

UNIVERSAL SEALANTS (UK) LIMITED

NUFINS DIVISION

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1. Product Identification

Trade Name: CONFIL MORTAR / PUTTY / GROUT / CONCRETE / BEDDING MORTAR

Description: Unsaturated polyester resin based mortar / putty / grout / anchor compound / concrete / bedding mortar.

2. Composition / Information on Ingredients

Ingredient	CAS Number	Conc. (w/w)	Classification	R. Phrases
BASE COMPONENT				
Styrene	100-42-5	35-50%	F,Xn	10,20,36/38
Phthalic Anhydride	85-44-9	<0.2%	Sensitising	42/43
Amorphous Silica	7631-86-9	0-2%	None	None
AGGREGATE COMPONENT				
Magnesium Silicate	14807-96-6	0-25%	None	None
Crystalline Silica		Trace	Xn	20,48
Dibenzoyl Peroxide	94-36-0	0.5-5%	O,Xi	36,43,7
Amorphous Silica	7631-86-9	0-5%	None	None

3. Hazard Identification

Base resin is flammable, harmful by inhalation and irritating to eyes and skin. Strongly exothermic polymerisation may be initiated by heat, peroxides or other free radical generators. Aggregate may cause fires, is irritating to eyes and may cause sensitisation by skin contact.

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.

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: Alcohol-resistant foam, dry powder, carbon dioxide or sand.

Unsuitable Extinguishing Media: Water, halons.

Exposure Hazards: May give off toxic fumes if heated or involved in a fire, including carbon monoxide, carbon dioxide, benzoic acid, benzene, diphenyl 2-ethylhexyl phosphate and phenyl benzoate.

Special Protective Equipment: Full face, positive pressure, self-contained breathing apparatus and full protective clothing.

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. Avoid breathing vapours and dust. Eliminate all ignition sources.

Environmental Precautions: Eliminate all ignition sources. 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. Take precautionary measures against static discharges. 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, sunlight, ignition sources or open flame. Keep away from reducing agents (eg amines), acids, alkalis and heavy metal compounds (eg accelerators, driers, metal soaps).

8. Exposure Controls / Personal Protection

Occupational Exposure Standards: Styrene - 8 hour TWA 100ppm, 15 min STEL 250ppm MEL.
Crystalline Silica - 8 hour TWA 0.3mg/m³ (respirable) MEL.
These exposure limits must not be exceeded at any time during the exposure period.
Dibenzyl Peroxide - 8 hour TWA 5mg/m³ OES
Talc - 8 hour TWA 1mg/m³ (respirable) OES
Amorphous Silica - 8 hour TWA 6mg/m³ (total inhalable), 2.4mg/m³ (respirable) OES
General Dust - 8 hour TWA 10mg/m³ (total inhalable), 4mg/m³ (respirable) OES

While the base component may contain amorphous silica (depending on grade), which has an Occupational Exposure Standard assigned to it, this material is not present in powder form and therefore does 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:** Where an aggregate component is included with the product an approved respirator and filter medium for dusts should be used if engineering controls are unlikely to control exposure below the relevant exposure standards. If levels of styrene exceed the above limits use an approved respirator fitted with an appropriate gas cartridge (organic substance). All items must conform to EN149 and should be suitable for the levels of contamination present in the workplace.
- Hand Protection:** Wear Neoprene, Nitrile or PVC 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 splashing of the product is likely chemical resistant goggles conforming to BS 2092 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 Aggregate	Purple/ amber liquid Sand coloured fine aggregate	Boiling Point:	Base Hardener	>=145°C N/A
Odour:	Aromatic		Vapour Pressure @ 20°C:	Base Hardener	6.52mb N/A
pH:	N/A		Evaporation Rate (Butyl Acetate = 1):		N/D
Flash Point:	31°C		Flammable Limits in Air:	Upper: Lower:	6.1% 1.1%
Solubility:	Immiscible in water		Autoignition Temperature:		490°C
Flammability:	Flammable				
Specific Gravity:	2.05 (Mixed) - Confil Mortar 1.93 (Mixed) - Confil Grouts		1.73 (Mixed) - Confil Putty 2.1 (Mixed) - Confil Concrete		

2.1 (Mixed) - Confil Bedding Mortar

10. **Stability and Reactivity**

Stability: Base: Stable under normal conditions (see Section 7).
Aggregate: A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by direct contact with incompatible substances or by thermal decomposition at and above 60°C.

Materials to Avoid: Base: Strong oxidising agents.
Aggregate: Acids, alkali, heavy metals and reducing agents. Avoid contact with rust. Do not mix with peroxide accelerators. Do not mix with reducing agents.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, benzoic acid, benzene, diphenyl 2-ethylhexyl phosphate and phenyl benzoate.

11. **Toxicological Information**

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

Acute Toxicity:

Inhalation: Harmful.
Eye Contact: Irritating to the eyes.
Skin Contact: Irritating to the skin.
Ingestion: May result in irritation to the gastro intestinal tract.

The following data applies to the Benzoyl peroxide component of the Hardener material.

Acute Toxicity:

Eye Contact: Moderately irritating.
Skin Contact: Non-irritating.
Ingestion: Oral LD50 (rat) >5000 mg/kg
Genotoxicity: Ames test: not mutagenic.

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.

Both styrene and dibenzoyl peroxide are readily biodegradable.

Dibenzoyl peroxide (78%)

Ecotoxicity: Fish: Acute toxicity, 96h-LC50 = 2.0 mg/ltr (Poecilia reticulata)

Bacteria: Activated sludge respiration inhibition test EC50 = 35 mg/ltr.
Hazardous for water. Do not allow the product to reach ground water, water bodies or sewage systems. Must not reach sewage water or drainage ditch undiluted or unneutralised.

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

UN Number:	1866	Packaging Group:	III
ROAD		AIR	
ADR Class:	3	Air Transport Number:	3
ADR Hazard Number:	30	Packaging Instruction:	310
SEA			
IMDG Class:	3.3		
IMDG Page Number:	3379		
Marine Pollutant:	P		
Proper Shipping Name:		Resin solution, flammable.	

15. Regulatory Information

EU Classification and Labelling Particulars:

Base:

Designated Name: CONFIL MORTAR / PUTTY / GROUT / CONCRETE / BEDDING MORTAR

Classification: Flammable & Harmful

Indication(s) of Danger: F & Xn

Risk and Safety Phrases:

R10:	Flammable.
R20:	Harmful by inhalation.
R36/38:	Irritating to eyes and skin.
S23:	Do not breathe vapours.
S36/37/39:	Wear suitable protective clothing, gloves and eye/face protection.

Hardener:

Designated Name: CONFIL MORTAR / PUTTY / GROUT / CONCRETE / BEDDING MORTAR

Classification: Not classified as hazardous

Indication(s) of Danger: None

Risk and Safety Phrases:

R48:	Danger of serious damage to health by prolonged exposure.
S36/37/39:	Wear suitable protective clothing, gloves and eye/face protection.

S38: In case of insufficient ventilation wear suitable respiratory equipment.

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

R7: May cause fire.
R10: Flammable.
R20: Harmful by inhalation.
R36/38: Irritating to eyes and skin.
R42/43: May cause sensitisation by inhalation and skin contact.
R48: Danger of serious damage to health by prolonged exposure.

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. These products are designed for use for repairing concrete structures and for anchoring bolts and other fixings.

Further Information: This Safety Data Sheet was compiled in accordance with EU Directives 67/548/EEC and 1999/45/EC. Reference was also made to the above legislation and guidance publications.

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Changes in this Version: All sections revised to comply with CHIP 3 provisions.

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Disclaimer: The information in this document is offered for general health and safety guidance only and is not intended to be a definitive source of advice, nor does it constitute a risk assessment, for which the user is responsible. All information provided in this document is believed to be accurate to the best of our knowledge. Users of the products referred to should observe the recommendations, conditions and instructions relating to any relevant product

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label, usage information, consent or approval in force at the time. Further and more specific information may be obtained from the supplier on request.