ULTRASIL Li+

Liquid Densifier, Sealer, and Dustproofer For Concrete

EUCLID CHEMICAL

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 surface sealers and coatings.

Primary Applications

- Interior concrete floors
- Commercial and retail floors
- Warehouse floors
- Manufacturing plants
- Distribution centers
- Transportation terminals
- Institutional floors
- Health care facilities
- Clean rooms
- Mechanical rooms

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 Credit 4.2)

Technical Information

Typical performance at 21°C

Form:	Clear, thin liquid
Specific Gravity:	1.10
pH:	11.7
Density:	1.1 kg/L
Solids / Active Content:	15%
VOC Content:	<5 g/L
Freeze Point:	0°C

Packaging

ULTRASIL LI+ is packaged in 18.9 L pails.

Shelf Life

2 years in original, unopened package

Specifications / Compliances

USDA Compliant

Coverage

1 litre of **ULTRASIL Li+** will cover from 6 to 20 m^2 of concrete surface depending upon the texture and porosity of the surface.

Flowcrete Asia Sdn Bhd (366254-X)
Lot 37631 & 37632 Jalan 6/37A Taman Bukit Maluri
Industrial Area Kepong 52100 Kuala Lumpur Malaysia
Tel: +60 3 6277 9575 Fax: +60 3 6277 4645
Email: asia@flowcrete.com

Directions for Use

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

Surface Preparation (New Concrete): Cure the concrete by a wet or sheet cure method in accordance with ASTM C-171, or with a curing compound that meets the requirements of ASTM C 309. Euclid Chemical's dissipating curing compound Kurez DR VOX is recommended. To maximize strength and other physical properties of the concrete slab, new concrete should cure 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+** After the curing method is removed, allow the slab to air dry a minimum of 24 hours prior to application. Insufficient drying of the concrete will prevent full penetration of **ULTRASIL Li+**, reducing its effectiveness.

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. If necessary, use EUCO Clean & Strip to remove these contaminants before applying **ULTRASIL Li+**.

Application (New or Old 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 L/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 - 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 grinder equipped with a wire wheel is recommended.

Clean Up

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

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.
- If added abrasion resistance is required in new construction, consider the use of a dry shake floor hardener. such as SURFLEX, EUCO-PLATE HD, or DIAMOND-PLATE.
- Allow the product to dry 4 to 6 hours at 21°C before exposure to foot traffic or rain.
- In all cases, consult the Safety Data Sheet before use.

Rev: 29/09/16