

# FLOR-SIL<sup>™</sup>

## Lithium Densifier

Technical Information Sheet

### Product Description

FLOR-SIL<sup>™</sup> Lithium Densifier is an economical cost effective chemical treatment used to enhance the grinding and polishing process (metal and resin bonded abrasives) of architectural polished concrete surfaces. FLOR-SIL<sup>™</sup> rapidly produces a harder, denser surface that is easily profiled and polished. Its deep penetrating, non-soluble properties provide longer life and higher reflectivity.

### Limitations

KEEP FROM FREEZING. DO NOT HEAT. STORE BETWEEN 36°F (2°C) AND 100°F (38°C). Do not apply when air, material and surface temperatures are expected to fall below 40°F (4°C) within four hours of completed application. DO NOT DILUTE WITH WATER OR OTHER COMPOUNDS.

### Coverage Rate

400-500 sq. ft. per gallon (12-15m<sup>2</sup>/L). Note: Coverage or treatment yield will vary with concrete quality, porosity, finish and environment. Previously densified floors require less material than non-treated floors.

### Equipment

**FLOR-SIL<sup>™</sup>**: Pump type sprayer, micro-fiber pad with applicator, personal safety equipment. The DIAMATIC Condor applicator may also be used for larger applications.

### Surface Preparation

The surface of the concrete should be processed in accordance with the DIAMATIC ULTRAFLOOR<sup>®</sup> Specification for polished concrete. After the 200 grit resin polishing step has been completed the surface should be thoroughly cleaned and allowed to dry prior to the application.

### Packaging and Shelf Life

The **DIAMATIC FLOR-SIL<sup>™</sup>** is available in 5 gallon pails, 55 gallon drums and 275 gallon totes. The shelf life when stored properly indoors is 1 year.

### Technical Data

Protection C  
Irritant  
V.O.C. Content 50 < gms/L  
Health 1  
Flammability 0  
Reactivity 0



### Application

The application temperature range should be between 40-90 degrees F (5-32 C).

1. Grind the concrete to remove all foreign material from the concrete surface and then bring the surface profile to a 100-200 grit finish. This step opens up the surface ensuring better penetration.
2. Mix, shake or stir thoroughly before applying.
3. Depending on size of work area, product can be applied with a pump up sprayer or a high volume, low-pressure sprayer (HVLP). Apply FLOR-SIL<sup>™</sup> to the surface evenly at the rate of approx. 400-500 sq. ft. per gallon. Follow the application immediately using a micro-fiber mop to remove any excess material. Allow material to remain on the surface 20-30 minutes. DO NOT LET ANY AREA DRY OUT during this time. Add more FLOR-SIL<sup>™</sup> as needed in order to maintain a uniformly wet surface.
4. After material has penetrated and is no longer glistening on the surface, continue grinding and polishing to the intended final surface profile and desired finish. If using wet polishing method, or on integrally colored concrete, we recommend using an auto scrubber and water to remove residual slurry between abrasive disc grits.

### Maintenance

Routine sweeping, mopping, washing and mechanical scrubbing of floors with neutral pH cleaners / water is recommended. DO NOT USE acidic, butoxy-ethanol, or citrus cleaners to maintain the floor.

### Safety

**FLOR-SIL<sup>™</sup>** is an aqueous Nano-lithium polysilicate solution. The treatment is alkaline and may cause eye and skin irritation. KEEP OUT OF THE REACH OF CHILDREN. Do not take internally. Avoid prolonged contact with skin. Avoid ingestion of material. If swallowed, do not induce vomiting, call physician. Avoid contact with eyes. Protective clothing is recommended. Protective goggles are recommended in case of splashing. If splashed in eyes, wash immediately with clean water and call physician if irritation persists. Contact areas should be thoroughly washed with soap and water. Additional precautions, safety information and first aid treatments are contained in the Material Safety Data Sheet. **FLOR-SIL<sup>™</sup>** will bond to most surfaces immediately, so wash off over spray with water and mild detergent. CAUTION: Surfaces wet with **FLOR-SIL<sup>™</sup>** may be slippery.