ULTRASIL 7
LIQUID DENSIFIER AND DUSTPROOFER FOR CONCRETE

DESCRIPTION

ULTRASIL 7 is a water-based lithium silicate solution used to densify and dustproof freshly troweled, or “green” concrete surfaces or older floors in need of treatment. ULTRASIL 7 penetrates and chemically reacts within the concrete surface, producing calcium silicate hydrate (CSH) in the pores. The result is concrete that is denser, more durable, and easier to clean. Because the product of the lithium silicate-concrete reaction is formed within the concrete surface, the protection of ULTRASIL 7 never peels or flakes off and lasts much longer than membrane 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

- Densifies and dustproofs concrete in one operation
- Water-based, low VOC
- Easy to apply with no scrubbing, rinsing, or waste disposal
- Permanent treatment that never peels off
- Makes concrete easier to maintain
  ▲ Can contribute to LEED points

TECHNICAL INFORMATION

Typical Engineering Data

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td><strong>Form</strong></td>
<td>Clear, thin liquid</td>
</tr>
<tr>
<td><strong>Specific Gravity</strong></td>
<td>1.10</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>11.7</td>
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<tr>
<td><strong>Density</strong></td>
<td>9.2 lb/gal (1.1 kg/L)</td>
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<tr>
<td><strong>Solids/Active Content</strong></td>
<td>7%</td>
</tr>
<tr>
<td><strong>VOC Content</strong></td>
<td>≤5 g/L</td>
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<tr>
<td><strong>Freeze Point</strong></td>
<td>32°F (0°C)</td>
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PACKAGING

ULTRASIL 7 is packaged in 55 gal (208 L) drums and 5 gal (18.9 L) pails.

SHELF LIFE

2 years in original, unopened package

COVERAGE

1 gallon (3.8 L) of ULTRASIL 7 will cover from 250 to 800 ft² (23 to 74 m²) of concrete depending upon the finish and porosity of the surface.
**DIRECTIONS FOR USE**

ULTRASIL 7 should be used directly from the container and requires no dilution or pre-mixing.

**Surface Preparation:** ULTRASIL 7 may be applied to freshly placed concrete immediately following final finishing. Older concrete must be clean and free of any materials that could prevent penetration of ULTRASIL 7, such as curing compounds or cure & seals, paints, coatings, dirt/oil, waxes, etc.

**Application to Freshly Placed, Steel Troweled Interior Concrete:** Air temperature during application must be between 40°F and 100°F (4°C and 38°C) for proper chemical reaction of the ULTRASIL 7.

Apply a single coat of ULTRASIL 7 using a low pressure sprayer equipped with a 0.5 gal/min (1.9 L/min) spray tip. Apply at a coverage rate that results in a uniformly wet surface without puddles. While ULTRASIL 7 is still wet, use a soft-bristle broom or microfiber pad to redistribute and evenly spread out the material. No scrubbing is required. Do not continue to spread out ULTRASIL 7 once the product begins to dry. Keep the floor wet with ULTRASIL 7 for 5-10 minutes, then allow it to dry. Immediately apply the specified curing compound or initiate the specified curing procedure.

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

**Application to Older, Cured Steel Troweled Concrete:** Surface must be clean, dry and absorbent, and must wet uniformly. Test surface absorbency with a light water spray. To slow dry times in hot, dry weather conditions, lightly pre-wet the concrete with fresh water and allow any standing water to evaporate.

Using a low pressure sprayer, apply a single coat sufficient to wet the surface without producing puddles. Use a clean microfiber pad to spread product evenly. Avoid spreading once the product has started to dry. Scrubbing is not necessary. If surfaces dry immediately, apply more product. Surface should remain wet for 5–10 minutes. Adjust rate of application to eliminate puddles. Allow treated surfaces to dry.

For immediate, enhanced shine, buff or burnish the dry concrete surface in both directions using an orbital floor machine or burnisher equipped with an appropriate polishing pad.

**Floor Joints:** If the floor joints are to be filled after ULTRASIL 7 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 7 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 7. If accidentally 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.
- In all cases, consult the Safety Data Sheet before use.