

MADE IN INDIA**Technical Data Sheet****DENSI-HARD[®]**
LITHIUM SILICATE**Description**

Densi-Hard[®] Lithium Silicate is a specially formulated product for densifying concrete and terrazzo floors. It helps achieve a hard surface that is easy to grind and polish. Lithium Silicate with its small molecule size is deep-penetrating and its non-soluble characteristics provide longer life and higher reflectivity, helping reduce floor maintenance cost. This environmentally friendly treatment makes the concrete dustproof, improves overall abrasion resistance, makes the floor more durable and reduces efflorescence.

**Areas of Application**

- Concrete floors interior and exterior
- Polished concrete floors
- Commercial and retail floors
- Warehouse floors
- Industrial floors
- Food storage areas
- Manufacturing plants
- Distribution centers
- Transportation terminals
- Institutional floors
- Health care facilities

**Shelf life**

- 1 year in original unopened container.

**Technical Data**

Appearance	Clear to cloudy liquid
Chemical Base	Lithium Silicate
Viscosity	Water like
pH	11-12
Specific Gravity @ 27°C	Approx 1.08-1.09 gm/cc
Solid Content	13 to 14%
Surface Breathability	Breathable
Skid Resistance ASTM E 303	Good
Application	Densification, Hardener and Sealer
VOC Content	< 5 g/l
Freeze Point	32°F (0°C)

**Packaging**

- 1L Can
- 5 L Jerry can
- 10 L Jerry can
- 20 L Jerry can
- 209 L Barrel

**Features**

- Densifies
- Dustproofs
- Seals
- Increases abrasion resistance
- Reduces water penetration
- Easy maintenance
- Water based
- Odorless
- Low VOC
- Eligible for LEED points

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Instructions for Use with Polishing

1. Clean the surface properly to check the condition of the floor.
2. Start grinding the concrete with 36 or 60 grit depending upon your floor and grind up to 200grit resin bond. Grinding flattens the surface and opens up the surface ensuring better penetration.
3. Shake well before applying. Do not dilute with water. Apply Densi-Hard® Lithium Silicate evenly at the rate of approximately 20-60 sqft per litre. Lightly broom out any puddles immediately after the material has been applied. Allow material to remain on the surface for 20-30 minutes. Don't let the material dry until you have applied the second coat.
4. Let the material cure for 24 hours for best results.
5. Then proceed with 400 grit, 800 grit and go up to 1500 grit as required.
6. Remove all polishing dust and debris using a scrubbing machine.
7. Burnish with a 3000 grit Diamond Pad for high gloss as required.
8. Apply Surie Porex Stain Protector & buff with white pad using a burnisher or a single disc machine for extra high gloss.



Instructions for Use without Polishing

Preparation: The substrate shall be thoroughly cleaned of all foreign materials such as bond breakers, curing agents, form release oils, dust, and construction latence by light mechanical grinding if required. Clean the surface with a high pH detergent and wash thoroughly. The surface shall be saturated with water and later excess water has to be removed.

Application: A low pressure, high volume sprayer shall be used to apply Densi-Hard® Lithium Silicate so as to form a glistening sheen and to ensure complete saturation of the surface. Enough Densi-Hard® Lithium Silicate shall be applied to keep the surface wet for at least 20 minutes. If applying by hand, spread the sprayed material with a lambs wool roller once or twice and then stop spreading. If spread excessively, it tends to dry in streaks. After 20 minutes, the excess material shall be removed and the surface shall be allowed to dry for 1 - 2 hrs. The floor is ready to use after the surface is dry. A light lithium residue may form on the surface after the floor is dry. This is the excess Densi-Hard® Lithium Silicate liquid floor hardener which was not absorbed and can be removed by a stiff broom or power sweeper. For an immediate shine, Densi-Hard® Lithium Silicate shall be allowed to dry overnight and then polished with a high speed buffer equipped with a black pad, followed by a red pad.

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Precautions

1. Protect Densi-Hard® Lithium Silicate from freezing. In the event of freezing, thaw and stir or agitate before using.
2. Protect metal, glass, wood, paint or brick from contact with Densi-Hard® Lithium Silicate. If accidentally over sprayed on these surfaces, wash surface with clean water immediately.
3. Allow the product to dry 4 to 6 hours at 21° C before exposure to foot traffic or rain.
4. In all cases, consult the Safety Data Sheet before use.
5. Store in a cool and dry place.



Coverage

The coverage is determined by the porosity of the floor. It may be anywhere between 20-60 sqft. per litre. A floor that has been previously hardened will require less material than a fresh floor.



Maintenance

Floors treated with Densi-Hard® Lithium Silicate benefit from good routine maintenance. Regular scrubbing with Surie Porex pH Neutral Floor Cleaner is recommended and maintains the gloss. Oils and acids should be removed quickly and properly to prevent damage.



Clean-Up

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



Legal Notes

The information and in particular, the recommendations relating to the application and end-use of Surie Porex products, are given in good faith based on Surie Porex's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Surie Porex's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Surie Porex serves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to are current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.