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# PRODUCT INFORMATION



**Manufacturer's Code:** RPDPK **Updated:** 01/01/2026

**Product Name:** DENSACRETE PREMIUM

**Description**: DENSACRETE PREMIUM is an oil and water resistant concrete densification sealer based on metal silicates. DENSACRETE PREMIUM is a non-film forming penetrating sealer that can penetrate, block concrete capillaries and react with concrete to form a hard, dust-proof and colour enhanced concrete finish. Apart from concrete densification sealing, DENSACRETE PREMIUM imparts oil and water resistance to the concrete, effectively making it a water and oil-proof concrete finish. Furthermore, a smooth or gloss finish can be achieved by concrete polishing. DENSACRETE PREMIUM will not leave visible residues or efflorescence after the treatment.

**Recommended Uses:** DENSACRETE PREMIUM is used as an oil and water resistant concrete densification sealer for treating concrete including residential driveways or garage floors, commercial car parks, and factory or warehouse flooring. Applications include treating new and old concrete slabs for strengthening, dust-proofing, and creating oil and water resistance. DENSACRETE PREMIUM provides good resistance against water and oil absorption and reduces oil staining. The sealer may also be used for treating other masonry substrates including sealing 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 PREMIUM include:

- Resists water and oil penetration and reduces oil staining
- Penetrates and reacts with concrete to ensure durable protection
- Leaves no visible residues or efflorescence after treatment
- Enhances concrete colour without changing the surface characteristics
- Ready-to-use or dilute with water before use
- Environmentally friendly water-based technology with nil VOC

**Use Instructions:** Surface Preparation

Prior to application, the concrete surface should be completely cleaned of any surface contaminants that may impede the penetration of DENSACRETE PREMIUM. 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 PREMIUM. 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 PREMIUM. This will ensure maximum absorption of the sealer to achieve optimum concrete densification and oil and water resistance by the application of DENSACRETE PREMIUM.

Application

DENSACRETE PREMIUM should be mixed well before use. The 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.

It may help to achieve better penetration by pre-diluting the sealer at 1:1 with clean water before use. However, this may mean that more wet-on-wet applications are required to achieve the desired result.

A final application is required after the previous application has been cured for 24 hours. It is recommended that no further polishing is undertaken after the final application. Polishing or buffering at this stage may reduce the oil and water resistant effect imparted by DENSACRETE PREMIUM. Further application of DENSACRETE PREMIUM may be applied if advanced oil and water resistance is required for the treated concrete.

If an alternative desired polished concrete finish is required, then other TECH-DRY oil and water repellent sealers may be applied as a finish sealer after the final polish. Please contact Tech-Dry on (03) 9699 8202 for further information.

Consumption Rate

The application rate of DENSACRETE PREMIUM 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/$m^2$ per litre per coat or could be out of this range significantly.

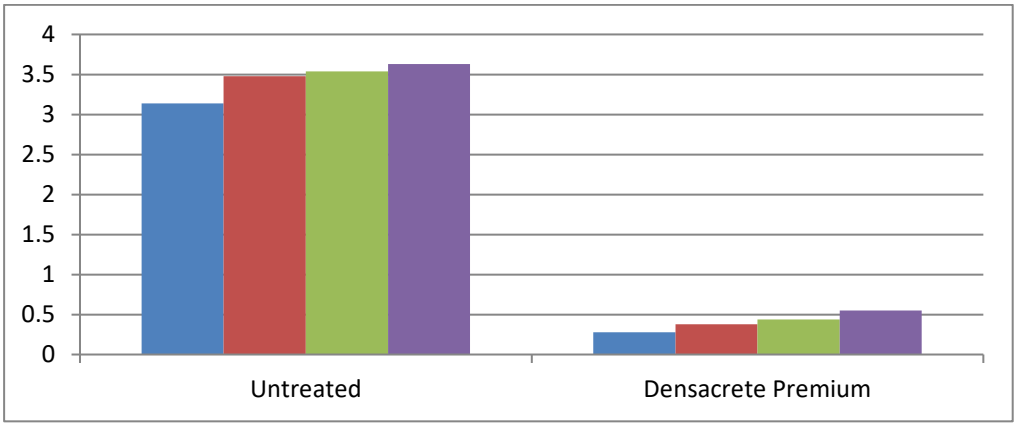
After application and curing

Curing starts immediately after application. But it may take 24 hours or more to achieve better curing. Avoid heavy traffic for up to 24 hours. The optimum densification and oil and water-resistance is expected after 7 days of curing or more.

**Performance Test:** The performance of oil and water resistance of DENSACRETE PREMIUM is evaluated by a capillary water absorption and oil staining test on a polished concrete. The concrete is pre-polished with 50 grit metal pad and then treated with DENSACRETE PREMIUM by the method described in the above use instructions.

**The capillary water absorption** results are shown in Figure 1. The results clearly indicate that the capillary water absorption of the concrete treated with DENSACRETE PREMIUM is significantly reduced compared to that of the untreated sample.

***Figure 1.*** *Capillary water absorptions of the treated concrete & the control*



**The oil resistance** performance is shown in the following oil staining test results. Olive oil, engine oil, and used engine oil are placed as oil droplets on to both treated and untreated concrete surfaces. The surfaces are then periodically checked for oil beading effect (indicating oil repellency, oil penetration and oil absorption); and oil staining status after the oils are removed from the surfaces at intervals of 2 hours, 6 hours and 24 hours during the 24 hour oil staining test. The results indicate that the surfaces treated with DENSACRETE PREMIUM show excellent resistance to oil penetration/absorption and significant resistance to oil staining compared to those of the control substrates.

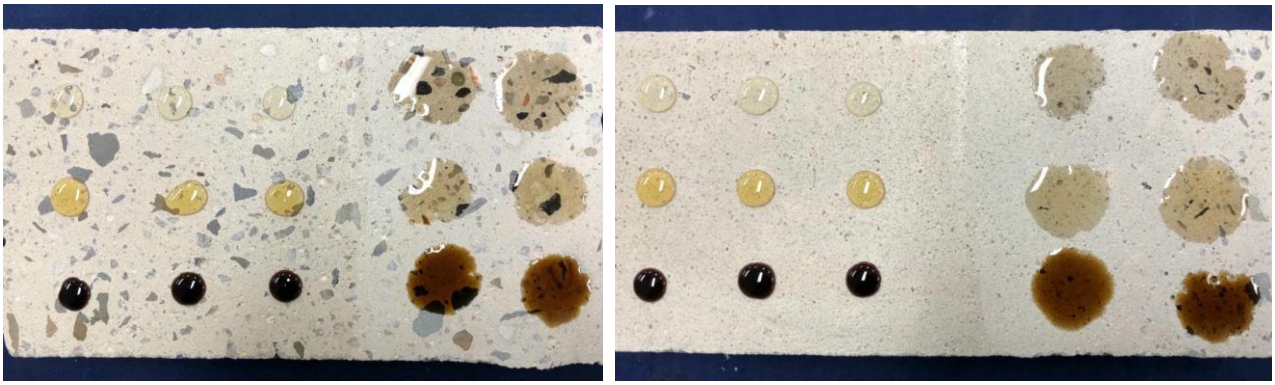


***Figure 2.*** *Oil beading effect at the* ***start*** *of the 24 hour oil staining test*
*Oil droplets: from top to bottom is olive oil, engine oil & used engine oil.*
*Substrates: left, polished finish showing aggregates; right, polished finish without showing aggregates.*
*Surfaces: left part is treated with DENSACRETE PREMIUM; right part is untreated as control.*

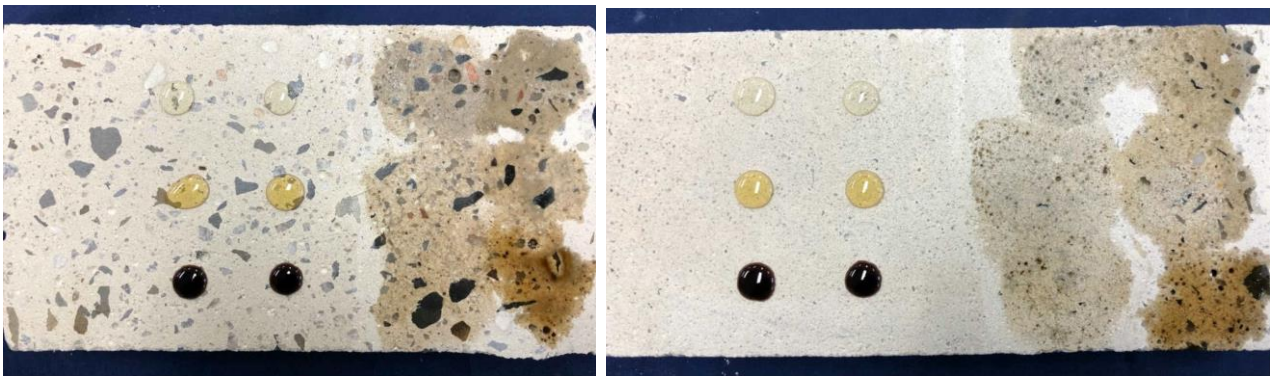


***Figure 3.*** *Oil beading effect and staining status at* ***2 hours*** *during the 24 hour oil staining test*
*Treated parts show no oil stains whereas the control parts show significant oil absorption and staining.*

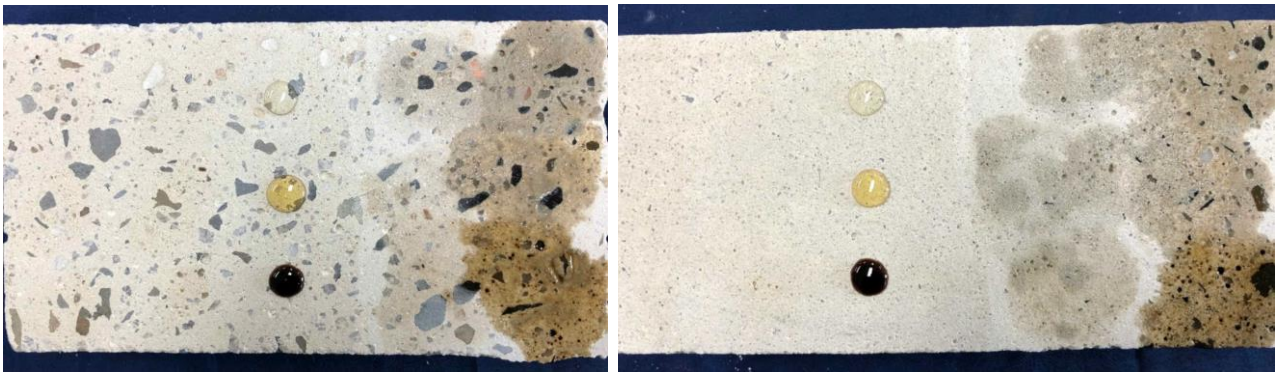


***Figure 4.*** *Oil beading effect and staining status at* ***6 hours*** *during the 24 hour oil staining test*
*Both treated parts show no or very light oil stains compared to that of the heavy oil stains on the controls*

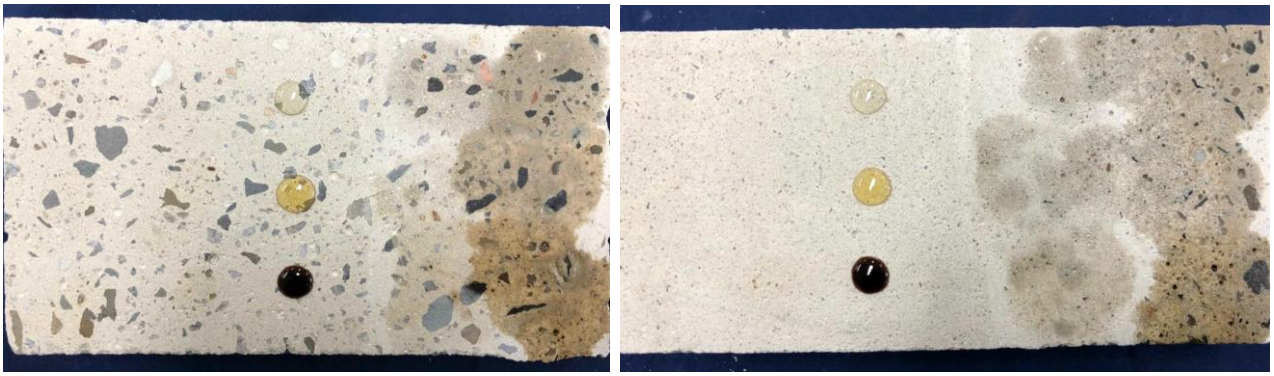


***Figure 5.*** *Oil beading effect at the end of the oil staining test (**24 hours**)*
*The oil beading effect shows no significant change compared to that at the start of the oil staining test*

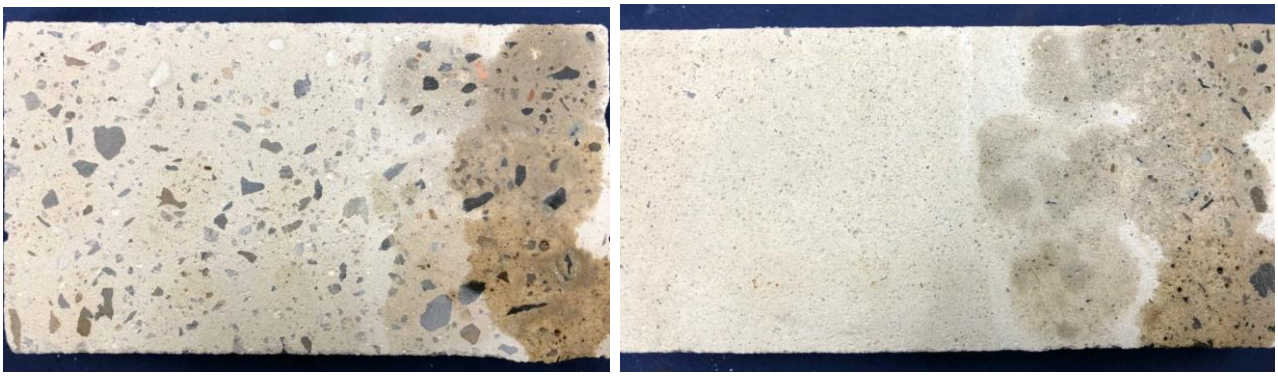


***Figure 6.*** *Oil staining status at the end of the oil staining test (**24 hours**)*
*Both treated parts show no or very light oil stains compared to that of the heavy stains on the control surfaces*

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|---|---|---|
| **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 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. Please contact Tech-Dry on (03) 9699 8202 for further information.

**Handling & Storage:** DENSACRETE 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$^{o}$C. The product should be used within use-by-date. The sealer should be used up as soon as possible after the original container is opened.

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

**Packaging:** DENSACRETE PREMIUM is available in 20 litre plastic containers. Other size packages are available on request.