Mapecrete Hard SB

Silicate-Blend, Liquid Densifier, Sealer and Dustproofer for Concrete





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DESCRIPTION

Mapecrete[®] Hard SB is a special blend of silicate and siliconate polymers specifically designed to penetrate concrete in order to densify, seal, dustproof and harden the surface. It is formulated to chemically react and create an internal bond that increases surface density, durability and abrasion resistance.

FEATURES AND BENEFITS

- Environmentally friendly with a VOC-free and odorless formula
- Can be applied to newly cured and existing concrete
- Will not discolor, yellow, chip or peel
- Resists and allows for the easy removal of tire marks
- Provides an attractive, durable floor for years after application
- Increases water repellency of concrete surfaces

WHERE TO USE

- High-performance areas subject to forklift traffic
- Concrete floors subject to high pedestrian traffic
- Polished concrete floors

SUITABLE SUBSTRATES

 Newly cured (at least 7 days old) and existing concrete surfaces, structurally sound and stable, with a hardtroweled finish

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 dissipating resin-curing compound in accordance with ASTM C309. Cure for 7 days or longer for best results.
- Concrete should be clean and free of any dirt, residue, debris and curing compounds before applying Mapecrete Hard SB.

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 SB*.

MIXING

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

• Mapecrete Hard SB requires no pre-mixing or blending. Use directly from the container.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

- 1. Pre-dampen concrete in hot weather when ambient temperatures are greater than 80°F (26°C). Apply *Mapecrete Hard SB* after all standing water has disappeared.
- 2. Apply *Mapecrete Hard SB* to the concrete surface with a low-pressure sprayer, or by pouring it directly onto the surface and aggressively scrubbing into the surface with a soft bristle broom or mechanical scrubber at the rate of 200 to 250 sq. ft. per U.S. gal. (4.9 to 6.12 m² per L).
- 3. The concrete must be kept wet with *Mapecrete Hard SB* for at least 30 minutes. Add additional material to keep the surface wet.
- 4. If *Mapecrete Hard SB* begins to thicken, lightly spray with clean water and continue scrubbing for another 10 to 15 minutes.
- 5. Remove all excess material from the surface with a squeegee, push it to the next area and repeat the steps above.

CLEANUP

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

LIMITATIONS

- Do not use *Mapecrete Hard SB* as a curing compound. Using it on new concrete less than 7 days old will inhibit penetration and reduce the product's effectiveness.
- For optimum installation, apply when the surface temperature is between 40°F and 100°F (4°C and 38°C).
- At an ambient temperature of 70°F (21°C), allow *Mapecrete Hard SB* to dry for 4 to 6 hours before permitting exposure to light foot traffic.
- Mapecrete Hard SB is a colorless solution that does not alter the appearance of concrete surfaces. It will not hide serious staining or excessive wear.
- Protect adjacent surfaces including metal, glass and wood from overspray. Immediately wash off any overspray with potable water.
- Mapecrete Hard SB is not recommended for use on textured concrete substrates.
- Do not dilute.
- Do not allow to puddle.
- Cured material can only be removed by mechanical means.

Product Performance Properties

Laboratory Tests	Results
VOCs	0 g per L
Abrasion/wear resistance – ASTM C779	
At 28 days	+ 225% increased wear resistance
Coefficient of friction – ASTM F1679	Dry: 0.81 Wet: 0.72
Liquid repellency (Rilem Method 11.4): Water absorbed in 24 hours	Untreated concrete: 0.169 U.S. oz. (5 mL); Mapecrete Hard SB-treated concrete: 0.034 U.S. oz. (1 mL)

Shelf Life and Application Properties

Shelf life	2 years in original, unopened container
Consistency	Sprayable and pourable liquid
Color	Clear
Drying time at 70°F (21°C)	1 hour
Ready for light foot traffic	4 to 6 hours
Ready for wheel traffic	24 hours

CSI Division Classification

Concrete Finishing	03 35 00

Packaging

Sizes

5 U.S. gals. (18.9 L)

55 U.S. gals. (208 L)

Approximate Coverage*

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

Substrate Type	Coverage
Hard-troweled concrete	200 to 250 sq. ft. per U.S. gal. (4.9 to 6.12 m² per L)

^{*} 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-durabilite@mapei.com.



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. <u>ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.</u>

Before using, the user must determine the suitability of our products for the intended use, and the user alone assumes all risks and liability. <u>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.</u>

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For the most current product data and BEST-BACKED^{SM} warranty information, visit www.mapei.com.

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