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UPDATED: 12-06-2023

PRODUCT DATASHEET

ECOSEALER

MANUFACTURER'S CODE: ES1-1000

PRODUCT NAME: ECOSEALER

DESCRIPTION: ECOSEALER is a water-based silane/siloxane impregnant for masonry building materials. The product is designed to penetrate into the capillaries of masonry surfaces and render the substrate permanently water repellent. This water repellent zone reduces the absorption of water or other waterborne staining materials which are responsible for the bulk of the deterioration in masonry building materials and significantly reduces the incidence of efflorescence. The treatment will not significantly change the appearance of the masonry substrate, or its' vapour permeability, however a slight darkening of the surface may occur for some substrates.

RECOMMENDED USES: ECOSEALER is recommended as a water repellent sealer for porous masonry building substrates such as fibre cement, natural stone, concrete block & pavers, clay bricks, unglazed terracotta, and porous unglazed tile and grout.

Figure 1.



Water Absorption of Treated Brick

Some of the important features of ECOSEALER include:

- Non-toxic water-based formulation
- Penetrates into masonry substrate
- Permanently bonds to the substrate with no peel or blister
- UV, alkali stable and durable formulation
- Reduces water penetration, efflorescence and water-born staining.
- Does not significantly change the surface appearance and vapour permeability.
- Easy application and cost effective.

As masonry materials vary significantly, a test MUST be carried out prior to application to find out the suitability of this product for the purpose.

USE INSTRUCTIONS:

Application

Please read this product information for the correct application and safe handling. Do not apply if rain or extreme weather conditions are expected. The surface to be treated should be dry, firm and free from grime, oil and any previous coatings/sealers. If necessary, the surface should be washed with a suitable detergent in water and allowed to dry. All cracks should be filled with appropriate grout materials and allowed to cure before application. A test prior to application is strongly recommended to determine the suitability of the product for its intended purpose, the number of coats required and the likely consumption rate.

ECOSEALER can be applied using brush, roller or spray, however the product is preferably applied by saturation flooding using a hand-held low-pressure sprayer or airless spray equipment. Do not use an air compressor-driven spray unit, as atomisation of this product may lead to harmful levels of aspiration.

For vertical surfaces, the product should be applied as a liquid thin film stream which runs down the surface approximately 30 - 40cm. A second application should follow immediately after the first coat has absorbed into the surface. This is termed a "wet-on-wet" application. The object is to saturate the surface to allow better penetration.

For horizontal surfaces, the product should be applied by flooding the surface for about 10 minutes to ensure the penetration of product into the surface. If the sealer is quickly absorbed by the substrate after the first application, a second coat may be required immediately. Any sealer remaining on the surface which has not been absorbed by the surface for 10 minutes should be removed to avoid excessive accumulation of the sealer in surface areas which may cause an uneven or glazed finish.

<u>Never</u> attempt to apply another coat after a previous coat has dried, as the previous coats will prevent penetration of the subsequent coats and cause an uneven and/or glazed finish.

The number of applications depends on the permeability of the substrate. Generally, for very dense surfaces one application may be sufficient, but for permeable substrates, two or more coats "wet-on-wet" may be required.

Do not splash or spray the product onto any area you do not wish to treat. If splashing occurs, the product should be removed with a wet cloth immediately.

Consumption rate

The consumption of ECOSEALER varies significantly depending on the permeability of the substrate. It may be of the order of $4 - 15m^2$ per litre per coat, or could be out of this range for very porous or dense surfaces.

After application

Initial surface water repellency will develop after the surface is dry. Good water repellence will be achieved within 24 hours. Full curing may take up to seven days. Avoid heavy traffic for at least 24 hours. Equipment can be washed in water, or a solvent such as mineral turpentine.

Pilot testing and quality control

Due to the variation of building materials, it is strongly recommended that a pilot test on a small area on site should be carried out prior to application to confirm the suitability of this product for the intended purpose.

- TYPICAL DATA:Appearance: Milky white emulsion
Solids content: <50% by weight
Specific Gravity: 1.0 g/ml at 20°C
pH value: 7-8
Solubility in water: Soluble in water
VOC content: Nil
Flash point: Not allocated
- **IMPORTANT NOTE:** ECOSEALER penetrates into the capillaries and renders the surface water repellent while still leaving most of the capillaries open to allow water vapour to pass through. It reduces water absorption by capillary action. It has a limited resistance to water penetration under prolonged contact or hydrostatic pressure. In some cases where the substrate is very permeable, or there is extreme wind driven rain, resistance to water penetration or waterborne staining may not be adequate.
- **HANDLING & STORAGE:** ECOSEALER is a non-hazardous material. However, as with all chemical products, good industrial hygiene procedures should be followed when using this product. Vapour inhalation and skin or eye contact should be avoided by wearing proper protection. Wash hands after handling. The product should be stored in closed containers in a cool dry place. The product has a shelf life of 6 months in a sealed original container under 25°C.

Use in areas with sufficient ventilation! Avoid aspiration and ingestion!

Keep out of reach of children!

PACKAGING: ECOSEALER is available in 1, 5, 20, 200 and 1000 litre plastic containers

DISCLAIMER:

The information given in this data sheet is based on many years of experience and is correct to the best of our knowledge. As the storage, handling and application of this material is beyond our control; we can only be responsible for the quality of our product at the time of dispatch. We reserve the right to alter certain product parameters within the spectrum of properties in order to keep abreast of technical advances. It is the responsibility of the end user to determine the suitability of this material for any particular application.