Telephone Number : 01202 891899

### 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 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	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**

<b><u>Persistence/Degradability</u></b>	
Biodegradable	This product is expected to be not readily biodegradable.
Bioaccumulation	Has the potential to bioaccumulate.
<b><u>Ecotoxicity Effects</u></b>	
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  
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

Avoid contact with skin  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28A  
S37/39  
S46

After contact with skin, wash immediately with plenty of water.  
Wear suitable gloves and eye/face protection.

S61

If swallowed seek medical advice immediately and show this container or label.  
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

01.04.2008

Reference

EPA/03

Product Code

Epoxy Products Epoxy Putty (Resin - Pack A)

Intended Use

Epoxy Resin Putty.

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 PUTTY PACK B

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

Product Name : Epoxy Putty (Hardener - Pack B)  
Product Type : Epoxy Resin Curing Agent  
Application : Epoxy resin jointing and adhesive  
Supplier : Epoxy Products Limited  
Address : Unit 7, Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ England  
Contact numbers : 01202 891899  
Emergency Telephone Number : 01202 891899

### 2. Hazards Identification

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

Description : Polyamine Epoxy Resin Curing Agent

### 3. Composition/Information on Ingredients

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

### 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 (Co<sup>2</sup>), Dry Chemical Alcohol Foam.

### 6. Accidental Release Measures

### 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 glasses

d) Skin Protection : Protective long sleeved overalls must be worn.

### 9. Physical and Chemical Properties

Appearance : putty

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 : 1.80

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 acid 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.

#### **IRRITATION EFFECTS DATA**

Severe irritant to the eyes of a rabbit.

#### **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**

EEC SYMBOL Harmful (Xn)

EEC Council Directive relating to the classification, packaging and labelling of dangerous substances and preparations Risk (R) 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**

This Safety Data Sheet has been written to comply with Directives 91/155/EEC (the "Safety Data Sheet Directive") and 88/379/EEC (the "General Preparations Directive").

Date Issued : 1.03.2008  
Reference : SD/EP/B/03  
Intended Use : Epoxy Curing Agent  
Product Code : Epoxy Putty (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.