

KUT AQUASIL

Silane Siloxane Based Penetrating Water Repellent, Primer and Sealer

PPC-20-1110



DESCRIPTION

KUT AQUASIL is available in two grades **KUT AQUASIL SB** is solvent based and **KUT AQUASIL WB** is water based single component penetrating oligomeric silane-siloxane system, ready to use which penetrate deep into porous substrates and then react to produce a bonded hydrophobic lining to the pores. **KUT AQUASIL** is colorless when dry, non-staining, non-yellowing, and non-filming sealer used to protecting concrete and masonry surfaces without altering their appearance or the texture of the treated surface. **KUT AQUASIL** is breathable, non flammable & has excellent resistance to weathering. Even though allowing passage of water vapour from the substrate it significantly reduces the absorption of water and water borne salts.

USES

- **KUT AQUASIL** protects atmospherically exposed reinforced concrete structures from attack by chloride ions and water intrusion.
- It is also suitable to protect other cementitious substrates and masonry.
- **KUT AQUASIL** is suitable for use on all types of structures, including those in marine environments. It is equally suitable for new and existing concrete structures.
- **KUT AQUASIL** is used above grade, on vertical surfaces to minimize water penetration, reduce efflorescence, and aid in minimizing spalling due to freeze-thaw cycles. It also protects against ultraviolet degradation, airborne dirt, smog, industrial fumes, acid rain, and most other atmospheric chemicals.
- **KUT AQUASIL WB** is formulated for use on various surfaces such as pre-cast, pre-stressed, exposed aggregate, poured-in-place, air entrained concrete, granite, marble and most commonly used building materials that readily absorb moisture. It is used as a sealer for pre-mixed decorative plasters & renders. It is used as a primer for emulsion paints & plasters, silicone resin based coatings & plasters. Being water based the product meets all VOC requirements and is environmental friendly.

- **KUT AQUASIL SB** is formulated for use on porous materials such as light weight concrete, concrete, brick and normal weight block, sandstone, granite, marble and most commonly used building materials that readily absorb moisture.

ADVANTAGES

- Can be applied to new, cured concrete or old, over dry or damp concrete surfaces.
- Extremely high alkali resistance.
- Provides an efficient, continuous chloride barrier, protects reinforcing steel against the corrosive effects of surface absorbed chlorides and moisture.
- Blocks pores and capillaries for outstanding water repellency by penetrating deep into substrates, allows water vapour to escape from the structure
- Chemically resistant to ice melting compounds, fuels, oils and atmospheric contaminants
- Dries to tack-free, Non staining and skid-resistant surface
- Full protection in one treatment, but may be reapplied later at any time
- Provides a low cost protection system over the life span of a structure
- Renders new concrete virtually free of surface scaling
- Retards deterioration of existing, distressed structures by reducing water and chloride intrusion
- Increases freeze thaw resistance and minimises efflorescence

STANDARDS

KUT AQUASIL complies & meets the requirements of **ASTM E514** and **SS W110C**.



مصنع التخصصية لكيمويات البناء
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TYPICAL PROPERTIES

• **Drying Time:**

Foot traffic : @4-6 hrs
Wheel traffic : @10-12 hrs

• **Material Properties @ 25°C, 50% RH**

- Flash Point for KUT AQUASIL SB 44°C
- Depth of Penetration (substrate dependent) 1 cm
- Reduction in water leakage (ASTM E514)
Brick — 100%
Mortar Block — 91%
- Reduction in water absorption (SSW110) 92.5%
- Accelerated weathering 1500 hours No change
- Abrasion Resistance is - Excellent
- Dirt Pick-up - None

Values presented are typical and are not necessarily referenced to create specifications.

APPLICATION INSTRUCTIONS

Surface Preparation: Cure new concrete 28 days before application. Surface must be structurally sound, clean, dry, free of dust, dirt, paint, efflorescence, laitance, and other contaminants that will prevent the proper penetration of **KUT AQUASIL**. Prior to application, joints or cracks must be properly sealed or filled. If acid is used for cleaning, neutralize completely before **KUT AQUASIL** application. A dry substrate allows better penetration of the sealer.

Application Instructions: **KUT AQUASIL** should be applied in two coats until the recommended total application rate of 0.2 litre/m²/coat has been achieved. This is best accomplished by using portable Low pressure air-less spray equipment, although for smaller areas, application with brush or rollers may also be acceptable. Application should be from the bottom up to ensure uniform product distribution. Apply a saturation coat with a 6-8" controlled run-down. For dense surfaces, one saturation coat of **KUT AQUASIL** is normally required. For porous surfaces two or more saturation coats of **KUT AQUASIL** may be required, applied using a "wet on wet" technique. Apply a test patch to evaluate surface appearance and effectiveness of the coverage rate. If in doubt about the condition of the substrate, the **ASPEC** Technical Dept. should be consulted. **KUT AQUASIL** should be allowed to dry for a minimum of 2 hours (at 20°C) before continuing.

Clean Up: Immediately after use and before **KUT AQUASIL SB** has cured, clean equipment with **KUT SOLVENT PS**.

For **KUT AQUASIL WB** clean equipment with water.

Estimating: In order to obtain the penetrating properties of **KUT AQUASIL**, it is important that the correct method, correct rates of application and overcoating times are observed.

Number of coats	: 2
Theoretical application rate/coat	: 0.2 litres/m ²
Overcoating time @ 20°C	: 2 hours

PACKING AND COVERAGE

KUT AQUASIL is available in 5, 20 and 200 litre containers

Theoretical application rate per coat: 0.2 litres/m²

STORAGE

KUT AQUASIL in original sealed containers when kept in dry conditions at 5°C - 27°C has a shelf life of 12 months.

Fire: **KUT AQUASIL SB** and **KUT SOLVENT PS** are flammable. Do not expose to naked flames or other sources of ignition. No smoking. Containers should be tightly sealed when not in use. In the event of fire, extinguish with CO₂ or foam.

Flash point

KUT AQUASIL SB : 44° C

KUT AQUASIL WB not applicable as is water based.

KUT SOLVENT PS : 38° C

HEALTH AND SAFETY

KUT AQUASIL does not cause any significant hazard. **KUT AQUASIL** should not come into contact with skin and eyes or be swallowed. Avoid inhalation of vapour/spray. Use only in well ventilated areas. In case of insufficient ventilation, Wear suitable protective gloves, mask and eye/face protection. In case of contact with skin, wash immediately with soap and water. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. Hands must be thoroughly washed with soap and water before eating or smoking. If swallowed seek medical attention immediately — DO NOT INDUCE VOMITING. If discomfort persists or any breathing difficulty occurs, or if swallowed, seek immediate medical attention. Empty containers should be disposed off in accordance with local waste disposal regulations. For additional information see relevant Product Safety Data Sheet.

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