MATERIAL SAFETY DATA SHEET

Pointfix - A two-part epoxy jointing compound for fast jointing of sandstone and concrete paving. Tub contains two packs (Pack A & Pack B) of resin/hardener impregnated sand, which when mixed sets to form solid matter.

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

1.1	Product identifier	:	Pointfix – Pack A (Resin)
1.2	Relevant identified uses of the substance or mixture and uses advised against		
	Use of the substance/mixture	:	Epoxy resin jointing sand used for pointing paving
1.3	Details of the supplier of the safety data sheet	:	Pave Fix Ltd, 10 - 12 Stag Business Park, Ringwood, BH24 3AS
	Email Address – Technical Information	:	info@pavefix.co.uk
	Telephone	:	+44 (0) 1245 478500
1.4	Emergency telephone number	:	+44 (0) 1245 478500

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

Component	EINECS	CAS Number	Concentration %	Classification (CLP)	REACH REG
Epoxy Resin Bisphenol Type A (Mol..Wt.<700)	500-033-5	25068-38-6	<2	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	<2	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	<1	Skin Corr/Irrit. 2; H315 Skin Sens. 1 ; H317	01-2119485289

SECTION 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.

Potential acute health effects

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

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 upfor small spillage	Transfer to a labelled, sealable container for product recovery or safe disposal. Treat residues as

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	Wet sand
Odour	Not available
Relative density	Not available
Flash Point	150˚C
Viscosity	-
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
Packaging	site. Keep container labelled until cleaned and then remove or deface labels.

SECTION 14 Transport information

14.1 UN Number	3082
14.2 UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID
14.3 Transport Hazard Class	N.O.S. (LIQUID EPOXY RESIN, ALIPHATIC GLYCIDYL ETHER)
14.4 Packaging Group	9
Land Transport ADR / ADN	111
UN Number	
UN Proper Shipping Name	
Transport Hazard Class	
Packaging Group	

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	:	30.06.2021
Reference	:	PF/A/01
Product Code	:	Pave Fix - Pack A)
Intended Use	:	Epoxy resin jointing sand used for pointing paving

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.

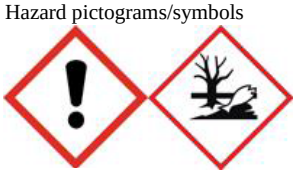
MATERIAL SAFETY DATA SHEET
POINTFIX - PACK B

1.1	Product identifier	:	Pointfix – Pack B (Hardener)
1.2	Relevant identified uses of the substance or mixture and uses advised against		
	Use of the substance/mixture	:	Epoxy resin jointing
1.3	Details of the supplier of the safety data sheet	:	Pave Fix Ltd, 10 - 12 Stag Business Park, Ringwood, BH24 3AS
	Email Address – Technical Information	:	info@pavefix.co.uk
	Telephone	:	+44 (0) 1245 478500
1.4	Emergency telephone number	:	+44 (0) 1245 478500

SECTION 2: Hazards Identification

2.4 Classification according to Regulation 1272/2008 (CLP)
Acute toxicity - Oral Category 4 H302 : Harmful if swallowed.
Skin corrosion - Category 2 H315 : Causes skin irritation.
Serious eye damage - Category 1 H318 : Causes serious eye damage.
Skin sensitisation - Category 1 H317 : May cause an allergic skin reaction.
Chronic aquatic toxicity - Category 3 H412 : Harmful to aquatic life with long lasting effects.

2.5 Label Elements
Hazard pictograms/symbols



Signal Word: Warning

Hazard Statements:
H302: Harmful if swallowed.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H412: Harmful to aquatic life with long lasting effects.
H318: Causes serious eye damage.

Precautionary Statements:

Prevention	:	P272: Contaminated work clothing should not be allowed out of the workplace. P280: Wear protective gloves/protective clothing/eye protection/face protection.
Response	:	P303+P361+P353 : IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. 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.
Disposal	:	P501: Disposal of contents/container to be specified in accordance with national regulations.

2.6 Other Hazards
Components of the product may effect the nervous system
Mild skin irritant
Risk of serious damage to eyes
Harmful if swallowed

SECTION 3. Composition/Information on Ingredients

Substance/Mixture : Mixture

Component	EINECS	CAS Number	Concentration %	Classification (CLP)	REACH REG
Benzyl Alcohol	202-859-9	100-51-6	<1	Acute Tox. Inha 4 ; H332 Acute Tox. Oral 4 ; H302	01-2119492630-38
Methyleneoxide, polymer with Benzenemine, hydrogenated	603-894-6	135108-88-2	<2	Acute Tox. Oral 4 ; H302 Skin Corr/Irrit 1C ; H314 Skin Sens. 1 ;H317 STOT RE Oral 2 ; H373a Aquatic Chronic 3 ; H412	

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. If rapid recovery does not occur, obtain medical attention.

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 firefighting 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 upfor small spillage	Transfer to a labelled, sealable container for product recovery or safe disposal. Treat residues as

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 work shift 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	Wet sand
Odour	Ammoniacal
Relative density	2.00 g/m^3
Boiling point	>222˚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	Amines Incompatible with bases Reducing agents Reactive materials, eg sodium calcium, zinc etc. Materials with hydroxyl compounds Nitrosamines Nitrous acid and high nitrous oxide concentrations Mineral acids Sodium Hypochlorite Product slowly corrodes copper, aluminium, zinc and galvanised surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an Explosion Oxidising agents.

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	
Likely routes of exposure	
Effects on Eye	Causes eye burns
Effects on Skin	May cause central nervous system effects such as headache, nausea, dizziness, confusion, breathing difficulties. Mild skin irritation. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Inhalation Effects	May cause central nervous system effects such as headache, nausea, dizziness, confusion, breathing difficulties. Symptoms of overexposure can result in respiratory failure.
Ingestion Effects	Harmful if swallowed.
Acute Toxicity	
Acute Oral Toxicity	LD50: 1,200 mg/kg Species: Rat
Acute Inhalation Toxicity	No data available on the product itself.
Inhalation – Components	
Benzyl Alcohol	LC50 (4 h): > 4.178 mg/l Species: Rat - (OECD Test Guideline 403)
Acute Dermal Toxicity	No data available on the product itself.
Acute Dermal Toxicity – Components	
Benzyl Alcohol	LD50: 2,000 mg/kg Species: Rabbit
Methyleneoxide, polymer with Benzenemine, hydrogenated	LD50: 2,000 mg/kg Species: Rabbit
Skin corrosion/irritation	Mild irritant to the skin of a rabbit
Serious eye damage/ eye irritation	Risk of serious damage to eyes.
Sensitisation	May cause 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.
Specific target organ systemic toxicity (single exposure)	Eyes. Central nervous system. Neurological disorders. Eye disease Skin disorders and allergies.
Specific target organ systemic toxicity (repeated exposure)	This product contains no listed carcinogens according to Directive 67/548/EEC, IARC, ACGIH and/or NTP in concentrations of 0.12 percent or greater..
Aspiration hazard	No data available

SECTION 12. Ecological information

12.1 Toxicity	
Aquatic toxicity	No data is available on the products itself
Toxicity to fish – Components	
Benzyl Alcohol	LC50 (96 h) : 10mg/l Species: Bluegill Sunfish
Toxicity to algae – Components	
Benzyl Alcohol	IC50 (72 h) : 700 mg/l Species: Algae
12.2 Persistence and degradability	No data available
12.3 Bioaccumulative potential	No data available on the product itself
Bioaccumulative – Components	
Benzyl Alcohol	Low bioaccumulation potential
Methyleneoxide, polymer with Benzenemine, hydrogenated	Does not bioaccumulate
12.4 Mobility in soil	No data is available

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. 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

Road Transport - ADR	Not dangerous goods
Air Transport - IATA	Not dangerous goods
Maritime Transport - IMDG	Not dangerous goods

SECTION 15. Regulatory information

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

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

SECTION 16. Other Information

Hazard Statements

H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H412	Harmful to aquatic life with long lasting effects

Indication of Method

Acute toxicity Category 4	Harmful if swallowed.	Calculation method
Skin corrosion Category 2	Causes skin irritation.	Calculation method
Serious Eye Damage Category 1	Causes serious eye damage.	Calculation method
Skin sensitisation Category 1	May cause an allergic skin reaction.	Calculation method
Chronic aquatic toxicity Category 3	Harmful to aquatic life with long lasting effects.	Calculation method

Date Issued	:	30.06.21
Reference	:	PF/B/01
Product Code	:	Pave Fix - Pack B (Hardener)
Intended Use	:	Epoxy resin jointing sand used for pointing paving

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.