

## PRODUCT INFORMATION

### CONCRETE DENSIFIER

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Manufacturer's Code: RPCDR

Updated: 04/07/2018

Product Name: CONCRETE DENSIFIER

**Description:** CONCRETE DENSIFIER is a hybrid concrete densification sealer containing potassium and lithium silicates. It penetrates into concrete and blocks the concrete capillaries forming calcium silicate hydrate which binds and hardens the concrete surface resulting in hard, dense, dust free, traffic resistant, water resistant, and colour enhanced surface finish. A smooth or gloss finishes can be easily achieved by concrete polishing. Unlike sodium silicate densifiers, CONCRETE DENSIFIER unlikely leaves visible residues or efflorescence after the treatment.

**Recommended Uses:** CONCRETE DENSIFIER is used as a penetrating densifier or strengthener sealer for concrete. Applications include treating polished concrete flooring in residential, retail, or commercial warehouse floors. It is also used for strengthening, dust-binding or water-proof sealing of old concrete. It creates dense concrete surface and imparts resistance to water, oil and stain penetration. It also provides protection against concrete corrosion caused by smoke fumes, light acids, salts or other harmful chemicals. CONCRETE DENSIFIER may also apply to other masonry substrates including natural stones, 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 CONCRETE DENSIFIER include:

- Deeply penetrating into concrete capillaries ensuring durable protection
- 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:** Surface Preparation

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

New concrete should be properly cured. Curing compounds, release agents, or coatings/membranes should be removed from the surface, cleaned and allowed to dry before applying CONCRETE DENSIFIER. 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 200grit or desired surface 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 CONCRETE DENSIFIER.

Application (Shake or stir the sealer before use)

CONCRETE DENSIFIER 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 10-30 minutes to ensure maximum absorption. The second coat should be applied immediately if the first coat is quickly absorbed by the surface (wet-in-wet method). Avoid applying the sealer if the surface has dried. Remove the excess sealer from the surface if the sealer is not absorbed by the surface after 10-30 minutes. The excess sealer may dry and cause unwanted residue on the surface which may only be removed by mechanic scrubbing. If a good water-resistant result is required, the above wet-in-wet application may be repeated a few 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 may be required to ensure enough sealer is applied. A test should be conducted before application.

Polishing

The area may be further polished or buffed once the surface has cured and dried. CONCRETE DENSIFIER should be applied after every polishing. For additional water, oil or stain resistant treatment, Tech-Dry CONCRETE DENSIFIER PLUS, CONCRETE DENSIFIER PREMIUM or other sealers may also be used. Please contact Tech-Dry on (03) 9699 8202 for further information.

Consumption Rate

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 or 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 up to 7 days. Avoid heavy traffic for 24 hours. Wash all equipment in water.

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

**Important Note:** CONCRETE DENSIFIER 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:** CONCRETE DENSIFIER 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:** CONCRETE DENSIFIER is available in 15 litre or other size containers 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.