SURFHARD®

CHEMICAL HARDENER AND DUSTPROOFER FOR CONCRETE

SURFHARD† is a magnesium silicofluoride that reacts chemically with the free lime and calcium salts in hardened concrete to make a more dense and durable surface. It will effectively penetrate a concrete surface and make it hard, free from dusting and highly resistant to corrosion and abrasion. The addition of a patented penetrating agent to SURFHARD makes it possible for its penetrating properties and hardening action to proceed to a greater depth than with conventional hardeners.

PRIMARY APPLICATIONS
• Horizontal and vertical surfaces
• Schools
• Industrial floors
• Commercial buildings
• Home basements
• Storage silos in coal scrubbing facilities

FEATURES / BENEFITS
• Hardens and dustproofs concrete surfaces
• Prolongs floor life
• Resists acids, alkalis, oils and salts
• Simplifies cleaning
• Can be used without interrupting production schedules

SPECIFICATIONS / COMPLIANCES
• SURFHARD complies with General Services Administration and U.S. Army Corps of Engineers Specifications for magnesium silicofluoride floor hardeners.
• This product meets V.O.C. contents in accordance to EPA 40 CFR Part 59 Table I Subpart D for Concrete Protective Coatings with a maximum V.O.C. content of 400 g/l.

PACKAGING
SURFHARD is packaged in 55 gal (208 liter) drums, 5 gal (18.9 liter) pails.

†SURFHARD is a registered trademark no. 819,356

TECHNICAL INFORMATION

V.O.C.: 0 g/l

Typical Performance

<table>
<thead>
<tr>
<th>Application</th>
<th>Cure Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foot traffic</td>
<td>4-6 hours</td>
</tr>
<tr>
<td>Wheel traffic</td>
<td>24 hours</td>
</tr>
</tbody>
</table>

Shelf life is 2 years in original, unopened package.

SURFHARD helps protect concrete against the harmful effects of:
• Caustic soda
• Calcium chloride
• Sodium chloride
• Soap solutions
• Ammonium chloride
• Solvents
• Fuel oils
• Sugar solutions

Appearance
SURFHARD is a clear liquid which dries transparent. After placing, the color of the concrete may initially appear darker than the surrounding concrete. As the sealer cures and dries out, the treated concrete will have little change in appearance.

Treated concrete will slightly bead water and other liquids.

COVERAGE
Extremely porous concrete will require an application rate up to 100 ft²/gal (2.5 m²/liter) diluted per the instructions below.

SURFHARD is applied in up to three coats per the following recommended dilutions:

<table>
<thead>
<tr>
<th>COAT</th>
<th>DILUTION</th>
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</thead>
<tbody>
<tr>
<td>1st coat</td>
<td>1 part SURFHARD - 2 parts water</td>
</tr>
<tr>
<td>2nd coat</td>
<td>1 part SURFHARD - 1 part water</td>
</tr>
<tr>
<td>3rd coat</td>
<td>2 parts SURFHARD - 1 part water</td>
</tr>
</tbody>
</table>

NOTE: All three coats may not be necessary to harden the floor. If the floor should show patches of white on drying, immediately flood with water and scrub the floor with a mechanical scrubber, rinse and dry. Do not attempt further treatment.
DIRECTIONS FOR USE
Surface Preparation - The surface to be treated should be clean, free of dust, oil, and paint and preferably dry. New concrete surfaces should be at least 7 days old prior to application of SURFHARD. Membrane forming curing compounds should not be used on new concrete if SURFHARD is to be applied.

Extremely soft and porous surfaces should be saturated with water prior to application of hardener. Six hours later, or when the surface is dry, apply the 1st coat of SURFHARD and proceed as indicated previously. This pre-wetting concentrates the chemical at the top level of the concrete rather than at the bottom. The final coat will then harden at the top surface and yield maximum wearing and resistance qualities. In some instances, or in some selected areas, a surface may require an additional application of undiluted SURFHARD to complete hardening and dustproofing.

Mixing - SURFHARD is easily diluted in water with mild agitation.

Placement - Flood each coat of SURFHARD onto the surface and spread with a soft fiber broom, squeegee, or mop. Allow the solution to soak into the concrete for 10-15 minutes and redistribute any puddles that remain. Treated surfaces should be thoroughly dry between coats. Drying time may vary from 4-12 hours depending upon the temperature, humidity, and whether the concrete is indoors or outdoors.

As the various coats of SURFHARD are applied, each succeeding coat will yield increased coverage because the concrete surface is in the process of hardening and becoming more dense. After the third coat the floor should be thoroughly flushed with water and scrubbed with a stiff broom to remove any residual material. If the floor should show patches of white upon drying, immediately flood with water and scrub the floor with a mechanical scrubber, rinse and dry. Do not attempt further treatment.

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

PRECAUTIONS / LIMITATIONS
• SURFHARD is not recommended for application to colored concrete surfaces.
• Allow the product to dry 4-6 hours before exposure to traffic.
• SURFHARD is a water-based material and must be kept from freezing.
• If excess SURFHARD is left on the concrete surface, a white residue may form and should be removed by scrubbing immediately.

Form Surfhard-9.99