

Mapecrete Hard LI

Lithium Silicate Densifier and Sealer for Concrete



DESCRIPTION

Mapecrete™ Hard LI is a water-based, VOC-free, lithium silicate solution used to densify, seal and dustproof horizontal, hard-troweled concrete surfaces. It penetrates the concrete surface, chemically reacts with the free lime and produces a dense, hard matrix within the concrete and a more durable surface on top.

FEATURES AND BENEFITS

- Environmentally friendly with a VOC-free and odorless formula
- Effective against acids, alkalis, salts, oils and water
- Densifies, dustproofs and seals concrete surfaces in one operation
- Improves old, worn concrete that is carbonated, soft and powdery

WHERE TO USE

- Industrial floors, such as warehouses, distribution centers, manufacturing plants and transportation terminals
- Concrete floors in medical buildings, institutions, “clean rooms,” mechanical rooms, and commercial and retail stores
- Effective on horizontal, interior concrete surfaces

SUITABLE SUBSTRATES

- New, cured (at least 7 days old) and existing Portland-cement concrete surfaces, structurally sound and stable

Consult MAPEI's Technical Services Department for installation recommendations regarding any substrates and conditions not listed.

SURFACE PREPARATION

For new concrete

- After final troweling, moisture-cure or sheet-membrane-cure in accordance with ASTM C171, or use a clear, dissipating curing compound in accordance with ASTM C309. Cure for 7 days or longer for best results.
- Concrete should be clean and free of dirt, residue and any contaminants that may interfere with the penetration of *Mapecrete Hard LI*.
- Completely remove any curing compound. Before applying *Mapecrete Hard LI*, allow the floor slab to air-dry for at least 24 hours after the removal of the curing compound.

For existing/older concrete

- Concrete should be clean and free of any dirt, residue, debris, curing compounds, cure and seals, paint, coatings, oil and wax that could prevent the penetration of *Mapecrete Hard LI*.

MIXING

Before product use, take appropriate safety precautions. Refer to the Safety Data Sheet for details.

- *Mapecrete Hard LI* requires no pre-mixing or blending. Use directly from the container.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

1. Pre-dampen concrete when ambient temperatures are greater than 80°F (26°C). Apply *Mapecrete Hard LI* after all standing water has disappeared.
2. Apply *Mapecrete Hard LI* to the concrete surface with a low-pressure sprayer at a spread rate of 250 to 800 sq. ft. per U.S. gal. (6.12 to 19.6 m² per L). Apply uniformly without producing puddles on the surface.
3. Using a microfiber pad or soft-bristle push broom, redistribute the product evenly over the concrete floor, keeping the surface wet for 5 to 10 minutes.
4. Do not allow excess *Mapecrete Hard LI* to dry on the surface.
5. Any areas showing patches of white on the floor should be immediately flooded with water and scrubbed.

CLEANUP

- Clean tools and equipment immediately after use with soap and water.
- Dried material may require mechanical means for removal.

LIMITATIONS

- Protect *Mapecrete Hard LI* from freezing.
- For optimum installation, apply when surface temperatures are at least 40°F (4°C) and rising.
- If ambient temperature is 70°F (21°C), allow *Mapecrete Hard LI* to dry for 4 to 6 hours before exposure to foot traffic or water.
- Do not use *Mapecrete Hard LI* on textured concrete.
- Excess *Mapecrete Hard LI* may result in white residue where the product has puddled and dried.
- Protect adjacent surfaces – including metals, glass and wood – from overspray. Immediately wash off any overspray with potable water.
- Do not dilute.
- The air temperature during application must be between 40°F and 90°F (4°C and 32°C).

Product Performance Properties

Laboratory Tests	Results
VOC content (SCAQMD Rule 1113)	<100 g per L
Typical VOC content per SCAQMD Rule 1113 testing methods	0 g per L
Density	9.3 lbs. per U.S. gal. (4.22 kg per 3.79 L)
Solids content	16%
Specific gravity	1.12
pH	12.3

Shelf Life and Application Properties

Shelf life	2 years in original, unopened container
Consistency	Clear, thin liquid
Drying time at 70°F (21°C)	
Foot traffic/rain	4 to 6 hours
Wheel traffic	24 hours

CSI Division Classification

Concrete Finishing	03 35 00
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Packaging

Size
Pail: 5 U.S. gals. (18.9 L)
Pail: 55 U.S. gals. (208 L)

Approximate Coverage*

per 1 U.S. gal. (3.79 L)

Substrate Type	Coverage
Typical concrete substrate	250 to 800 sq. ft. (23.2 to 74.3 m²)

* Coverage varies depending on the surface porosity.

ADDITIONAL INFORMATION

Refer to the Safety Data Sheet (SDS) for specific data related to health and safety as well as product handling.

For information on MAPEI’s commitment to sustainability and transparency, as well as how MAPEI products may contribute to green building standards and certification systems, contact sustainability_USA@mapei.com (USA) or sustainability-durabilite@mapei.com (Canada).

WARNING

The test results shown in the TECHNICAL DATA table were obtained in compliance with test methods and curing cycles, if applicable, defined in the industry standards referenced on the Technical Data Sheet. Please note that the use of test procedures or methods other than those indicated in the table could lead to different values and that, in such cases, any liability of our company is excluded.

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement nor replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at www.mapei.com. **ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.**

Before using, the user must determine the suitability of our products for the intended use, and the user alone assumes all risks and liability. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

CONTACT INFORMATION

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Edition Date: May 13, 2025 MK 3000088 (24-2539)

For the most current product data and BEST-BACKEDSM warranty information,
visit www.mapei.com.
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