

**Safety Data Sheet
according to 1907/2006/EC**

Ref: HSD/E36

Issue No: 11

Date of Issue: 1st October, 2012

1. Product and Company Identification

Product Name: EPICON MORTAR

Intended Uses: Three component epoxide resin high strength repair mortar.

Manufacturer: UNIVERSAL SEALANTS (UK) LIMITED
Kingston House, 3 Walton Road, Pattinson North,
Washington, Tyne & Wear. NE38 8QA, United Kingdom

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2. Hazard Identification

Possible Hazards:

Base:

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.

Hardener:

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

R34: Causes burns.

R43: May cause sensitisation by skin contact.

R62: Possible risk of impaired fertility.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Aggregate:

Not classified as hazardous. The low level of crystalline silica is unlikely to present a hazard during normal conditions of use.

3. Composition / Information on Ingredients

Name	CAS No	EINECS	Conc. (w/w)	Classification	R. Phrases
BASE COMPONENT					
Bisphenol A/F epoxy Resin	40216-08-8	609-794-9	75-90%	Xi,N	36/38,43,51/53
Alkylglycidylether	68081-84-5	268-358-2	5-15%	Xi,N	36/38,43,51/53
Titanium Dioxide	1317-80-2	215-282-2	2-10%	None	None
Ferric Oxide					
Pigments	1332-37-2	215-570-6	<5%	None	None
HARDENER COMPONENT					
Mixed Polyamines	N/A	N/A	100%	C,N	20/21/22,34,37,43,62,51/53
AGGREGATE COMPONENT					
Quartz Grits	N/A	N/A	100%	None	None
Crystalline Silica	N/A	N/A	Trace	Xn	20,48

4. First Aid Measures

Inhalation: In case of drowsiness or sickness remove to fresh air, keep patient warm and at rest. If unconscious, turn to the recovery position. Seek medical assistance.

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Skin Contact: Promptly remove contaminated clothing and wash the affected area with plenty of soap and water to ensure all traces of product are removed, then rinse thoroughly. Any contaminated clothing must be thoroughly cleaned before re-using. Seek medical advice if irritation persists.

Eye Contact: Flush with copious amounts of clean water for at least 15 minutes, with the eye lids held open. Seek medical attention.

Ingestion: Wash out mouth with water. Keep patient at rest and obtain medical attention. DO NOT INDUCE VOMITING.

5. Fire Fighting Measures

Suitable Extinguisher Media: Water spray, alcohol-resistant foam, dry powder, carbon dioxide or sand.

Unsuitable Extinguishing Media: Water jet.

Exposure Hazards: May give off toxic fumes if heated or involved in a fire, including CO.

Special Protective Equipment: In the event of fire wear self-contained breathing apparatus.

6. Accidental Release Measures

Personal Precautions: Wear protective equipment as specified in Section 8. Do not eat, drink or smoke. Avoid contact with skin and eyes. Eliminate all ignition sources.

Environmental Precautions: Keep people and animals away. Prevent entry into drains, sewers and watercourses. If spillage enters drains leading to sewerage works inform the local water company. If spillage enters rivers or watercourses inform the Environment Agency.

Spillages: Cordon off area. Absorb/contain spillage using inert absorbent granules, sand or earth. Transfer collected material to heavy-duty plastic/steel drums and keep in a well ventilated place for subsequent safe disposal. See Section 13.

7. Handling and Storage

Handling: No specific precautions required when handling unopened containers; follow any relevant manual handling guidance. Refer to Sections 6 and 8 if exposure to product is possible. Wash thoroughly with soap and water before eating, drinking or smoking, and after work

Storage: Store in original containers in a well ventilated area away from heat, ignition sources or open flame. Do not store near acids.

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8. Exposure Controls / Personal Protection

Occupational Exposure Standards:	Crystalline Silica - 8 hour TWA 0.3mg/m ³ (respirable) WEL. This exposure limit must not be exceeded at any time during the exposure period. General Dust - 8 hour TWA 10mg/m ³ (total inhalable), 4mg/m ³ (respirable) WEL. Titanium Dioxide and Ferric Oxide Pigments - 8 hour TWA 10mg/m ³ (total inhalable), 4mg/m ³ (respirable) WEL. While the base component contains titanium dioxide and ferric oxide pigments which have Workplace Exposure Limits assigned to them, these materials are not present in powder form and therefore do not present an inhalation hazard.
Engineering Control Measures:	Refer to any applicable COSHH assessments. Engineering controls should be used where practicable in preference to personal protection and may include physical containment and good ventilation.
Respiratory Protection:	An approved respirator and filter medium for dusts should be used if engineering controls are unlikely to control exposure below the relevant exposure limits when handling the aggregate component. All items must conform to EN149 and should be suitable for the levels of contamination present in the workplace.
Hand Protection:	Wear Neoprene, Nitrile, PVC or Natural Rubber gloves or gauntlets. These must be manufactured to EN374. The material breakthrough time should be stated by the glove manufacturer, and must be observed at all times.
Eye Protection:	If contact is likely chemical resistant goggles should be worn.
Body Protection:	Wear suitable impervious, chemical resistant overalls.
Foot Protection:	Wear chemical resistant safety footwear.
Hygiene Measures:	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Appearance:	Base: Grey liquid Hardener: Clear liquid. Aggregate: Sand coloured aggregate	Boiling Point:	>200 °C
Odour:	Base: Mild Hardener: Amine type Aggregate: None	Vapour Pressure @ 20°C:	N/D
pH:	N/D	Evaporation Rate (Butyl Acetate = 1):	N/A

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Flash Point:	>100°C	Flammable Limits in Air:	Upper:	N/D
			Lower:	N/D
Solubility:	Insoluble in water	Autoignition Temperature:	(Hardener)	510°C
Flammability:	Not Flammable			
Specific Gravity:	1.9 (Mixed)			

10. <u>Stability and Reactivity</u>
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Stability: Stable under normal conditions (see Section 7).

Materials to Avoid: Base: Amines and catalysts
Hardener: Mineral and organic acids, oxidising agents, reactive metals and sodium or calcium hypochlorite. Slowly corrodes copper, aluminium, zinc and galvanised surfaces. Reacts violently with peroxides possibly creating an explosion. Reaction with acids is accompanied by large heat release and may be sufficient to cause vigorous boiling, creating a hazard due to splashing or splattering of hot material.

Hazardous Decomposition Products: Ammonia and aldehydes. Oxides of carbon and nitrogen. Nitrogen oxide can react with water vapours to form corrosive nitric acid. Other oxides of nitrogen emitted on decomposition are highly toxic.

11. <u>Toxicological Information</u>

There is no data available on the product itself.
The following data applies to the Epoxy component of the Base material.

Acute Toxicity:

Eye Contact: Irritant.

Skin Contact: Irritant for skin and mucous membranes. May cause sensitisation.

Ingestion: May result in irritation to the gastro intestinal tract.

The following data applies to the Amine component of the Hardener material.

Acute Toxicity:

Eye Contact: Strong caustic effect.

Skin Contact: Caustic effect on skin and mucous membranes. May cause sensitisation.

Ingestion: Swallowing will lead to a strong caustic effect on the mouth and throat, and to the danger of perforation of the esophagus and stomach.

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Additional Toxicological Information: This material shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
Harmful, corrosive, irritant.

No specific data is available on the materials within the aggregate component.

12. Ecological Information

There is no data available on the product itself.
The following data applies to un-mixed material only, as once the base and hardener are combined the harmful constituents will react to form an inert product.
Hazardous for water. Do not allow the product to reach ground water, water bodies or sewage systems. Poisonous for fish and plankton in water bodies. Toxic to aquatic organisms, Must not reach sewage water or drainage ditch undiluted or unneutralised. Danger to drinking water if even small quantities leak into soil.

13. Disposal Considerations

Un-reacted materials: Dispose of used containers and un-reacted product as hazardous waste, in accordance with all applicable local and national regulations, and in compliance with the Environmental Protection (Duty of Care) Regulations 1991.

14. Transport Information

Base:

UN Number:	3082	Packaging Group:	III
ROAD		AIR	
ADR Class:	Limited quantity	Air Transport Number:	9
ADR Hazard No:	in compliance with chapter 3.4 LQ7 less than 5 litres per inner package	Packaging Instruction:	964

SEA

IMDG Class:	9
EMS:	F-A, S-F
Marine Pollutant:	P
Proper Shipping Name:	Environmentally hazardous substance, liquid, NO.S. (contains epoxy resin)

Hardener:

UN Number:	2735	Packaging Group:	III
ROAD		AIR	
ADR Class:	Limited quantity	Air Transport Number:	8
ADR Hazard No:	in compliance with chapter 3.4 LQ19 less than 3 litre per inner package	Packaging Instruction:	856 (Cargo only) 852

SEA

IMDG Class:	8
EMS:	F-A, S-B
Marine Pollutant:	No
Proper Shipping Name:	Amines, liquid, corrosive, N.O.S. (Contains mixed polyamines).

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15. Regulatory Information

EU Classification and Labelling Particulars:

Base:

Designated Name: EPICON MORTAR - BASE

Classification: Irritant & Dangerous for the Environment.

Indication(s) of Danger: Xi & N

Contains: Epoxy constituents- see information supplied by the manufacturer.

Risk and Safety 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.
S25:	Avoid contact with eyes.
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. Refer to special instructions/safety data sheet.

Hardener:

Designated Name: EPICON MORTAR - HARDENER

Classification: Corrosive & Dangerous for the Environment.

Indication(s) of Danger: C,N

Contains: Mixed polyamines.

Risk and Safety Phrases:

R20/21/22:	Harmful by inhalation, in contact with skin and if swallowed.
R34:	Causes burns.
R43:	May cause sensitisation by skin contact.
R62:	Possible risk of impaired fertility.
R51/53:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S23:	Do not breathe fumes/vapour.
S25:	Avoid contact with the eyes.
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.

Aggregate:

Designated Name: EPICON MORTAR - AGGREGATE

Classification: Not classified as hazardous

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Indication(s) of Danger: N/A

UK Guidance Publications: EH40; Occupational Exposure Limits, HSE. Revised annually.
EH26; Occupational Skin Diseases - Health and Safety Precautions, HSE.
EH44; Dust in the Workplace: General Principles of Protection, HSE.
MDHS 14; Methods for the Determination of Respirable and Total Dusts, HSE.
COSHH Essentials, HSE

UK Legislation: Health and Safety at Work, etc Act, 1974, and relevant Statutory Provisions.
Control of Substances Hazardous to Health Regulations, 1999.
The Manual Handling Operations Regulations, 1992.
The Personal Protective Equipment at Work Regulations, 1992.
Chemicals (Hazard Information and Packaging for Supply) Regulations, 2002 - CHIP 3.

16. Other Information

Full Text of R-Phrases Referred to above:

R20:	Harmful by inhalation.
R20/21/22:	Harmful by inhalation, in contact with skin and if swallowed.
R34:	Causes burns.
R36/38:	Irritating to eyes and skin.
R37:	Irritating to the respiratory system.
R43:	May cause sensitisation by skin contact.
R48:	Danger of serious damage to health by prolonged exposure.
R51/53:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R62:	Possible risk of impaired fertility.

Training Advice: Do not use unless trained to do so. Refer to the Technical Data Sheet for the product.

Recommended Uses: For professional use only. This product is designed for use as a general purpose epoxy resin repair mortar.

Further Information: This Safety Data Sheet was compiled in accordance with EU Directives 67/548/EEC and 1999/45/EC.
The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark.
ESES (The European Chemical Substances Information System), provided by the European Commission Joint Research Centre in Ispra, Italy.
Reference was also made to the above legislation and guidance publications.

MSDS First Issued: 3rd November, 1989.

MSDS Revised: 1st October, 2012.

Changes in this Version: Sections 2,3,15 & 16 revised to reflect change in raw material classification.

Prepared By: F. Stratton

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