

UNIVERSAL SEALANTS (UK) LIMITED

NUFINS DIVISION

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1. Product Identification

Trade Name: NUCEM PRIMER

Description: Concrete primer/bonding agent.

2. Composition / Information on Ingredients

Ingredient	CAS Number	Conc. (w/w)	Classification	R. Phrases
BASE COMPONENT				
Bisphenol A/F epoxy resin	40216-08-8	50-60%	Xi,N	36/38,43,51/53
Alkylglycidylether	68081-84-5	5-10%	Xi,N	36/38,43,51/53
Portland Cement	65997-15-1	30-40%	Xi	41,P11
HARDENER COMPONENT				
Polyamide	N/A	40-50%	Xi	52/53,43,38,41

3. Hazard Identification

Base: May be irritating to the eyes and skin, and may also cause sensitisation by skin contact. Contains Chromium (VI) and cement, may produce an allergic reaction. There is a risk of serious damage to the eyes. The product is toxic to aquatic organisms and has the potential to cause long term damage to the aquatic environment.

Hardener: Irritating to the skin, and may also cause sensitisation by skin contact. There is a risk of serious damage to the eyes. The product is harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

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: 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, nitrogen oxide gases and ammonia. Sudden reaction and fire may result if the hardener is mixed with an oxidising agent.
- 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. 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
- 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 - 8 hour TWA 10mg/m³ (total inhalable), 4mg/m³ (respirable) OES. While the Base material contains Portland cement, which has Occupational Exposure Standards assigned to it, it is not present in powder form and 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:** None necessary under foreseeable conditions of use.

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 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: Grey paste Hardener: Clear amber liquid	Boiling Point: (Base) >200°C (Hardener) 100°C
Odour:	Base: Mild Hardener: Ammoniacal	Vapour Pressure @ 20°C: (Base) N/D (Hardener) As water
pH: (Base) N/A (Hardener) Alkaline		Evaporation Rate (Butyl Acetate = 1): (Base)N/A (Hardener) As water
Flash Point: >100°C		Flammable Limits in Air: Upper: N/D Lower: N/D
Solubility: (Base) Insoluble in water (Hardener) Fully miscible in water		Autoignition Temperature: (Base) N/D (Hardener) >150°C
Flammability:	Not Flammable	
Specific Gravity:	1.1 (Mixed)	

10. Stability and Reactivity

Stability:	Stable under normal conditions (see Section 7).
Materials to Avoid:	Base: Amines, catalysts, acids and oxidising agents. In contact with inorganic acids - hazardous gases including hydrogen chloride, hydrochloric acid, sulphur dioxide/sulphuric acid. Hardener: Mineral and organic acids, oxidising agents, reducing agents, reactive metals and sodium or calcium hypochlorite. Alkalis (ie Sodium or Potassium Hydroxide). 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. Toxicological Information

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. The cement component 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: Irritant for skin and mucous membranes. May cause sensitisation. The cement component may cause irritant contact dermatitis, allergic (chromium) dermatitis, and/or burns. Skin exposure has been linked to allergic (chromium) dermatitis. Allergic dermatitis more commonly arises through contact with cement/water mixtures than dry cement.

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

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

Acute Dermal Toxicity: LD50, Rabbit = >2000mg/kg (No deaths) (Estimate)

Acute Inhalation Toxicity: LC50, Rat = No Data

Irritation Effects Data: No irritation data are known for this material

Chronic/Subchronic Data: No delayed, subchronic or chronic test data are known.

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. 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:	914

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IMDG Class: 9
IMDG Page Number: 9028
Marine Pollutant: P

Proper Shipping Name: Environmentally hazardous substance, liquid, NO.S. (contains epoxy resin)

Hardener:

Not classified as hazardous for any mode of transport.

15. Regulatory Information

EU Classification and Labelling Particulars:

Base:

Designated Name: NUCEM PRIMER - BASE

Classification: Irritant & Dangerous for the Environment - Contains epoxy constituents (see information supplied by the manufacturer), and Cement + Chromium (VI). May produce an allergic reaction.

Indication(s) of Danger: Xi & N

Contains: Epoxy constituents- see information supplied by the manufacturer, and Cement + Chromium (VI). May produce an allergic reaction.

Risk and Safety Phrases:

R36/38:	Irritating to eyes and skin.
R41:	Risk of serious damage to eyes.
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: NUCEM PRIMER - HARDENER

Classification: Irritant

Indication(s) of Danger: Xi

Contains: N/A

Risk and Safety Phrases:

R38:	Irritating to skin.
R41:	Risk of serious damage to eyes.
R43:	May cause sensitisation by skin contact.

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R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28: After contact with skin, wash immediately with plenty of water and soap.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S61: Avoid release to the environment. Refer to special instructions/safety data sheet.

UK Guidance Publications: EH40; Occupational Exposure Limits, HSE. Revised annually.
EH26; Occupational Skin Diseases - Health and Safety Precautions, 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:

R36: Irritating to eyes.
R38: Irritating to skin.
R41: Risk of serious damage to eyes.
R43: May cause sensitisation by skin contact.
R51: Toxic to aquatic organisms.
R52: Harmful to aquatic organisms.
R53: May cause long-term adverse effects in the aquatic environment.

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 primer/bonding agent for concrete surfaces.

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: Section 14 transport reclassification.

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