LITHUM SILICATE

Lithium Silicate Concrete Floor Densifier

Product Description

Lithium Silicate is an environmentally friendly, VOC free, lithium silicate concrete floor densifier, hardener, and sealer. Lithium Silicate is designed to penetrate untreated, bare concrete surfaces providing a permanent glossy, dust proof floor. Lithium Silicate reacts quickly with the floor surface to produce initial and ultimate hardness. Lithium Silicate shows great effectiveness when used in conjunction with a floor polishing machine, yielding a highly protected, hardened, and densified floor.

Benefits & Features

- VOC compliant, non-flammable, and odorless formula for easy indoor use.
- Effective on new and old concrete surfaces and very easy to maintain. Combats surface ASR.
- A safer floor surface. Provides excellent non-slip, high traction properties
- Yields a UV stable, superior sheen, and resistance to abrasion and scuffing.

Recommended Applications

Lithium Silicate is recommended for mechanical concrete polishing systems as well as broom finished, troweled, burnished, and other concrete floor applications where a floor densifier is specified.

Technical Information

Solids	5% (Active)	Wet Appearance	Clear - Hazy
Drying Time	1-2 Hours	Dry Appearance	Crystal Clear
Re-Coat Time	2-3 Hours	VOC Content	0
Foot Traffic	12-24 Hours	Blush Resistance	Excellent
Wheel Traffic	24-48 Hours	Solvent Resistance	Excellent
Application Temp	40°F - 85°F	Concrete Adhesion	Excellent

***Please note that low air and/or concrete temperatures and/or relative humidity may extend drying times. Follow recommended coverage rates for best results.

Specifications/Compliances

Lithium Silicate is VOC and OTC compliant in all areas of the United States and many foreign nations.

Approximate Coverage Rates

Freshly placed, uncured, troweled concrete	800-100 ft ²
Cured, troweled concrete	600-800 ft ²
Cured, ground concrete	400-800 ft ²

Shelf Life

Lithium Silicate has a shelf life of one year in it's original, sealed, unopened container.

Packaging

Lithium Silicate is packaged in 1 gallon cans, 5 gallon pails and 55 gallon drums.

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Constant

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Instructions for Use

<u>Surface Preparation</u>: Protect all people, property, and plants not to be treated with Lithium Silicate as product splash and wind drift could occur.

Do not apply to any surface that is dirty, frozen or heavily saturated or flooded with water. Surface must be clean and free of all debris, dry and absorbent. Mist water in a small area to test the surface for absorbency. Any surface to be treated should uniformly wet out. If the surface to be treated does not wet out uniformly, it is then recommended to prepare the surface mechanically to remove any remaining surface contaminants.

Mixing: No mixing is necessary prior to application.

Application: New (Uncured) Concrete: It is not traditionally recommended to apply Lithium Silicate to concrete earlier than 28 days. If this application is necessary, ensure the removal of all soft cut saw debris prior to application. Apply after final troweling at a rate of 800-1000 sq. ft. per gallon using an industrial grade sprayer with a 0.5 gpm fan tip, lint free mop, or soft bristle push broom. Ensure floor saturation for 15-20 minutes, removing any puddle areas with a soft bristle push broom or mop. Apply more Lithium Silicate to areas that appear to be more porous and are absorbing the material more. Rework any excess material with a soft bristle broom as to allow the material to dry evenly. Remove any excess or residue with a stiff bristle broom or dry pad floor buffer.

Existing Concrete: Apply at a rate of 600-800 sq. ft. per gallon using an industrial grade sprayer with a 0.5 gpm fan tip, lint free mop, or soft bristle push broom. Ensure floor saturation for 15-20 minutes, removing any puddle areas with a soft bristle push broom. Apply Lithium Silicate to areas that appear to be more porous and are absorbing the material more. Rework any excess material with a soft bristle broom as to allow the material to dry evenly. Remove any excess or residue with a stiff bristle broom or dry pad floor buffer.

Polished Concrete: After completing the 400 grit stage of polishing, apply a saturating, uniform coat of Lithium Silicate at a rate of 400-600 sq. ft. per gallon using an industrial grade sprayer with a 0.5 gpm fan tip, lint free mop, or soft bristle broom, ensuring floor saturation for 15-20 minutes. Do not allow to puddle. Allow to dry. Follow through with additional polishing steps until desired appearance is achieved. Additional applications of Lithium Silicate can be added at any stage before the final polishing phase is done if necessary at a rate of 600-800 sq. ft. per gallon. Allow to dry. Remove any excess residue with polishing diamonds or polishing pads. Flushing with water is not necessary. Note: For softer concrete an initial application of Lithium Silicate can be applied after the 80 grit stage prior to the standard polishing steps to achieve a harder surface.

Please Note: It is always recommended to test the product in a small, inconspicuous area (on the same concrete substrate) for desired results prior to application. Coverage rates may vary for all coatings and substrates depending on porosity, density, texture, etc. If applying by spray method, extended coverage rates may be achieved, but be aware that less material will be applied and performance expectations may be limited.

Clean-Up

Use soap and warm water. Dispose of containers in accordance with local and federal regulations.

Product Removal

Not applicable.

Precautions & Limitations

- Lithium Silicate will freeze. It is recommended to store in an area between 40°F and 85°F.
- Do not puddle or apply in thick coats. Lithium Silicate should be applied only as explained above.
- Lithium Silicate is harmful if swallowed. Abide by recommended safety guidelines.
- Coverage rates depend upon many conditions including application method, surface porosity, applicator, etc..
- Lithium Silicate is not a curing compound. Use on concrete less than 3 days old may result in a reduction of effectiveness.
- The use of high alkaline or acidic cleaners on the treated surface is not recommended and can be damaging.
- Protect metal, glass, wood, brick, and painted surfaces. Wash immediately with clean water if contact occurs.

Special Notes

Please consult Safety Data Sheet (SDS) and read warranty information prior to use. This information can be requested by contacting customer service at 330-682-5678.

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