

## PRODUCT INFORMATION

### LIMESTONE EMULSION

Page 1 of 2

Manufacturer's Code: RPLEN

Updated: 22/09/2014

Product Name: LIMESTONE EMULSION

**Description:** LIMESTONE EMULSION is a water-based silicone water repellent and surface binder for Australian limestone. It is a non-caustic and user-friendly product, which is designed to penetrate deeply into the capillaries of limestone surfaces and render the substrate water repellent and strengthen the surface. This water repellent zone significantly reduces the absorption of water or other water-borne staining materials which are responsible for the bulk of the deterioration in limestone buildings. Unlike other sealers, the treatment with LIMESTONE EMULSION will not significantly change the appearance and the vapour permeability of the limestone substrate.

**Recommended Uses:** LIMESTONE EMULSION is recommended as a water repellent sealer for permeable Australian limestone. It may also be suitable for other types of limestone substrates. Some of the important features of LIMESTONE EMULSION include:

- Water-based emulsion with no volatile hydrocarbon solvents.
- Penetrates deeply into the limestone surface.
- Bonds to the substrate with no peel or blister and provides surface dust binding.
- UV, alkali stable and durable formulation.
- Reduces water penetration and water-borne staining and strengthens surface.
- Does not significantly change the surface appearance and vapour permeability.
- Non-caustic and user-friendly formula.

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

**Use Instructions:** Please read this product data sheet thoroughly 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 suitable grout materials and allowed to cure before application. A test prior to application is strongly recommended to determine the number of coats required and suitable consumption rate.

#### Application

- LIMESTONE EMULSION can be applied using brush, roller or spray. However, the product is preferably applied by saturation flooding using a hand pressure spray or airless spray equipment to avoid direct contact of the brush or the roller with the surfaces. Enough material should be applied onto the surface.
- 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 is absorbed by the surface. This is termed a "wet-in-wet" application. The object is to saturate the surface to allow a 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 remaining liquid on the surface which has not been absorbed after 10 minutes should be removed to avoid any excessive accumulation of the sealer, which may cause an uneven finish.

- The number of applications depends on the permeability of the substrate. Generally for dense surfaces one application “wet-in-wet” may be enough but for permeable limestone, two or more coats “wet-in-wet” may be required. Again, any subsequent coats should follow immediately after the previous application. It is NOT possible to apply LIMESTONE EMULSION to a surface which has dried and become water repellent. To do so may cause surface discoloration and unevenness.
- **Stir or shake** LIMESTONE EMULSION before use.
- Mask off the window, doors or any surfaces you do not wish to treat. If splashing occurs the product should be removed with a damp cloth **immediately** to avoid possible contaminations.

#### Consumption rate

The consumption of LIMESTONE EMULSION varies significantly depending on the permeability of the substrate. It may be of the order of 0.5-2 m<sup>2</sup> per litre per coat or could be out of this range significantly.

#### After application

The initial surface water repellency will develop gradually after the surface is dry. Full curing may take 24 hours or up to 7 days. Avoid heavy traffic for at least 24 hours. The equipment should be washed **immediately** in water after application.

#### 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 must be conducted prior to application to determine the suitability of this product for the purpose.

#### **Typical Data:**

Appearance:	White emulsion
Active Content:	<50% by weight
Specific Gravity:	approx. 1.0 g/ml at 20 °C
pH Value:	7-9
Solubility in Water:	Dispersible in water
VOC Content:	Nil
Flash Point:	Not allocated

#### **Important Note:**

LIMESTONE EMULSION 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. However, it has a limited resistance to water penetration particularly under prolonged contact or hydrostatic pressure. Therefore, in some cases where the substrate is very permeable or there is extreme wind driven rain, resistance to water penetration or water-borne staining may not be adequate. This product should not be diluted with water or any other dilutant.

#### **Handling & Storage:**

LIMESTONE EMULSION is a water-based, non-caustic and user-friendly product which is classified as a non-hazardous material according to the criteria of Worksafe Australia. However, as with all chemical products, good industrial hygiene procedures should be followed when using this product. The product should be stored in closed containers in a cool dry place away from any fire sources. The product has a shelf life of 12 months in a sealed container stored at a temperature below 25°C.

**Use under sufficient ventilation!**

**Keep out of reach of children!**

#### **Packaging:**

LIMESTONE EMULSION is available in 20, 200 and 1,000 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.