SURFHARD

LIQUID DENSIFIER AND DUSTPROOFER FOR CONCRETE



DESCRIPTION

SURFHARD is a water-based magnesium fluorosilicate solution that reacts chemically with alkaline materials in concrete producing a more dense, durable, and chemically resistant floor. SURFHARD is especially effective at strengthening weak, soft, or dusting concrete surfaces. A patented penetrating agent in SURFHARD assists in its penetration and reactivity, enabling SURFHARD to dustproof and densify at a greater depth.

PRIMARY APPLICATIONS

- Concrete floors, especially those with carbonated, soft, or dusting surfaces
- Schools
- Industrial floors
- Commercial buildings
- **Residential basements**

FEATURES / BENEFITS

- Densifies and dustproofs concrete surfaces
- Prolongs floor life
- Resists acids, alkalies, oils and salts
- Improves concrete that is carbonated, soft, or powdery

TECHNICAL INFORMATION

Typical Performance

	Dry Time	
Foot Traffic:	4 to 6 hours	
Wheel Traffic:	4 hours	
VOC Content:	<5 g/L	

SURFHARD helps protect concrete against the harmful effects of:

Sodium chloride

- Caustic soda
- Fuel oils Ammonium chloride
- Calcium chloride Soap solutions
 - Solvents Sugar solutions

Appearance: SURFHARD is a clear liquid that does not change the colour or appearance of concrete. Immediately after application, the colour of the treated concrete may initially appear darker. As SURFHARD cures and dries out, the treated concrete will have little change in appearance. Treated concrete will slightly bead water and other liquids.

Packaging

SURFHARD is packaged in 20L buckets.

SHELF LIFE

2 years in original, unopened package

- Can be used without interrupting production
- Can contribute to LEED points

schedules

τ

enetrating Sealers & Liquid Densifiers

SPECIFICATIONS / COMPLIANCES

USDA Compliant

Coverage

The number of coats, dilution ratios, and coverage rates are dependent on the texture and porosity of the concrete. Coverage rates and material requirements below are approximations for steel-troweled concrete surfaces. Extremely porous or dusting surfaces may require less dilution, lower coverage rates, or additional coats and must be determined on the jobsite.

	Dilution Ratio (Surfhard:water)	Coverage Rate, Diluted Surfhard	Volume of Undiluted Surfhard Required for 100 m ²
1st Coat	1:2	3.7 m²/L	8.9 L
2nd Coat	1:1	4.9 m²/L	10.2 L
3rd Coat	2:1	7.4 m²/L	8.9 L

DIRECTIONS FOR USE

Surface Preparation: The surface to be treated should be clean, free of curing compounds, sealers, paint or any other contaminants that could prohibit penetration of **SURFHARD**. Membrane forming curing compounds should not be used on new concrete if **SURFHARD** is to be applied, unless a dissipating curing compound such as KUREZ DR VOX is used and cleaned off the surface after the curing period. For best performance, concrete should be dry before applying **SURFHARD**. New concrete surfaces should be at least 7 days old prior to application. Extremely soft and porous surfaces should be saturated with water prior to application. When the surface is dry, apply the 1st coat of **SURFHARD** and proceed as indicated under Placement below. This pre-wetting concentrates the chemical at the top level of the concrete. 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 to 15 minutes and redistribute any puddles that remain. Treated surfaces should be thoroughly dry between coats. Drying time may vary from 4 to 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 denser. 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.

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.

CLEAN UP

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

PRECAUTIONS / LIMITATIONS

- SURFHARD is not recommended for application to coloured concrete surfaces.
- Allow the product to dry 4 to 6 hours at 21°C before exposure to traffic or rain.
- **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. If this residue is allowed to dry, removal may require mechanical means such as sanding or grinding.
- In all cases, consult the Safety Data Sheet before use.

DISCLAIMER: Flowcrete's products are guaranteed against defective materials and manufacture and are sold subject to its standard Terms and Conditions of Sale, copies of which can be obtained on request. Any suggested practices or installation specifications for the composite system (as opposed to individual product performance specifications) included in this communication (or any other) from Flowcrete SA (Pty) Ltd constitute potential options only and do not constitute nor replace professional advice in such regard. Flowcrete SA (Pty) Ltd recommends any customer seek independent advice from a qualified consultant prior to reaching any decision on design, installation or otherwise.