# ULTRASIL LI\*

# LIQUID DENSIFIER, SEALER AND DUSTPROOFER FOR CONCRETE



# **PACKAGING**

ULTRASIL LI+ is packaged in 20 litres

# APPROXIMATE YIELD

ULTRASIL LI+ will cover from 6.1 to 19m<sup>2</sup>/litre of concrete, depending upon texture and porosity of the surface.

# **CLEAN-UP**

Clean brushes, tools, equipment and potable water flush sprayer with immediately after use.

#### SHELF LIFE

2 Years in original, unopened container.

# **DESCRIPTION**

ULTRASIL LI\* is a water-based lithium silicate solution used to densify, seal and dustproof concrete surfaces. ULTRASIL LI\* penetrates and chemically reacts within the concrete surface, producing extremely hard and dense calcium silicate hydrate (CSH) in the pores. The result is concrete that is more durable, easier to clean and more resistant to damage from water and mild chemicals. Because the product of the lithium silicate-concrete reaction is formed internally, the protection of ULTRASIL LI\* never peels or flakes off, is unaffected by moisture and lasts much longer than the surface sealers and coatings.

# PRODUCT CHARACTERISTICS

# FEATURES / BENEFITS

- · Seals, densifies and dustproofs concrete in one operation
- Water-based, low VOC
- Treated concrete is more dense and durable
- Permanent treatment that never peels off
- Makes concrete easier to maintain
- Can contribute to LEED points (EQ Clean rooms Credit 4.2)

# PRIMARY APPLICATIONS

- · Interior concrete floors
- Healthcare facilities
- Distribution centres
- · Diamond polishing concrete
- · Mechanical rooms
- · Institutional floors
- Manufacturing plants
- · Commercial and retail floors
- Transportation terminals
- · Warehouse floors

# **TECHNICAL INFORMATION**

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

Form	Clear, thin liquid
Specific Gravity	1.10
pH	11.7
Density	1.1kg/litre
Solids / Active Content	15%
VOC Content	<pre>&lt; 5g/litre</pre>
Freeze Point	0°C

# **DIRECTIONS FOR USE**

ULTRASIL LI+ should be used directly from the container and requires no dilution or pre-mixing.

Surface Preparation (Newly Concrete): Cure the concrete by a wet or sheet cure method in accordance with ASTM C171, or with a curing compound that meets the requirements of ASTM C309. To maximise strength and other physical properties of the concrete slab, new concrete should cure for seven days or longer before application of ULTRASIL LI+. For fast track projects, the cure time may be reduced at the discretion of the project engineer. If a curing compound is used, it must be completely removed before application of ULTRASIL LI+. Surfaces to be treated with ULTRASIL LI+ must be clean, dry and absorbent.

Surface Preparation (Existing / Older Concrete): Concrete must be clean and free of any materials that could prevent penetration of ULTRASIL LI+, such as curing compounds or cure & seals, paints, coatings, dirt/oil, waxes, etc.

Application (New or Order Concrete): Air temperature during application must be between 2°C and 38°C for proper chemical reaction of the ULTRASIL LI+. Apply a single coat of ULTRASIL LI+ using a low pressure sprayer equipped with a 1.9 litre/min spray tip. Apply at a coverage rate that results in a uniformly wet surface without puddles. While ULTRASIL LI+ is still wet, use a soft-bristle broom or microfiber pad to redistribute and evenly spread out the material. Do not continue to brush or spread out ULTRASIL LI+ once the product begins to dry. Keep the floor wet with ULTRASIL LI+ for 5 to 10 minutes.

Do not allow excess ULTRASIL LI+ to puddle and dry on the floor. This may result in a white residue that must be removed immediately with scrubbing.

If immediate surface sheen is desired, dry buff or burnish the floor with a polishing pad appropriate for the desired end gloss result.

**Floor Joints:** If the floor joints are to be filled after ULTRASIL LI+ has been applied, they must be thoroughly cleaned before installation of joint filler. Cleaning joints by circular concrete saw or a drill equipped with a wire wheel is recommended.

Maintenance: Contact The Euclid Company for detailed maintenance procedures.

# PRECAUTIONS / LIMITATIONS

- Protect ULTRASIL LI+ from freezing. In the event of freezing, thaw and stir or agitate before using.
- Protect metal, glass, wood, paint or brick from contact with ULTRASIL LI+. If accidently oversprayed on these surfaces, wash surface with clean water immediately.
- Allow the product to dry for 4 to 6 hours at 21°C before exposure to foot traffic or rain.
- In all cases, consult the material safety data sheet before use.