MATERIAL SAFETY DATA SHEET
EPOXY JOINT SEALANT - PACK A

SECTION 1. Identification of the substance/mixture and of the company/undertaking.

1.1	Product identifier	:	Epoxy Products Epoxy Joint Sealant - Pack A
1.2	Relevant identified uses of the substance or mixture and uses advised against		
	Use of the substance/mixture	:	Expansion joint sealant
1.3	Details of the supplier of the safety data sheet	:	Epoxy Products Limited, Unit 7 Haviland Road, Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ England Tel No. +44 (0) 1202 891899
	Email Address – Technical Information	:	sales@epoxyproducts.co.uk
	Telephone	:	+44 (0) 1202 891899
1.4	Emergency telephone number	:	+44 (0) 1202 891899

SECTION 2. Hazards Identification

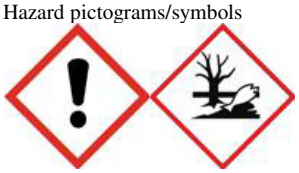
2.1 Classification of the substance or mixture

Classification according to Regulation 1272/2008 (CLP)

Skin corrosion/irritant - Category 2 H315 : Causes skin irritation.
Eye damage/irritant – Category 2 H319 : Causes serious eye irritation
Skin sensitisation - Category 1 H317 : May cause an allergic skin reaction.
Aquatic Chronic - Category 2 H411 : Toxic to aquatic life with long lasting effects.

2.2 Label Elements

Hazard pictograms/symbols



Signal Word: Warning
Hazard Statements:
H319: Causes serious eye irritation.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H411: Toxic to aquatic life with long lasting effects.
Precautionary Statements:

Prevention	:	Wear protective gloves Wear eye or face protection Avoid release to the environment
Response	:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Disposal	:	Disposal of contents/container to be specified in accordance with national regulations.

2.3 Other Hazards

Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annexe X111
Not Applicable
Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annexe X111
Not Applicable

SECTION 3. Composition/Information on Ingredients

Substance/Mixture : Mixture

Component	EINECS	CAS Number	Concentration %	Classification (CLP)	REACH REG
Epoxy Resin Bisphenol Type A (Mol..Wt.<700)	500-033-5	25068-38-6	<20	Skin Corr/Irrit. 2; H315 Eye Dam/Irrit. 2 ; H319 Skin Sens. 1 ; H317 Aquatic Chronic 2, H411	01-2119456619-26
Formaldehyde, polymer with (chloromethyl) oxirane and Phenol, MW<700	500-006-8	9003-36-5	<10	Skin Corr/Irrit. 2; H315 Skin Sens. 1 ; H317 Aquatic Chronic 2, H411	01-2119454392-40
Oxirane, mono{(C12-C14-alkyloxy) methyl} derivs.	271-846-8	68609-97-2	<5	Skin Corr/Irrit. 2; H315 Skin Sens. 1 ; H317	01-2119485289

4. First-aid measures

4.1 Description of first aid measures

Eye Contact	Rinse immediately with plenty of water also under the eyelids for at least 10 minutes. Remove contact lenses. Get medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 10 minutes. Wash off with soap and water. Immediately remove contaminated clothing and any extraneous chemical without delay.
Ingestion	Wash out mouth with water. If victim has swallowed material and is still conscious give small amounts of water to drink. Stop if person feels sick. Do not induce vomiting unless directed to do so by medical personnel.. Seek immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed.

Eye contact	Causes serious eye irritation
Inhalation	No known significant effects or critical hazards
Skin contact	Causes skin irritation. May cause an allergic skin reaction
Ingestion	Irritating to mouth, throat and stomach.

Over exposure signs/symptoms

Eye contact	Adverse symptoms may include the following: Pain or irritation Watering Redness
Inhalation	No known significant effects or critical hazards
Skin contact	Adverse symptoms may include the following: Irritation Redness
Ingestion	No specific data

4.3 Indication of any immediate medical attention and special treatment needed

No specific treatment

SECTION 5. Fire-fighting measures

5.1	Extinguishing media	
	Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.
	Unsuitable extinguishing media	None known
5.2	Special hazards arising from the substance	
	Hazards from the substance or mixture	Incomplete combustion may form carbon dioxide ,carbon monoxide and halogenated compounds.
5.3	Advice for fire-fighters	
	Special protective actions for fire fighters	Promptly isolate the scene by removing all persons from the vicinity of the fire.
	Special protective equipment for fire fighters	Fire fighters should wear appropriate protective equipment.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing, gloves and eye/face protection. Use self contained breathing apparatus and chemically protective clothing.

6.2	Environmental precautions	Prevent contamination of soil and water. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers.
6.3	Methods and material for containment and cleaning up	Transfer to a labelled, sealable container for product recovery or safe disposal. Treat residues as for small spillage

SECTION 7. Handling and storage

7.1	Precautions for safe handling	
	Protective measures	Wear appropriate personal protective equipment. Avoid contact with eyes, skin or clothing. Do not ingest. Keep containers closed when not in use.
	Advice on general occupational hygiene	Do not eat, drink or smoke when handling this product. Wash hands after handling.
7.2	Conditions for safe storage, including any incompatibilities	Keep containers tightly closed in a dry, cool and well ventilated areas Do not store in unlabelled containers.

SECTION 8. Exposure controls/personal protection

8.1	Control parameters	
	Occupational exposure limits	No exposure limit value known

8.2 Exposure controls

Provide readily accessible eye wash stations and safety showers. Provide natural or explosion proof ventilation adequate to ensure concentrations are kept below explosion limits.

Personal protective equipment

Hand protection	Chemically resistant, impervious gloves should be worn at all times when handling. Butyl rubber, Nitrile rubber, neoprene gloves, impervious gloves, latex or vinyl disposable gloves.
Eye/face protection	Protective eye glasses or goggles must be worn.
Skin and body protection	Standard issue work clothes. Long sleeve shirts, trousers or overalls must be worn.
Environmental exposure controls	Construct a dike to prevent spreading.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state/colour	Paste
Odour	Not available
Relative density	Not available
Flash Point	150˚C
Viscosity	Not available
Ph	Not available

SECTION 10. Stability and reactivity

10.1	Reactivity	Stable under normal conditions
10.2	Chemical stability	This product is stable
10.3	Possibility of hazardous reactions	No specific data

10.4	Conditions to avoid	No specific data
10.5	Incompatible materials	No specific data
10.6	Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced

SECTION 11. Toxicological information

11.1	Information on toxicological effects	
	Acute Toxicity	
	No data available on the product itself.	
	Components - Oral	
	Epoxy Resin Bisphenol Type A	No acutely toxic in rat and mouse studies, LD50>2000mg/kg
	Formaldehyde, polymer with (chloromethyl) oxirane and phenol,	No acutely toxic in rat and mouse studies, LD50>2000mg/kg
	Oxirane, mono{(C12-C14-alkyloxy) methyl} derivs.	LD50 >2.0grams (Female Rat) and LD50 = 26.8 grams (Male Rat)
	Components - Inhalation	
	Epoxy Resin Bisphenol Type A	Due to the low vapour pressure, meaning ful acute inhalation studies could not be conducted.
	Formaldehyde, polymer with (chloromethyl) oxirane and phenol,	No specific data
	Oxirane, mono{(C12-C14-alkyloxy) methyl} derivs.	No mortalities were observed in rats exposed for 7 hours to the saturated vapour (150mg/m^3)
	Components – Dermal	
	Epoxy Resin Bisphenol Type A	No acutely toxic in rat and mouse studies, LD50>2000mg/kg
	Formaldehyde, polymer with (chloromethyl) oxirane and phenol,	No specific data
	Oxirane, mono{(C12-C14-alkyloxy) methyl} derivs.	No specific data
	Potential acute health effects	
	Eye contact	Causes serious eye irritation.
	Inhalation	Irritating to mouth, throat and stomach.
	Ingestion	No known significant effects or critical hazards
	Over exposure signs/symptoms	
	Eye contact	Adverse symptoms may include the following: Pain or irritation Watering Redness
	Inhalation	No known significant effects or critical hazards
	Skin contact	Adverse symptoms may include the following: Irritation Redness
	Ingestion	No specific data
	Chronic toxicity or effects from long term exposures	
	Carcinogenicity	No known significant effects or critical hazards
	Reproductive toxicity	No known significant effects or critical hazards
	Germ cell mutagenicity	No specific data is available.

SECTION 12. Ecological information

12.1	Toxicity	
	Aquatic toxicity	No data is available on the products itself
	Epoxy Resin Bisphenol Type A	Acute LC50 1.30 mg/l Fish
	Formaldehyde, polymer with (chloromethyl) oxirane and phenol,	Acute LC50 2.54 mg/l Fish
	Oxirane, mono{(C12-C14-alkyloxy) methyl} derivs.	Acute LC50 1.80 mg/l Fish – Rainbow Trout Acute EC50 844 mg/l Aquatic Plants - Algae
12.2	Persistence and degradability	No data available
12.3	Bioaccumulative potential	No data available
12.4	Mobility in soil	No data is available

SECTION 13. Disposal considerations

13.1	Waste treatment methods	
	Product	Waste to be treated as controlled waste. Dispose to licensed waste disposal site. In accordance with local waste disposal authority.
	Packaging	Keep container labelled until cleaned and then remove or deface labels. Drain container thoroughly and rinse well with water. Treat rinsings as for product disposal. Empty packaging should be removed by a licensed waste contractor.

SECTION 14 Transport information

14.1 UN Number
14.2 UN Proper shipping name
14.3 Transport Hazard Class
14.4 Packaging Group

Land Transport ADR / ADN

UN Number	3082
UN Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. (LIQUID EPOXY RESIN, ALIPHATIC GLYCIDYL ETHER)
Transport Hazard Class	9
Packaging Group	111

Air Transport ICAO / IATA

UN Number	3082
UN Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. (LIQUID EPOXY RESIN, ALIPHATIC GLYCIDYL ETHER)
Transport Shipping Class	9
Packaging Group	111

Maritime Transport IMO **/ IMDG**

UN Number	3082
UN Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. (LIQUID EPOXY RESIN, ALIPHATIC GLYCIDYL ETHER)
Transport Shipping Class	9
Packaging Group	111

14.5 Environmental hazards
Environmentally hazardous and/or marine pollutant : YES

SECTION 15. Regulatory information

15.1 Safety, health and environment regulations/legislation specific for the substance or mixture
EU Regulation (EC) No. 1907/2006 (REACH) Annex X1V – List of substances to authorisation.
Substances of very high concern

Carcinogen	:	Not listed
Mutagen	:	Not listed
Toxic to reproduction	:	Not listed
PBT	:	Not listed
VPvB	:	Not listed

SECTION 16. Other Information

Hazard Statements

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H411	Toxic to aquatic life with long lasting effects

Full Text of Classiofications (CLP)

Skin Corrosion/Irritation Category 2, H315	Skin Corrosion/irritation – Category 2
Skin Sensitisation Category 1,H317	Skin Sensitisation - Category 1
Eye Damage/Irritation Category 2,H319	Serious Eye Damage/Eye Irritation – Category 2
Aquatic Chronic Category 2,H411	Aquatic Hazard (Long lasting) – Category 2

Date Issued	:	15.06.2015
Reference	:	EJS/A/07
Product Code	:	Epoxy Products Epoxy Joint Sealant (Resin- Pack A)
Intended Use	:	Expansion joint sealant

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

SECTION 1: Identification of the substance/mixture and of the company/undertaking.

1.1	Product identifier	:	Epoxy Products Epoxy Joint Sealant - Pack B
1.2	Relevant identified uses of the substance or mixture and uses advised against		
	Use of the substance/mixture	:	Epoxy Curing Agent
1.3	Details of the supplier of the safety data sheet	:	Epoxy Products Limited, Unit 7 Haviland Road, Ferndown Industrial Estate, Wimborne, Dorset. BH21 7RZ England Tel No. +44 (0) 1202 891899
	Email Address – Technical Information	:	sales@epoxyproducts.co.uk
	Telephone	:	+44 (0) 1202 891899
1.4	Emergency telephone number	:	+44 (0) 1202 891899

SECTION 2: Hazards Identification

2.1 Classification according to Regulation 1272/2008 (CLP)

Acute Tox. Dermal - Category 4	H312	Harmful in contact with skin
Acute Tox. Oral - Category 4	H302	Harmful if swallowed
Skin Corr. Category 1B	H314	Causes severe skin burns and eye damage
Eye Dam. Category 1	H318	Causes serious eye damage
Skin Sens. Category 1	H317	May cause an allergic skin reaction
Reproductive Tox. Category 2	H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child
Chronic Aquatic Tox.Category 1	H410	Very toxic to aquatic life with long lasting effects.

2.2 Label Elements

Hazard pictograms/symbols

Signal word : Danger

Hazard Statements:

H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes sever skin burns and eye damage
H317	May cause an allergic skin reaction
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/ eye protection/face protection
P305+P351+P338	IF IN EYES) Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTRE/doctor.
P501	Disposal of contents/container to be specified in accordance with national regulations

2.3 Other Hazards

Results of PBT and vPvB assessment – not applicable

SECTION 3. Composition/Information on Ingredients

Substance/Mixture : Mixture

Component	EINECS	CAS Number	Concentration %	Classification (CLP)	REACH REG
2-Piperazin-1-ylethylamine	205-411-0	140-31-8	40 - 60	Acute Tox. Dem 3 H311 Acute Tox. Cat 4: H302 Skin Corr. Cat 1B: H314 Skin Sens. Cat 1:H317 Aquatic Chronic Cat 3: H412	01-2119471486-30
Phenol, 4-nonyl- branched	284-325-5	84852-15-3	40 - 60	Repr. 2 H361fd Acute Tox. Oral Cat 4:H302 Skin Corr. 1B H314 Aquatic Chronic 1 H410	

Chemical Family: Cycloaliphatic Amine

SECTION 4: First-aid measures

4.1 Description of first aid measures

General advice — Seek medical advice. If breathing has stopped or is laboured, give assisted respirations. Supplemental oxygen maybe indicated. If the heart has stopped trained personnel should begin cardiopulmonary resuscitation immediately.

Eye Contact	Rinse immediately with plenty of water also under the eyelids for at least 20 minutes. Remove contact lenses.
Skin Contact	Wash off immediately with plenty of water for at least 20 minutes. Wash off with soap and water. Immediately remove contaminated clothing and any extraneous chemical without delay.
Ingestion	Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victims head to one side.
Inhalation	Remove to fresh air.

4.2 Most important symptoms and effects, both acute and delayed.

Symptoms	No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5. Fire-fighting measures

5.1	Extinguishing media	Alcohol resistant foam, carbon dioxide, dry chemical, dry sand or limestone powder
	Extinguishing media – Not suitable	No data available
5.2	Special hazards arising from the substance	Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated
5.3	Advice for fire-fighters	Avoid contact with skin. Use personal protective equipment. Wear self-contained breathing apparatus for fire fighting if necessary.

SECTION 6. Accidental release measures

6.1	Personal precautions, protective equipment	Wear suitable protective clothing, gloves and eye/face protection. Use self contained breathing
6.2	Environmental precautions	Prevent contamination of soil and water. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers.
6.3	Methods and material for containment and cleaning up	Transfer to a labelled, sealable container for product recovery or safe disposal. Treat residues as for small spillage

SECTION 7. Handling and storage

7.1	Precautions for safe handling	Do not use sodium nitrate or other nitrosating agents in formulations containing this product. Suspected cancer causing nitrosamines could be formed. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Avoid contact with eyes. Use personal protective equipment. When using, do not eat, drink or smoke.
7.2	Conditions for safe storage, including any incompatibilities	Do not store near acids. Keep away from alkalis. Keep containers tightly closed in a dry, cool and well ventilated place.

SECTION 8. Exposure controls/personal protection

8.1	Control parameters	If applicable, refer to the extended section of the MSDS (available upon request)
8.2	Exposure controls	Provide readily accessible eye wash stations and safety showers. Provide natural or explosion proof ventilation adequate to ensure concentrations are kept below explosion limits.
8.3	Personal protective equipment	
	Hand protection	Chemically resistant, impervious gloves should be worn at all times when handling. Butyl rubber, Nitrile rubber, neoprene gloves, impervious gloves, latex or vinyl disposable gloves.
	Eye/face protection	Protective eye glasses or goggles must be worn.
	Skin and body protection	Standard issue work clothes. Long sleeve shirts, trousers or overalls must be worn.
	Environmental exposure controls	Construct a dike to prevent spreading.
	Special instructions for protection and	Discard contaminated clothing. Provide accessible eye wash stations and safety showers. Wash hands at the end of each workshift and before eating, drinking, smoking or using the toilet.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state/colour	Liquid, light yellow
Odour	Fishy
Flash Point	>200˚C
Autoignition temperature	No data available
Self inflammability	Product is not self-igniting
Danger of explosion	Product is not explosive
pH	Alkaline

SECTION 10. Stability and reactivity

10.1	Reactivity	Refer to possibility of hazardous reactions and/or incompatible materials section
10.2	Chemical stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available
10.4	Conditions to avoid	No data available
10.5	Incompatible materials	Sodium Hypochlorite Organic and mineral acids Product slowly corrodes copper, aluminium, zinc and galvanised surfaces.

10.6 Hazardous decomposition products	Nitric acid Ammonia Nitrogen oxides Carbon dioxide Aldehydes Flammable hydrocarbon fragments Organic acid vapours

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Acute Toxicity	
Acute Oral Toxicity	LD50: 1,620 mg/kg Species: Rat
Acute Inhalation Toxicity -	No data available on the product itself.
Acute Dermal Toxicity	No data available on the product itself.
Acute Dermal Toxicity	LD50: 1,000 mg/kg Species: Rabbit
Skin corrosion/irritation	Non irritant to the skin of a rabbit
Serious eye damage/ eye irritation	Non irritant to the eyes of a rabbit
Respiratory or skin sensitisation	Sensitisation of susceptible persons by skin contact.
Chronic toxicity or effects from long term exposures	
Carcinogenicity	No data is available
Reproductive toxicity	No data is available on the product itself
Germ cell mutagenicity	No data is available on the product itself.

SECTION 12. Ecological information

12.1 Toxicity

Aquatic toxicity	No data is available on the products itself
Toxicity to fish – Components	
Nonyl Phenol	LC50 (96 h) : 0.128 mg/l Species: Fish Fathead minnow
Toxicity to daphnia - Components	
Nonyl Phenol	EC50 (48 h) : 0.084 mg/l Species: Daphnia Magna

12.2 Persistence and degradability	No data available
12.3 Bioaccumulative potential	No data available
Bioaccumulative – Components	
Nonyl Phenol	Moderate bioaccumulation potential
12.4 Mobility in soil	No data is available
12.5 Results of PBT and vPvB assessment	Both not applicable

SECTION 13. Disposal considerations

Waste treatment methods	Waste to be treated as controlled waste. Dispose to licensed waste disposal site. In accordance with local waste disposal authority.
Contaminated Packaging	Keep container labelled until cleaned and then remove or deface labels. Empty packaging should be removed by a licensed waste contractor.

SECTION 14. Transport Information

14.1 UN Number
14.2 UN Proper shipping name
14.3 Transport Hazard Class
14.4 Packaging Group

Land Transport ADR / ADN

UN Number	2735
UN Proper Shipping Name	AMINES, LIQUID, CORROSIVE N.O.S (Nonyl Phenol, Amino ethyl) piperazine, 1-(2-,(AEP))
Transport Hazard Class	8
Packaging Group	11
Marine Pollutant	Yes

Air Transport ICAO / IATA

UN Number	2735
UN Proper Shipping Name	AMINES, LIQUID, CORROSIVE N.O.S (Nonyl Phenol, Amino ethyl) piperazine, 1-(2-,(AEP))
Transport Shipping Class	8
Packaging Group	11
Marine Pollutant	Yes

Maritime Transport IMDG

UN Number	2735
UN Proper Shipping Name	AMINES, LIQUID, CORROSIVE N.O.S (Nonyl Phenol, Amino ethyl) piperazine, 1-(2-,(AEP))
Transport Shipping Class	8
Packaging Group	11
Marine Pollutant	Yes

SECTION 15. Regulatory information

15.1 Safety, health and environment regulations/legislation specific for the substance or mixture

Country	:	EU
Regulatory List	:	EINECS
Notofication	:	Included on EINECS inventory

SECTION 16. Other Information

Hazard Statements

H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Date Issued	:	15.06.2015
Reference	:	EJS/B/07
Product Code	:	Epoxy Products Epoxy Joint Sealant (Hardener - Pack B)
Intended Use	:	Expansion joint sealant

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.