



# Densifier Plus Repellent

## Data Sheet & Installation Guide

**SD600**  
Lithium silicate sealer, hardener  
and repellent for concrete

### Proven Performance Protection and Waterproofing

**DESCRIPTION** SCP's Densifier Plus Repellent (SD600) is a state of the art premium densifier, hardener and water proofing sealer for new and existing concrete surfaces. SD600 is a multi-phase penetrating lithium colloidal based proprietary silicate treatment that reacts with the concrete to produce insoluble calcium silicate hydrate that locks aggregate together and fills vacant concrete pores while building a water-resistant matrix. SD600 is an effective solution for preventing water seepage and efflorescence in concrete. SD600 is a water-borne, deep penetrating, surface and sub-surface densifying and impregnating molecular bonding and densifying treatment. SD600 integrally waterproofs, densifies, strengthens and preserves concrete of any age at any point during the concrete's useful lifespan.

**DENSIFICATION:** SD600 reacts with concrete to produce insoluble calcium silicate hydrate within the concrete pores. Treated surfaces are more resistant to water damage and surface abrasion and also reduce dusting with less maintenance. SD600 will not contribute to surface ASR (Alkali Silicate Reaction). Treated surfaces resist damage from water and surface abrasion. The increased surface hardness reduces dusting and simplifies maintenance, producing a cleaner, healthier environment. SD600 is safer, faster and easier to apply than conventional sodium or potassium silicate hardeners.

**WATER REPELLENCE:** SD600 forms a virtually impervious barrier to water and dissolved materials in water. The tetrahedral silicate monomer technology incorporated in SD600 provides water repellent protection superior to silane and siloxane emulsions, silicates, petroleum distillates and other common water repellants.



#### ADVANTAGES

- ◇ Easy, one step application. No scrubbing. No flushing. No caustic wastewater.
- ◇ May be applied to broom finished, steel troweled, power troweled or burnished concrete finishes.
- ◇ Penetrates and reacts quickly to produce better initial and ultimate hardness.
- ◇ Provides better abrasion resistance than conventional hardeners.
- ◇ Produces a fast surface gloss which improves with traffic and maintenance.
- ◇ Improves performance, appearance and light reflectance of new or old concrete.
- ◇ Reduces application time and costs of diamond polishing operations
- ◇ Will not contribute to surface crazing. High lithium content combats surface ASR.
- ◇ Lithium will not absorb water or contribute to floor sweating.
- ◇ Gloss and hardness do not reduce slip resistance. Treated surfaces are easy to maintain and require no waxing
- ◇ Breathable and UV stable. Will not yellow, discolor, peel or flake; Non-flammable. Non-toxic. Low odor.
- ◇ Cures quickly. Most floors can be opened to traffic within one hour of treatment.

#### REGULATORY COMPLIANCE

##### VOC Compliance

SD600 is compliant with the US Environmental Protection Agency's AIM VOC regulations.

##### SAFETY INFORMATION

Always read full label and SDS for precautionary instructions before use. Use appropriate safety equipment and job site controls during application and handling.

24-Hour Emergency Information

INFOTRAC AT 800-535-5053



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### TYPICAL TECHNICAL DATA

FORM	clear, water-like liquid
SPECIFIC GRAVITY	1.1
pH	11
WT/GAL	9.2 lbs
ACTIVE CONTENT	14.50%
TOTAL SOLIDS	14.50%
VOC CONTENT	< 20 g/L
FLASH POINT	NA
FREEZE POINT	32°F (0°C)
SHELF LIFE	2 years in unopened, factory-sealed

### PREPARATION

Protect people, vehicles, property, plants and all surfaces from the product, splash and wind drift. Use polyethylene or other proven protective material

**New Concrete:** May be applied to freshly placed concrete after final finishing and installation of the control joints.

**Existing Concrete:** SD600 is ideal for application to existing, cured concrete of any age. Surfaces must be clean and structurally sound. Remove all foreign materials including bond breakers, curing agents, surface grease and oil, and construction debris.

Do not apply to surfaces which are frozen, dirty or have standing water. Surfaces must be clean, dry and absorbent. Test surface absorbency with a light water spray; surfaces designated for treatment should wet uniformly. If the surface does not wet uniformly, use an appropriate surface preparation cleaner or mechanical process to remove remaining surface contaminants.

Follow the appropriate cleaner with thorough water rinsing. If a d-limonene based cleaner/stripper is used, clean treated surfaces with a cleaner/degreaser and rinse thoroughly. Do not dilute or alter product.

Acid-stained concrete must be thoroughly neutralized and rinsed prior to application.

Application may begin as soon as prepared surfaces are dry and free of ponded water.

**SURFACE AND AIR TEMPERATURES:** Application temperatures should be 40 – 100°F (4-38°C).

Do not let product freeze – freezing will render product ineffective

**EQUIPMENT:** Apply with low pressure sprayer, microfiber pad, mop or a soft-bristled push broom. Fit sprayers with a 0.5 gpm (gallon per minute) spray tip.

### APPLICATION

TEST using the equipment and procedures selected for general application. Follow the application instructions below to pre-test each slab. Pretesting will confirm the suitability of the surface preparation and application procedures proposed for general application. Pre-testing will also determine the average coverage rates to be maintained over the entire project. Let surfaces dry thoroughly before inspection and approval. Surfaces to be treated must be clean, dry and absorbent. Confirm surface absorbency with a light water spray – surfaces designated for treatment should wet uniformly. Do not dilute or alter.

NOTE: Allowing excess material to puddle on the floor will extend dry times and create white residues which must be removed immediately.

#### Freshly Placed, Uncured Steel-Troweled Concrete

1. After final finishing, soft cut control joints. Clean concrete of any dirt, residue or debris.
2. 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 and ensure uniform wetting. Avoid spreading once drying begins. 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.
3. Allow treated surfaces to dry.
4. Immediately apply the specified curing compound or initiate the specified curing procedure.
5. When curing is complete, use an automatic floor scrubber equipped with cleaning pads or brushes appropriate for



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removal of accumulated construction soiling and surface residues. Avoid pads or brushes which may damage the finished floor.

### Cured, Steel Troweled Concrete

1. 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.
2. 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 and ensure uniform wetting. Avoid spreading once drying begins. 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.
3. Allow treated surfaces to dry.
4. Remove dried powder residue using stiff broom, power sweeper or floor scrubbing machine.
5. Optional: 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. This is a dry buffing operation.

### Cured, Ground/Honed Concrete

1. Sand, level or grind the surface with a floor sander, orbital floor machine or diamond grinder, as needed, to achieve desired exposure. Remove all dust and debris with a floor scrubbing machine and fresh water. Allow wet surfaces to dry. Surfaces must be clean and dry.
2. 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 and ensure uniform wetting. Avoid spreading once drying begins. 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.
4. Allow treated surfaces to dry.
5. Remove any dried powder residue using stiff broom, power sweeper or floor scrubbing machine.
6. Optional: If additional surface sheen is desired, buff or burnish the surface in both directions with an orbital floor

machine or burnisher equipped with an appropriate polishing pad. This is a dry buffing operation.

### Cured and Polished Concrete

Follow steps 1–4 listed above for Ground/Honed Concrete. Using progressively finer abrasives, continue diamond polishing in consecutive steps to achieve the desired finish. Remove all polishing dust and debris.

### TYPICAL COVERAGE RATES

Variations in concrete quality, porosity, job site conditions, temperature and relative humidity will affect coverage rates and drying times. Calculate the target coverage rate by testing a representative section of the prepared surface using the published application instructions.

### Estimated Coverage Rates

The following coverage rates are offered for estimating only. See below for instructions on calculating project-specific target coverage rates.

Freshly Placed, Uncured, Steel Troweled Concrete

- 600–1000 square feet per US gallon
- 56–93 square meters per US gallon
- 15–25 square meters per liter

Cured, Steel Troweled Concrete

- 500–900 square feet per US gallon
- 46–83 square meters per US gallon
- 12–22 square meters per liter

Cured, Ground/Honed Concrete

- 400–800 square feet per US gallon
- 37–74 square meters per US gallon
- 10–20 square meters per liter

### Calculating Project-Specific Target Coverage Rate

1. Prepare the test section in accordance with “Preparation” information above. Surfaces must be clean, dry and absorbent. Surfaces should wet uniformly.
2. Add 1-gallon of LS® to a clean, pump-up sprayer. Apply according to Application Instructions steps #1–3 for the appropriate floor type.

Repeat as necessary to determine correct rate of application.

3. Measure the test area to establish the target coverage rate per gallon.



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### Storage & Handling

Store in a cool, dry place. Always seal container after dispensing. Do not alter or mix with other chemicals. Published shelf life assumes upright storage of factory-sealed containers in a dry place. Maintain temperatures of 40-100°F (4-38°C). Keep from freezing. Do not double stack pallets. Dispose of in accordance with local, state and federal regulations.

### Maintenance

Do not use acidic cleaners. Though SD600 will improve the resistance of concrete surfaces to staining, acid concentrates and acidic foods may etch the floor and leave a residual stain. Clean up spills quickly to minimize any potential for damage. Though protective treatments simplify maintenance of concrete floors, all spills must be cleaned up in a timely manner

### SAFETY AND CLEAN UP

- Caution must be taken, as treated surfaces may be slippery until completely cured.
- Always wear protective gloves. Avoid getting on skin – product is an irritant and can burn with extended exposure. Do not get in eyes. Always wear protective eyewear; in enclosed areas it is advisable to wear an appropriate respirator to avoid possible irritation to breathing.
- Consideration should be made to wearing watches, eyeglasses, etc., as SD600 can etch glass or discolor aluminum if allowed to dry.
- Clean equipment using water and mild soap. Never store spray equipment without cleaning and following manufacturer's recommendations for storage between usages.
- Immediately wash off over spray from glass, aluminum, polished or other surfaces with fresh water.

### LIMITATIONS

- Limited shelf life – remains storage stable for approximately 12 months in sealed factory containers, use within 6 months where possible
- SCP is an alkaline material. Substrates such as glass, wood, plastic and metal should not be treated with SCP
- Will not prevent water penetration through material defects or structural cracks/fissures in the shell.
- Do not allow product to freeze

**Packaging:** SD600 is available in 1 gallon/3.78 liter bottles, 5 gallon/18.9 liter pails. 55-gallon drums and bulk container are also available upon request.

### FOR EXTERIOR & INTERIOR USE

**Use with adequate ventilation**

**Keep Out of Reach of Children**

**WARRANTY:** The information and recommendations made are based on our own research and the research of others, and are believed to be accurate. However, no guarantee of their accuracy is made because we cannot cover every possible application of our products, nor anticipate every variation encountered in natural stone and masonry surfaces, job conditions, and methods used for application. The purchasers shall make their own tests to determine the suitability of such products for a particular purpose.

SERVEON LLC warrants this product to be free from defects. Where permitted by law, SERVEON makes no other warranties with respect to this product, express or implied, including without limitation the implied warranties of merchantability or fitness for particular purpose. SERVEON'S liability shall be limited in all events to supplying sufficient product to re-treat the specific areas to which defective product has been applied. Acceptance and use of this product absolves SERVEON from any other liability, from whatever source, including liability for incidental, consequential or resultant damages whether due to breach of warranty, negligence or strict liability. This warranty may not be modified or extended by representatives of SERVEON, its distributors or dealers.

### CUSTOMER CARE

Factory personnel are available for product, environment and job-safety assistance with no obligation. Call 877-333-8188 and ask for Customer Care - technical support