

Ref: HSD/TS2
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UNIVERSAL SEALANTS (UK) LIMITED

NUFINS DIVISION

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1. Product Identification

Trade Name: TIE HOLE SEALER

Description: Pre-blended polymer modified cementitious plugging compound.

2. Composition / Information on Ingredients

Ingredient	CAS Number	Conc. (w/w)	Classification	R. Phrases
AGGREGATE COMPONENT				
Cement	65997-15-1	60-70%	Xi	See Section 16 for recommended label
Crystalline Silica		Trace	Xn	20, 48

GAUGING LIQUID (Acrylic)
Acrylic Emulsion

Not classified as hazardous

3. Hazard Identification

The dry aggregate and also the product when mixed with water are irritant. May cause irritation, dermatitis or burns. There is a risk of serious damage to the eyes.
The gauging liquid is not classified as hazardous, but it does contain trace quantities of residual monomers.

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: The product is not combustible, however if it is involved in a fire, use water spray, 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.

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 eyes. Avoid inhaling 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. Wash thoroughly with soap and water before eating, drinking or smoking, and after work. Transferring material to mixers may generate a dust hazard.
The gauging liquid is a low viscosity emulsion and may present a splashing hazard during transfer to the mixer.

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

8. Exposure Controls / Personal Protection

Occupational Exposure Standards: Portland Cement / General Dust:
8 Hour TWA 10mg/m³ (total inhalable) 4mg/m³ (respirable) OES
Crystalline Silica: 8 Hour TWA 0.3mg/m³ (respirable)
MEL
The gauging liquid contains trace quantities of residual acrylic monomers however it is extremely unlikely that the Occupational Exposure Limits for these materials would be reached under foreseeable conditions of use.

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:	Approved respirator and filter medium for dusts if engineering controls are unlikely to control exposure below the relevant exposure standards. All items must conform to EN149 and should be suitable for the levels of dust present in the workplace.
Hand Protection:	Wear Nitrile, PVC or Natural Rubber gloves or gauntlets. These must be manufactured to EN374 and have a breakthrough time of >480 minutes.
Eye Protection:	Dust tight goggles conforming to BS 2092.
Body Protection:	Wear suitable impervious, dust 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: Aggregate: Grey Gauging Liquid: Milky White Liquid	Boiling Point: (Gauging Liquid)	100°C
Odour: Mild, sweet	Vapour Pressure @ 20°C:	As Water
pH: 13.5 (Mixed)	Evaporation Rate (Butyl Acetate = 1):	As Water
Flash Point: N/A	Flammable Limits in Air:	Upper: N/A Lower: N/A
Solubility: Fully miscible in water	Autoignition Temperature:	N/A
Flammability: Not Flammable		
Specific Gravity: 2.0 (Mixed)		

10. Stability and Reactivity

Stability:	Stable under normal conditions (see Section 7).
Materials to Avoid:	Acids, oxidising agents.
Hazardous Decomposition Products:	Oxides of carbon. Hazardous gases when in contact with inorganic acids, ie hydrogen chloride with hydrochloric acid, sulphur dioxide with sulphuric acid, etc.

11. Toxicological Information

There is no data available on the product itself. The Gauging Liquid is not classified as hazardous to health provided it is correctly used in accordance with the given recommendations.

The following data applies to the cement component of the material.

Acute Toxicity:

Inhalation:	Cement powder may cause inflammation of the mucous membranes.
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Eye Contact:	Cement is a severe eye irritant. Mild exposures can cause soreness. Gross, or untreated mild, exposures can lead to chemical burning and ulceration of the eye.
Skin Contact:	Cement powder or any cement/water mixture may cause irritant contact dermatitis, allergic (chromium) dermatitis, and/or burns.
Ingestion:	The swallowing of small amounts of cement or any cement/water mixtures are unlikely to cause any significant reaction. Larger doses may result in irritation to the gastro intestinal tract.
Chronic Toxicity:	High repeated exposures to cement dust in excess of the OES have been linked with rhinitis and coughing. Skin exposure has been linked to allergic (chromium) dermatitis. Allergic dermatitis more commonly arises through contact with cement/water mixtures than dry cement. Inhalation of the respirable fraction of silica sand may cause permanent damage to the lungs (silicosis). This is a reportable disease in the U.K.

12. Ecological Information

There is no data available on the product itself.
The Gauging Liquid can be virtually eliminated from water by abiotic process, e.g. adsorption onto activated sludge. No negative ecological effects are to be expected according to the present state of knowledge.
The following data applies to the cement component of the material.

Aquatic Toxicity: LC50 aquatic toxicity rating has not been determined. The addition of cements to water will, however, cause the pH to rise and may therefore be toxic to aquatic life in some circumstances.

Biological Oxygen Demand (BOD): Not applicable.

13. Disposal Considerations

Dispose of empty bags or surplus product to a place authorised to accept builder's 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

Not classified as dangerous in the meaning of the transport regulations.

15. Regulatory Information

EU Classification and Labelling Particulars: (For Aggregate Component)
The Gauging Liquid is not classified as hazardous and therefore does not require labelling.

Designated Name: TIE HOLE SEALER

Aggregate Component

Ref: HSD/TS2
Issue No: 2
Date of Issue: 8th January, 2004

Classification: Irritant

Indication(s) of Danger: Xi

Risk and Safety Phrases: Label as per cement industry recommendations and Chip 3

P11: Contains chromium (VI). May produce an allergic reaction. Contact with wet product may cause irritation, dermatitis or burns.
Contact between dry product and body fluids (eg sweat or eye fluid) may also cause irritation, dermatitis or burns.

R41: Risk of serious damage to eyes.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S26: In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice.

S28: After contact with skin, wash immediately with plenty of clean water.

S2: Keep out of reach of children.

Gauging Liquid Component

Classification: Not classified as hazardous

Indication(s) of Danger: N/A

Risk and Safety Phrases:

S26: In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice.

S37/39: Wear suitable gloves and eye/face protection.

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.
CONIAC Health Hazard Information Sheet No 26 (Cement).
Portland Cement Dust - Criteria Documents for an Occupational Exposure Limit, June 1994 - ISBN 0-7176-0763-1

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.
R41: Risk of serious damage to eyes.

Ref: HSD/TS2
Issue No: 2
Date of Issue: 8th January, 2004

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. This product is designed for use as a high build/Thixotropic compound for sealing tie holes.

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.

MSDS First Issued: 18th July 2001

MSDS Revised: 8th January 2004

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

Prepared By: F. Stratton

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