

# **CCS DENSA-CON**

# DESCRIPTION

CCS Densa-Con is a water-based hybrid concrete densifier containing potassium and lithium silicates which penetrate into the concrete to block the capillaries by forming calcium silicate hydrate. This action binds and hardens the top layer of the concrete to provide a dense, hard and dust proof surface in addition to providing increased abrasion resistance and surface absorption of liquids.

CCS Densa-Con reacts with elements in the concrete surface to impart a low sheen which enhances the appearance of the surface whilst maintaining a natural concrete look.

#### **USES**

- · Interior and exterior concrete floors
- Polished concrete floors
- · Warehouse floors
- Commercial floors
- Manufacturing plants
- Distribution centres/warehouses
- · Workshops and car parks
- New and existing concrete

#### PACKAGING

CCS Densa-Con is available in a 20 litre drum.

### **COVERAGE RATES**

Application rates vary considerably depending on the porosity of the concrete and weather conditions. Dense, hard or new concrete will likely absorb less product compared to old permeable concrete which may absorb considerably more. Consumption rates are expected to be between 5-25m<sup>2</sup> per litre, per coat.

## PREPARATION

Surfaces to be sealed should be clean from all contaminants such as curing compounds, membranes and coatings that may obstruct the penetration of CCS Densa-Con. New concrete should be cured before use.

The surface to be sealed must be dry prior to the application of CCS Densa-Con. If the concrete surface has been burnished or excessively trowelled a light grind or abrading of the concrete is recommended to open the surface (for maximum product penetration). Where the surface has been subject to acid treatment the concrete should be completely neutralised using copious amounts of fresh water and allowed to dry.

#### **APPLICATION**

CCS Densa-Con can be applied with a low-pressure sprayer, mop or soft bristle brush or broom. The product should be uniformly flooded onto the surface with no areas of puddling. The densifier should remain on the surface as a wet liquid film for up to 10 minutes to ensure correct absorption occurs. If the first coat is rapidly absorbed into the surface a second coat should be applied immediately in a wet-on-wet application method. If the surface has dried out do not apply any further densifier. Any excess densifier should be removed after 10 minutes as this may dry and leave unnecessary residue on the surface which may only be removed by mechanical means. If a higher water-resistant outcome is required, the above wet-onwet application can be performed repeatedly on the one occasion to ensure enough densifier is applied to the surface.

To achieve better penetration the densifier can be diluted at 1:1 with clean water before applying. More wet-on-wet applications may be required to ensure enough densifier is applied. A test should be conducted before application.

#### **APPEARANCE**

After placement, the concrete may initially appear darker than the surrounding concrete.

As the product dries out, the concrete surface will gradually increase in hardness with a subsequent increase in gloss level.

# **PRODUCT INFORMATION**

Appearance:Colourless clear liquidDensity:1.0-1.1 g/mlpH Value:10-11Solubility in water:Soluable In water

#### **CLEAN UP**

Clean all application tools with water.

#### DRYING

Allow CCS Densa-Con to dry for approximately 4–6 hours for pedestrian traffic and 24 hours before subjecting the surface to vehicular traffic.

## **PRECAUTIONS**

CCS Densa-Con will not penetrate curing compounds. These must be removed prior to application.

CCS Densa-Con is not recommended as a curing compound.

During application, be sure to protect all metals, glass, paint, or brick surfaces. If accidentally over-sprayed, immediately wash the surface with clean water.

CCS Densa-Con hardens the surface by penetrating and blocking the pores and capillaries of the concrete. There are many factors that determine the amount of surface hardening and the final outcome therefore it is recommended that a preliminary test be undertaken to determine the suitability of this product.

Do not apply in cold or freezing temperatures.

**Note:** As CCS Densa-Con activates by mixing with the calcium hydroxide in the concrete, the product performance may be reduced when used over rain damaged or overworked concrete. This product cannot fix poorly finished concrete.

## **STORAGE**

CCS Densa-Con 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 densifier is best used within the use-by-date. The product should be kept in the sealed original container under 25°C. The densifier 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. For further information consult the Safety Data Sheet and read the product label carefully before use. Safety Data Sheets are available from <u>www.concretecoloursystems.com.au</u> or by calling 1800 077 744.

# User Responsibility, Product Selection and Compatibility

CCS warrant that their manufactured product is free from defects as well as being suitable for the purpose for which it is intended as long as it has been used and applied in accordance with the most current Technical Data Sheet from CCS.

In practice, differences in materials, substrates and actual site conditions require an assessment of product suitability for the intended purpose.

The user is responsible for checking the suitability of products for their intended purpose.

Further, combinations of products that form a total system are often required to service particular applications. Due to the multitude of products available to service an application, only products from the CCS system of products must be used in combination with this product to ensure it will be suitable for the purpose for which it is intended.

The product must also not be mixed or used in combination with any other product which is not a product supplied by CCS.

The information given in this data sheet is based on our current knowledge of the product when properly stored, handled and applied. We cannot guarantee that the product will be suitable, effective or safe when used for any purpose other than its stated uses.

To the extent that it is lawful, we exclude warranties implied by law and limit our liability to the cost of replacing the product. We accept no responsibility for loss or injury caused by improper use, inadequate preparation, inexpert or negligent application, or ordinary wear and tear.

Service or advice given by our staff should not amount to responsibility for the project - since the owner, or their contractor (and not River Sands), is responsible for procedures relating to the application of the product.



A Division of River Sands Pty Ltd

BRISBANE (HEAD OFFICE) Cnr Riverland & Monte Khoury Dr, Loganholme Qld 4129

Ph 1800 077 744 | (07) 3412 8111 helpline@concretecoloursystems.com.au www.concretecoloursystems.com.au