

## PRODUCT INFORMATION

**LITHIUM DENSIFIER PREMIUM**

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**Manufacturer's Code:** RPLDPR

**Updated:** 14/03/2018

**Product Name:** LITHIUM DENSIFIER PREMIUM

**Description:** LITHIUM DENSIFIER PREMIUM is an oil resistant concrete densifier containing lithium silicates. The sealer penetrates and blocks the concrete capillaries, hardens the surface, and enhances the surface colour of the concrete. Unlike concrete coatings, LITHIUM DENSIFIER PREMIUM imparts excellent oil resistant properties to the treated concrete and effectively makes the surface oil-proof without changing the surface characteristics of the concrete finish. A smooth or gloss finish can be achieved by concrete polishing. Due to the smaller molecule and high activity of lithium silicates, LITHIUM DENSIFIER PREMIUM can deeply penetrate into the capillaries and quickly react with concrete resulting in fast concrete polishing process. Further, unlike other silicate densifiers, LITHIUM DENSIFIER PREMIUM does not leave visible residues or efflorescence after the treatment.

**Recommended Uses:** LITHIUM DENSIFIER PREMIUM is used as an oil resistant penetrating densifier and strengthener for concrete flooring including residential garages, commercial car parks, restaurants, retail or warehouse floors. Applications also include treating polished concrete floors or bench tops, and sealing old concrete for strengthening, dust-proofing, oil and water-proofing. LITHIUM DENSIFIER PREMIUM provides excellent resistance to oil penetration or oil staining. The sealer may also be used for sealing other masonry substrates including natural stone pavers, clay bricks or ceramic tiles. However, a test should be conducted prior to application to determine the suitability of this product for the purpose.

The key features of LITHIUM DENSIFIER PREMIUM include:

- Excellent resistance to oil penetration, oil staining and water absorption
- Deeply penetrates into concrete capillaries to ensure durable protection
- Fast reaction with concrete for a fast concrete polishing process
- No visible residues or efflorescence after treatment
- Enhances surface colour without changing the surface characteristics of concrete
- Environmentally friendly water-based technology
- Ready-to-use low viscosity formula enables easy application

**Use Instructions:** Surface Preparation

Prior to application, the concrete surface should be completely cleaned of any surface contaminants that would impede the penetration of LITHIUM DENSIFIER PREMIUM, and allowed to dry before application.

New concrete should be cured for 28 days. Curing compounds, release agents, or coatings/membranes should be removed from the surface, cleaned and allowed to dry before applying LITHIUM DENSIFIER PREMIUM. In the case of acid treated concrete, the concrete surface should be completely neutralised and thoroughly rinsed with water, and allowed to dry before application.

For polished concrete, the surface is firstly removed by grinding to a minimum 200grit or desired finish to expose the aggregate before applying the sealer. This will ensure maximum absorption of the sealer and make it easy to further polish to finer grades due to the densification achieved by LITHIUM DENSIFIER PREMIUM.

Application (Shake well before use)

LITHIUM DENSIFIER PREMIUM can be applied with a low pressure hand sprayer, mop or soft bristle brush/broom. The sealer should be evenly flooded onto the surface and puddling should be avoided. Ensure the sealer is present on the surface as a mirror-like wet liquid film for up to 5-10 minutes to ensure maximum absorption. The second coat should be applied immediately if the first coat is quickly absorbed by the surface while the surface is still wet (wet-in-wet method). Avoid applying the sealer if the surface has dried. Remove the excess sealer from the surface after 10 minutes. The excess sealer may dry to cause unwanted residue on the surface which may only be removed by mechanical scrubbing. If a good oil and water-resistant result is required, the above wet-in-wet application should be repeated several times on the one occasion to ensure enough sealer is applied onto the surface.

It may help to achieve better penetration by pre-dilution of the sealer at 1:1 with clean water before application. More wet-in-wet applications are required to ensure enough sealer is applied. A test should be conducted before application.

Polishing

The area may be further polished or buffed after the surface has cured and dried. LITHIUM DENSIFIER PREMIUM should be applied after every polishing. For additional water or oil resistant treatment, TECH-DRY oil and stain resistant sealers may be used as the top finish. Contact Tech-Dry on (03) 9699 8202 for further information.

Consumption Rate

The LITHIUM DENSIFIER PREMIUM application rate varies depending on porosity of the concrete and climatic conditions. Dense, smooth, or new concrete may have a low absorption rate, whereas porous and old concrete may absorb significantly more sealer. The consumption rate varies from 5-25/m<sup>2</sup> per litre per coat, or could be out of this range significantly.

After application

Curing starts immediately and full curing may take up to 24 hours or more. Avoid heavy traffic for 24 hours. Wash all equipment in water.

**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:**

LITHIUM DENSIFIER PREMIUM penetrates and blocks the concrete pores or capillaries, and hardens the surface while making the surface oil and water resistant. However, the degree of surface hardening and oil or water resistance depends on many factors which are out of the manufacturer's control. It is highly recommended that a pilot test should be conducted 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:**

LITHIUM DENSIFIER PREMIUM is an alkaline solution. Skin or eye contact should be avoided by wearing proper protection. The risk of vapour inhalation of the sealer 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 should be kept in the sealed original container under 25°C. The product should be used within use-by-date. 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:**

LITHIUM DENSIFIER PREMIUM is available in 20 litre plastic containers. Other size package is available on request.

**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.