

UNIVERSAL SEALANTS (UK) LIMITED

NUFINS DIVISION

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1. Product Identification

Trade Name: AQUATARD FORMWORK RETARDER (FWR)

Description: Acrylic emulsion concrete retarder incorporating mono- and di saccharides.

2. Composition / Information on Ingredients

Ingredient	CAS Number	Conc. (w/w)	Classification	R. Phrases
Titanium Dioxide	1317-80-2	1-5%	None	None
Calcium Carbonate	1317-65-3	20-40%	None	None
Ammonia	7664-41-7	<0.2%	C,N (conc >=25%)	34,50
Acrylic Latex	Not classified as hazardous			

3. Hazard Identification

This product 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.
- 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 special precautions are necessary. When handling unopened containers follow any relevant manual handling guidance. The product is a low viscosity emulsion and may present a splashing hazard during use. 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. Protect from frost and direct sunlight.

8. Exposure Controls / Personal Protection

- Occupational Exposure Standards:** Titanium Dioxide / Calcium Carbonate:
8 Hour TWA 10mg/m³ (total inhalable), 4mg/m³ (respirable) OES.
Ammonia: 8 Hour TWA 25ppm, 15 min STEL 35ppm OES.
Contains trace quantities of residual acrylate monomers and ammonia, however it is extremely unlikely that the Occupational Exposure Limits for these materials would be reached under foreseeable conditions of use. While the product contains titanium dioxide and calcium carbonate, which have Occupational Exposure Standards assigned to them, these are not present in powder form and 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:** Approved respirator and filter medium for particulates 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 contamination present in the workplace.

- Hand Protection:** Wear 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:** Splash proof goggles conforming to BS 2092.
- Body Protection:** Wear suitable impervious 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:	White liquid	Boiling Point:	100°C
Odour:	Mild	Vapour Pressure @ 20°C:	As Water
pH:		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:	1.3		

10. Stability and Reactivity

- Stability:** Stable under normal conditions (see Section 7).
- Materials to Avoid:** Acids and metal salts may cause coagulation.
- Hazardous Decomposition Products:** Oxides of carbon, acrylic monomers.

11. Toxicological Information

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

- Inhalation:** No adverse effects are to be anticipated.
- Skin:** Short single exposure is unlikely to cause skin irritation but prolonged contact may lead to irritation, dryness and possibly dermatitis. Skin absorption is unlikely to occur due to the physical form of the product. LD50 (Acrylic emulsion): rabbit >5000mg/kg.
- Eye:** May cause slight temporary irritation. Corneal injury is unlikely.
- Ingestion:** Single dose oral toxicity is low. No hazards are to be anticipated from swallowing small amounts incidental to normal industrial handling.

LD50 (Acrylic emulsion): rat >5000mg/kg.

12. Ecological Information

There is no data available on the product itself. The following information is derived from similar materials.

The product can be virtually eliminated from water by abiotic process, e.g. adsorption onto activated sludge in suitable effluent treatment plants. If the product is correctly discharged into adapted biological treatment plants, the degrading action of the activated sludge will not be affected. No negative ecological effects are to be expected according to the present state of knowledge.

13. Disposal Considerations

Waste product must not be discharged directly to drains or waterways without treatment. Disposal of product, solid waste and packaging should always comply with local, national or EU regulations and in compliance with the Environmental Protection (Duty of Care) Regulations 1991, and be undertaken by an authorised contractor.

14. Transport Information

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

15. Regulatory Information

EU Classification and Labelling Particulars: Not classified as hazardous and therefore does not require labelling.

Designated Name: AQUATARD FORMWORK RETARDER (FWR)

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 water and seek medical advice.

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

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

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16. Other Information

Full Text of R-Phrases Referred to above:

R34: Causes burns.
R50: Very toxic to aquatic organisms.

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 concrete retarder.

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