TECH-DRY BUILDING PROTECTION SYSTEMS PTY. LTD. ACN 005 307 684 ABN 62 922 836 289 177-179 Coventry Street, South Melbourne, Victoria 3205, Australia Telephone: 61 3 9699 8202 (all hours) Facsimile: 61 3 9696 3362 Website: www.techdry.com.au E-mail: info@techdry.com.au



# **PRODUCT INFORMATION**

### **DENSACRETE LITHIUM**

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Manufacturer's Code: RPDL

Updated: 01/01/2023

Product Name: DENSACRETE LITHIUM

**Description:** DENSACRETE LITHIUM is a concrete densifier based on innovative silicate technology. It is a non-film forming penetrating sealer that penetrates, blocks concrete capillaries and reacts with concrete to form a hard, dust-proof and colour enhanced concrete finish. A smooth or gloss finish can be easily achieved by concrete polishing. Due to the smaller molecule and high activity of lithium silicate technology, DENSACRETE LITHIUM can deeply penetrate and quickly react with concrete resulting in fast concrete polishing process. Further, unlike other silicate densifiers, DENSACRETE LITHIUM is unlikely to leave visible residues or efflorescence after the treatment.

**Recommended Uses:** DENSACRETE LITHIUM is used as a concrete densification sealer for treating concrete including polished concrete such as residential concrete floors, commercial car parks, and factory or warehouse flooring. Applications include treating new and old concrete floors for strengthening, dust-proofing, and creating a hard, smooth/glossy and colour enhanced polished concrete finish. The densifier may be used for sealing other masonry substrates including natural stone, clay bricks and ceramic tiles. However, a test should be conducted prior to application to determine the suitability of the product for the purpose.

The key features of DENSACRETE LITHIUM include:

- Deeply penetrating into concrete ensuring durable protection
- · Fast reaction with concrete for efficient concrete polishing process
- · No visible residues or efflorescence after application
- Enhances surface colour without changing the surface characteristics of concrete
- Reduces water absorption and surface staining
- Environmentally friendly water-based technology
- Ready-to-use low viscosity formula enables easy application

Use Instructions: <u>Surface Preparation</u>

Prior to application, the concrete surface should be completely cleaned of any surface contaminants that may impede the penetration of DENSACRETE LITHIUM. The surface should be allowed to dry before application.

New concrete should be properly cured. Curing compounds, release agents, and coatings/membranes should be completely removed and cleaned from the surface and allowed to dry before applying DENSACRETE LITHIUM. In the case of acid treated concrete, the concrete should be completely neutralised and rinsed with water, and allowed to dry before the application.

For polished concrete, the surface is firstly removed by grinding up to 200 grit or any desired finish to expose the capillaries or aggregates before applying DENSACRETE LITHIUM. This will ensure maximum absorption of the sealer to achieve optimum concrete densification and desired surface finish by the application of DENSACRETE LITHIUM.

### Application (mix well before use)

DENSACRETE LITHIUM is a ready-to-use sealer or may be diluted before use. The densifier sealer may be applied with a low pressure hand sprayer, brush or broom. The product should be evenly flooded onto the surface. Pooling should be avoided. In order to achieve maximum absorption, ensure the sealer is present on the surface as a mirror-like wet film for up to 30 minutes. If the first coat is quickly absorbed by the surface, the second coat is applied immediately while the surface is still wet (wet-on-wet method). For porous and permeable concrete, this wet-on-wet application may be repeated until the surface is saturated with no further absorption of the sealer being achieved. Remove excess sealer from the surface if it hasn't been absorbed by the surface within 30 minutes. Any excess sealer on the surface may dry to unwanted residues that may become difficult to remove after the product is cured.

#### Polishing

If a desired polished finish is required, the concrete is further polished or buffed after the previous applied DENSACRETE LITHIUM has been cured and dried. A further application of DENSACRETE LITHIUM may be applied after each polishing. This polishing process may be repeated until desired surface finish is achieved.

If a water and oil resistant surface is required, TECH-DRY water and oil resistant resistance densification sealer or other oil and water repellent sealer may be applied as a top finish sealer after the above final polish. Please contact Tech-Dry on (03) 9699 8202 for further information.

#### Consumption Rate

The application rate of DENSACRETE LITHIUM varies depending on the porosity of concrete. Dense or new concrete will have a low absorption rate, whereas porous and permeable or old concrete will absorb more sealer. The consumption rate varies from 5 - 20/m<sup>2</sup> per litre per coat or could be out of this range significantly.

## After application and curing

Curing starts immediately after application. But it may take 24 hours or more to achieve better curing. Avoid heavy traffic and rain after application for up to 24 hours. However, optimum densification result is expected after 7 days of curing or more.

| Typical Data: | Appearance:          | Colourless clear liquid |
|---------------|----------------------|-------------------------|
|               | Density:             | 1.0-1.1 g/ml            |
|               | pH value:            | 10-11                   |
|               | Solubility in water: | Soluble in water        |
|               |                      |                         |

- Important Note: DENSACRETE LITHIUM penetrates and blocks the concrete pores or capillaries, and hardens the surface. However, the degree of pore blocking, surface hardening and water resistance depends on many factors which are out of the manufacturer's control. It is highly recommended that a pilot test on site should be conducted by the applicator prior to application to determine the suitability of this product for the purpose. If in doubt, please contact Tech-Dry on (03) 9699 8202.
- **Handling & Storage:** DENSACRETE LITHIUM is an alkaline solution. Skin or eye contact should be avoided by wearing proper protection. The risk of vapour inhalation of this product is low, however, an air-purifying respirator should be worn if there is a risk of exposure to high vapour concentrations. Wash hands after handling. The sealer is best used within the use-by-date. The product should be kept in the sealed original container under 25°C. The sealer should be used up as soon as the original container is opened.

## Keep this product away from aluminium surfaces. Keep out of reach of children.

Packaging: DENSACRETE LITHIUM is available in 20, 200 and 1,000 litre packages.

#### **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.