



## DATA SHEET

# LithiCoatz®

**Lithium Silicate Concrete Densifier, Hardner and Sealer with Water Saving Technology**

### PRODUCT DESCRIPTION

**LithiCoatz®** is a VOC free, environmentally friendly lithium silicate concrete floor and vertical surfaces densifier, hardener and sealer. This product penetrates bare concrete surfaces and transforms them into a permanently dust free floor with a gloss that gets better with age.

There's no scrubbing, no washing and the water saving technology makes **LithiCoatz®** environmentally friendly and easy to apply. This product may be applied to new and existing cured, concrete as a chemical hardener, dustproofers and densifiers as well as vertical surfaces to improve surface durability and appearance. **LithiCoatz®** is also very effective on polished concrete surfaces to harden, densify and protect the attractive and durable finish.

**Basic Use:** **LithiCoatz®** provides long-lasting dustproof performance on high traffic concrete floors and vertical surfaces in CHPS schools projects, projects seeking LEED certification and other projects, including retail offices, grocery stores, shopping malls, civic centers, sports arenas, stadiums and other commercial buildings. It is also appropriate for factories and warehouses, pharmaceutical plants, textile mills, automotive, truck and bus terminals and laundries, as well as food processing plants such as meat packing plants, canning factories, breweries and bakeries

### FEATURES & BENEFITS

- Densities and dustproofs bare concrete floors and vertical surfaces
- Water saving technology (no scrubbing, no flushing residue with water)
- Reacts instantly upon contact with floor surface
- Produces surface gloss which improves with age
- Will not absorb water or contribute to floor sweating
- High traction nonslip for safe floors
- Effective on both new and old floors
- UV stable, will not yellow, fade or discolor, VOC compliant, non-flammable, odorless

- Easy to maintain, no waxing necessary
- Resistant to surface whitening
- Can be applied to freshly poured concrete

### ESTIMATING

**LithiCoatz®** is available in factory sealed 5L, 20L, 200L and 1000L containers. Each container is properly identified with product name and batch number.

**Typical Application Rates:** Coverage dependent upon surface texture and porosity. Typical rate is 15m<sup>2</sup> / litre on hard trowelled, dense concrete. One coat is normally recommended. For best results on porous concrete surfaces, apply second coat after the first coat has dried completely and any dried residue has been removed.

**Polished concrete:** Apply two coats: the first at 400 and the second at 15m<sup>2</sup>/litre for maximum hardness and surface durability, per instructions.

### TECHNICAL DATA

#### Typical Properties:

|                                 |                  |
|---------------------------------|------------------|
| Type Solids                     | Lithium Silicate |
| Active Solids                   | 100%             |
| Flash Point                     | None             |
| Viscosity                       | Water Thin       |
| PH                              | 10.9             |
| Specific Gravity                | 1.10             |
| Colour                          | Clear            |
| Weathering, UV Test             | Excellent        |
| Surface Breathable              | Yes              |
| Skid Resistance, ASTM-E-303     | Good             |
| SCOF-wet or dry-                | +0.6             |
| Abrasion resistance, ASTM-C-799 |                  |
| Increased wear resistance, VOC, | +200-400%        |
| Gm/1                            | 0                |

### INSTALLATION

#### Surface Preparation:

Existing, Cured Concrete: Remove unsound concrete and fill holes, cracks and deteriorated areas. All residue, oil, sealers, waxes, contaminants and laitance must be removed from surfaces to ensure maximum penetration.

## Application:

Apply one, saturating coat of **LithiCoatz®** in a uniform manner, at a rate of 15 m<sup>2</sup>/litre. Install with a low-pressure sprayer or other device, maintaining a wet surface sheen for 15 to 20 minutes. Apply more **LithiCoatz®** to areas that are more porous and appear to readily absorb the material. Redistribute any excess **LithiCoatz®** with soft broom or microfibre pad, allowing material to dry uniformly. Avoid brooming once drying begins.

## Walls:

Ensure all wall surfaces are free of release agents and any other contaminants. Apply one coat of **LithiCoatz®** in a uniform manner at the rate of 15m<sup>2</sup> per litre. Install with a low-pressure sprayer or other device. Apply more **LithiCoatz®** to areas that are more porous and appear to readily absorb the material.

## New concrete application:

to fresh concrete may be necessary. In this case apply a uniform coat after final troweling and when surface water glaze is gone, but before application of a dissipating curing compound. Apply **LithiCoatz®** at the rate of 15 m<sup>2</sup>/litre with a low-pressure sprayer. Remove any puddles or excess accumulation with soft broom or microfiber pad, allowing material to dry uniformly. After treatment has dried a specified dissipating resin curing compound per industry standard can be applied.

## Diamond Polished Concrete:

After a sequence of polishing steps has been determined, proceed with coarse grinding steps. After the 400-diamond grit step has been reached and completed, apply one uniform, saturating coat of **LithiCoatz®** at 10-15 m<sup>2</sup>/ litre, keeping the surface wet for 15 to 20 minutes. Do not puddle. When dry, proceed with additional required polishing steps. After the 800-grit level and before the final polishing step, uniformly apply second coat of **LithiCoatz®** at 15-20 m<sup>2</sup>/litre. Allow to dry and remove any residue with polishing diamonds. No water flush is required.

## FOR BEST RESULTS:

- Apply when concrete temperatures are 4°C and rising.
- Do not use acidic or highly alkaline cleaners on treated surfaces.
- All spills must be cleaned up in a timely manner.
- On new, interior concrete placements, we recommend finishing the concrete to a hard steel trowel finish (3 passes) per ACI-302.1R, Class 5 floor.

## MAINTENANCE

The long term performance, appearance, and life expectancy of wear surface products are critically dependent upon a good routine maintenance program designed specifically for the installed wear surface type, traffic, and other conditions. Properly placed walk-off mats, inside and outside will help increase the life of the floor. Some cleaning products and equipment or improper use of products can damage a wear surface

appearance over time. Recommended maintenance program consists of frequent and thorough cleanings. Frequency of washing will vary, as it may be necessary daily, weekly or less frequently depending on floor usage and age. A mechanical walk behind or ride-on scrubber is an efficient and economical means of regularly cleaning concrete floors. Only soft scrubbing or soft brush attachments should be used when mechanically scrubbing your floor. Do not use aggressive abrasive pads or brushes. The use of black scrubbing pads, diamond impregnated pads or carbide impregnated type brushes may dull the surface gloss. Wet mops work well on small floors or places where a mechanical scrubber will not fit.

**LithiCoatz®** will aid in the curing of fresh concrete but does not meet Industry Standards as a standalone cure.

## PRECAUTIONS:

Avoid contact with skin, eyes and clothing. Wear skin and eye protection. Wash thoroughly after handling. Do not take internally.

Please refer to product Safety Data Sheet (SDS) before using. Immediately wash off with water all over-spray from glass, metal surfaces and other materials which may be damaged. Do not dilute.

## STORAGE/SHELF LIFE:

**LithiCoatz®** containers are to be sealed and stored in a clean, dry place above 4°C. Shelf life is two years in unopened containers when properly stored. Do not freeze.

## WEBSITE:

**CONCORD SEALERS** convenient Internet website offers instant access to Tech Data Sheets, Material Safety Data Sheets, product updates and other useful information. Visit... [www.concordsealers.com.au](http://www.concordsealers.com.au)

**CONCORD SEALERS AUSTRALIA** is ready to respond to your concrete information needs, anytime, anywhere!

## LIMITED WARRANTY:

This product is warranted to be free of defects in material and workmanship, and conform to Concord Sealers quality control standards.

*All recommendations, statements and technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty or guarantee of any kind, expressed or implied including but not limited to, an implied warranty of merchantability or an implied warranty of fitness for a particular purpose.*

*Satisfactory results depend upon many factors beyond Concord Sealers control. User shall rely on his or her own information and tests to determine suitability of the product for the intended use and user assumes all risk, loss, damage, expense and liability resulting from his or her direct use, indirect use or consequential to their use of the product.*