

RESIDENTIAL  
& COMMERCIAL

INDUSTRIAL  
& MARINE

ART  
& CRAFT

**SHIMICOAT**  
SURFACE SOLUTIONS



# Densilicate

## *Concrete Densifier*

## Penetrating Sealer

### Pack Sizes

Pack Sizes
5Lt
20Lt

### Description

Densilicate is a multi-purpose concrete densifier, binder, dust-suppressant, sealer, concrete impregnator liquid, used by professionals to increase the surface integrity. The product is also used as part of concrete polishing process to harden the surface by formation of Calcium Silicate (Glass Component).

SHIMICOAT Densilicate contains alkaline silicate based concrete densifier and a blend of specialty surfactants to assist surface penetration and deep hardening of the surface. The product is a chemical hardener which is applied to concrete floors and substrates to reduce surface porosity, increase hardness and provides dust-proofing properties. Densilicate is designed to help decrease cleaning and help make the surface less penetrable to undesirable fluid and stains. It produces a hard dust-free finish surface.

SHIMICOAT Densilicate is ideal for concrete surfaces especially those soft, damaged, powdered or friable cement and masonry surfaces. The product is engineered for warehouses, commercial & industrial and Basement Floors.

SHIMICOAT Densilicate applied to the surface to:

- Harden the surface & Dustproof
- Fill in the pores at the surface
- Increase surface density
- Improve the wear resistance
- Penetrating Alkaline silicate Solution
- React with free Calcium and Lime
- Fills voids, creating strength and durability
- Protect against sunlight, oil, traffic and dirt
- Provides a hardened densified concrete surface
- Moisture barrier enhancer
- Improve water-resistant
- Minimize water erosion
- Enhance chemical resistant
- Minimize efflorescence formation
- Increase lifespan of concrete surface
- Ideal to densify concrete surface for Diamond Polishing
- Will not flake, peel or scratch off
- Odorless and pleasant to work with

Convert brittle lime into Super-hard Calcium Silicate:

Lime (Calcium Oxide) + Silicate Densifier → Calcium Silicate + Alkaline Hydroxide



**MATERIALS**



**CHEMICALS**



**RESINS**



**EQUIPMENT**

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SHIMICOAT Densilicate is a high-performance Concrete Densifier–Surface Impregnator can be used to effectively be used as part of concrete polishing process. Please read SHIMICOAT Concrete Polishing procedure for further details.

SHIMICOAT Densilicate can be used on new and old concrete surfaces and granolithic pavers where a hard surface with light to moderate abrasion resistance is required. Ideal for floor surfaces such as garage, workshops, warehouses, industrial plants, stores, shopping malls, parking structures, service stations in both residential and commercial capacities.

Suitable for both interior or exterior applications. On concrete slabs where no specific curing efficiency or standards are required. Most economical solution for dustproofing concrete floors, especially for large floors.

## Features

SHIMICOAT Densilicate is ideal for uncoated concrete surfaces such as natural or semi-polished concrete surfaces and slabs.

The product provides high performance protection to industrial concrete flooring, roads, parking areas, concrete pipes, storage tanks and other concrete surfaces. SHIMICOAT Densilicate is the most economical solution to dustproofing and long-lasting life of concrete surface.

- Seals Concrete, hardens surface, dustproof and protect in one easy application
- It reacts with Lime (Calcium Hydroxide) to form highly stable, super-hard and solidified Silicate Compound
- Voids are reduced to minimize water penetration while maintaining surface breathability
- Non-Toxic, Odorless and Environmentally benign
- No wear, No erosion, No Film Forming, No Peeling or Flaking Off
- Abrasive and scratch resistant
- Densifies concrete for diamond polishing, enhanced gloss
- Hardens and increases the life of Concrete
- Improved chemical and abrasion resistance compared to untreated concrete
- Fast and easy to apply
- Improves cleanability
- Good penetration
- Economical
- Ready to Use (RTU), no mixing is required

SHIMICOAT Densilicate contains alkaline silicate and a blend of biodegradable surfactants to assist with deeper surface penetration.

## Usage

Each Liter covers 6sqm (6sqm/Lt) – Applied in multi-stages  
20Lt Drum covers approximately 100sqm

## Application

- Use Microfiber Flat Mop
- Apply in multi-stages
- DO NOT puddle, Lick wet the surface
- DO NOT walk over wet surface, NO footprints
- Read SHIMICOAT Polishing process for further information



## Dry Time at 25°C

First Coat:	30 Min at 25°C
Consequence Coats:	20 Min at 25°C (Lick Wet)
Light Traffic:	3 Hours
Heavy Traffic:	24 Hours

## Clean Up

### Clean-Up with Water

SHIMICOAT Densilicate is a water-based product, water soluble and can easily be cleaned up by water.

Wash, rinse and flush with water. General purpose detergent can be used.

## Preparations

Clean and dry surface. Ensure surface to be polished is free of all dirt, grease, oil, paint, curing agents and other contaminants. Removal of Oil Contamination by degreaser and alkaline cleaning pressure wash  
Acid-wash to enhanced surface porosity and etch the surface.

For further information, please refer to SHIMICOAT Instruction for “Surface Preparations”

**NOTE:** Surface preparation for polishing is different to Epoxy coating. Please read SHIMICOAT Polishing Procedure for further information.

## Specifications

### Physical Properties:

<b>Appearance</b>	Clear what thin liquid
<b>Solid Content (%)</b>	>50% Reactive Silicate
<b>VOC</b>	0%
<b>Thinning, Dilution Chemicals and Clean Up</b>	Water Soluble
<b>Application Conditions (Temp °C)</b>	10 – 30 °C (DO NOT apply at Sub-Zero Temp)
<b>Coverage Rate</b>	5 sqm/L to be applied in multi applications

## Direction

Clean and dry surface. Ensure surface to be polished is free of all dirt, grease, oil, paint, curing agents and other contaminants. Removal of Oil Contamination by degreaser and alkaline cleaning pressure wash  
Acid-wash to enhanced surface porosity and etch the surface.

**NOTE:** Surface preparation for polishing is different to Epoxy coating. Please read SHIMICOAT Polishing Procedure for further information.

For further information, please refer to SHIMICOAT Instruction for “Surface Preparations”

Using a watering can or straight out of the drum, pour small quantity of SHIMICOAT Densilicate onto the surface. Spread out in zigzag and crisscross action, using a flat microfiber mop. DO NOT allow puddling, DO NOT walk over the wet surface.

SHIMICOAT Densilicate creates a super-hard surface like Glass and it is important to apply uniformly without any footprints or roller marks.

Apply at least 2 coats.

Read SHIMICOAT Polishing process for further information



## Warning

- Please consult MSDS of the product prior to use.
- SHIMICOAT Densilicate will not penetrate through curing compounds or other coatings on the concrete being treated. These must be removed by mechanical means such as diamond grinding prior to application.
- Coverage and consumption rates will vary depending on the porosity and roughness of the concrete being treated. Stain resistance and sheen level will vary depending on the porosity and roughness of the concrete being treated.
- SHIMICOAT Densilicate works by reacting with Calcium Hydroxide available in the concrete. If the concrete had been rain affected or overworked in the laying process there may not be sufficient Calcium Hydroxide present for the reaction to occur. SHIMICOAT Densilicate will not rectify damaged concrete. In such situations, we recommend grinding and removal of the poor in Calcium Hydroxide and damaged top layer. The final grind may affect the overall characteristics of the floor. It is recommended to carry out grinding and slip trials on projects where slip may be of concern.
- SHIMICOAT Densilicate is not suitable for below freezing temperatures (Sub-Zero).
- Adverse weather conditions or humidity may affect cure time and application rates.

## Storage

The products shall be stored out of direct sunlight and heat at all times. The shelf life of the product is 24 months, mix uniformly for 3 minutes prior to use.

For further information, please contact SHIMICOAT technical team.

## DISCLAIMER

Material Safety Data Sheet, Technical and Environmental Data Sheet can be provided upon request.

The information provided in this document is guidance only and considering the uses of this product are beyond the seller's control, the product is sold without guarantees or warranties. Warranties and guarantees shall be governed by SHIMICOAT Standard Terms of Sale. The purchaser shall make its own tests to determine the suitability for their specific application, and Shimicoat Pty Ltd is taking no responsibility for misuse of the product. The purchaser assumes all risk of use and handling of this product. This product will be happily replaced or credited back if defective. Beyond this, Shimicoat Pty Ltd is not liable for any damages caused by this product or its use.

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*The customer is not released from the obligation to conduct careful inspection and testing of supplied goods.*