

MATERIAL SAFETY DATA SHEET

EPOXY JOINT SEALANT - PACK A

1. Identification of the substance/preparation and company.

Product Name : Epoxy Products Epoxy Joint Sealant - Pack A
Product Type : Epoxy Resin
Application : Epoxy resin jointing compound.
Supplier: Emergency Telephone Number: (01202) 891899
Epoxy Products Limited, 7 Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ England

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)

3. Composition/Information on Ingredients

Modified Liquid Bisphenol A/F-Epichlorohydrin Epoxide Resin.

2.2. Information on Ingredients

The ingredients listed below have been associated with one or more of the listed immediate and/or delayed (*) health hazards. Risk of damage and effects depends upon duration and level of exposure.

BEFORE USING OR HANDLING, READ AND UNDERSTAND THE MATERIAL SAFETY DATA SHEET.

CAS/Registry No. Material Description % Content

25068-38-6	*4,4'-ISOPROPYLDENEDIPHENOL-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) Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment. (R51/53) 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) Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment. (R51/53) 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 : Prevent from entering drains or watercourses; should this occur, the relevant Local Authority must be notified.
Small quantities : 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 : Paste, slightly sweet odour
Boiling Point : >150° C
Flammability : Combustible
Auto-ignition Temperature : >200° C
Relative Density : 1.80g/cm³ at 25° C

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

11.1 Immediate Hazards

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.

11.2. Delayed Hazards

25068-38-6 *4,4'-ISOPROPYLDENEDIPHENOL-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 Carriage Classification : Environmentally Hazardous Substance
 UN Conveyance Classification : Environmentally Hazardous Substance
 UN Class : 9
 UN Packaging Group : 111
 UN Number : 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE (Contains Epoxy Resin)
 ADR/RID Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains Epoxy Resin)
 HS Code Number : 390730 00

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

Safety Data Sheet History : Edition No 7
 SDS Distribution : This document contains important information to ensure the safe storage, handling and end use of this product. The information in this document should be brought to the attention of the person in your organisation responsible for advising on safety matters.

16. Other Information

Date Issued : 10.11.2008
 Reference : SD/JS/A/03
 Intended Use : Expansion/Contraction joint sealant.
 Product Code : Epoxy Products Epoxy Joint Sealant (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 JOINT SEALANT - PACK B

1. Identification of the substance/preparation and company.

Product Name : Epoxy Joint Sealant (Hardener - Pack B)
Product Type : Epoxy Resin Curing Agent
Application : Hardener Component for Resin Pack A
Supplier: Emergency Telephone Number: (01202) 891899
Epoxy Products Limited, 7 Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ England

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

	%	Classification
2-PIPERAZINE-1-YLETHLAMINE	>30	C: R34, Xn R21/22, R43, R52/53
NONYLPHENOL	<30	Repr. Cat. 3; R62, R63 C: R34, Xn: R22 N: R50/53

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 the patient at once to fresh air. Get medical attention..

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 does not 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

Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Seek medical advice, preferably an eye specialist.

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.

SPECIAL EXPOSURE HAZARDS (FIRE FIGHTING)

May generate toxic gases. Carbon Monoxide (CO). Carbon Dioxide (CO₂) Nitrous gases.

SPECIAL FIRE FIGHTING PROCEDURES

Keep upwind to avoid fumes. Keep run off water out of sewers and water sources. Dike for water control.

6. Accidental Release Measures

PERSONAL PRECAUTIONS

Wear protective clothing, boots, gloves and eye protection.

ENVIRONMENTAL PRECAUTIONS

Do not discharge into drains, water courses or into the ground. Contain spillages with sand, dry earth or any other suitable absorbent material.

SPILL CLEAN UP METHODS

Stop leak if possible without risk. Place into containers.

7. Handling and Storage

USEAGE PRECAUTIONS

Avoid inhalation of vapours and contact with skin and eyes.

STORAGE PRECAUTIONS

Store in tightly closed original containers in a dry, cool and well ventilated place. Store away from acids

8. Exposure Controls/Personal Protection

a) Respiratory Protection	:	Not required under normal conditions in well ventilated workplace
b) Hand Protection	:	Nitrile rubber gloves or any impermeable gloves must be worn.
c) Eye Protection	:	Protective glasses or goggles
d) Skin Protection	:	Protective long sleeved overalls must be worn.

9. Physical and Chemical Properties

Appearance	:	Wet sand, ammoniacal smell
Colour	:	Amber
Odour	:	Ammonia
pH	:	Alkaline
Flash Point	:	>100°C
Vapour Pressure	:	(mm Hg) <0.1 @ 21°C
Water Solubility	:	<0.1g/l

10. Stability and Reactivity

STABILITY

Stable under normal temperatures and conditions

MATERIALS TO AVOID

Strong oxidising substances. Organic peroxides. Strong alkalis. Acids- organic. Chemically reactive metals.

HAZARDOUS DECOMPOSITION PRODUCTS

Ammonia or amines. Carbon Monoxide, Carbon Dioxide, Nitric Acid, Nitrous gases. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

11. Toxicological Information

TOXIC DOSE 1 – LD50	1620mg/kg (oral rat)
INHALATION	Harmful by inhalation. High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.
INGESTION	Harmful if swallowed. Nausea, vomiting. Diarrhoea. Headache. May cause chemical burns in mouth, oesophagus and stomach.
SKIN CONTACT	May cause sensitisation by skin contact. May be absorbed through the skin. May cause nausea, headache, dizziness and intoxication. Causes burns.
EYE CONTACT	Irritating and may cause redness and pain. Risk of corneal damage. Visual disturbances including blurred vision. Causes burns.

12. Ecological Information

ECOTOXICITY	This product contains a substance which is very toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.
MOBILITY	This product is insoluble in water.
BIOACCUMULATION	May accumulate in soil and water systems.
WATER HAZARD CLASSIFICATION	<u>Wgk 3</u>
Name	NONYLPHENOL
LC50, 96 Hours, Fish mg/l	0.128
EC50, 48 Hours, DAPHNIA, mg/l	0.0848
Biocummulation potential	May accumulate in soil and water systems.

13. Disposal Considerations

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

14. Transport Information

UK ROAD CLASS	8	UK ROAD PACK GR	111
PROPER SHIPPING NAME	AMINES, LIQUID, CORROSIVE, N.O.S. (Aminoethyl)piperazin, 1- (2- (AEP), Nonylphenol	ADR CLASS	8 : Corrosive Substance
UN NO ROAD	2735	HAZARD No (ADR) 80	
ADR CLASS NO	8	HAZCHEM CODE	2X
ADR PACK GROUP	111	RID CLASS	8
ADR LABEL No	8	UN NO SEA	2735
CEFIC TEC (R) No	80 gc7-11+111	IMDG PACK GR	111
RID PACK GROUP	111	AIR CLASS	8
IMDG CLASS	8		
UN AIR NO	2735		
AIR PACK GR	111		
MARRINE POLLUTANT?	YES		

15. Regulatory Information

Labelling



CORROSIVE



DANGEROUS FOR THE ENVIRONMENT

CONTAINS 2-PIPERZIN-1-YLETHYLAMINE
NONYLPHENOL

Risk Phrases - R
R21/22 Harmful in contact with skin and if swallowed.
R34 Causes burns
R43 May cause sensitisation by skin contact

R50/53 Very toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment
R62 Possible risk of impaired fertility
R63 Possible risk of harm to the unborn child

Safety Phrases - S

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible)
S61 Avoid release to the environment. Refer to special instructions/safety data sheet.

16. Other Information

Date Issued : 01/02/2009
Reference : SD/EMFC/B/03
Intended Use : Epoxy Curing Agent
Product Code : Epoxy Mortar Fast Cure (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.