

PRODUCT DATA SHEET

## **SELECTION & SPECIFICATION DATA**

**Generic Type** | Cementitious urethane flooring mortar

# Description

Shock-Crete SL is a 1/8"-3/16" aggregate filled system that develops a cure strength approximately 2 times that of the concrete base to which it is applied. The monolithic topping exhibits excellent physical and mechanical strength and chemical resistance.

- Contributes toward satisfying credit for low emitting material under LEED 4.1
- Meets California Department of Public Health CDPH/EHLB Standard Method Version 1.2 2017.
  Compliance certification available upon request.
- Meets SCAQMD Rule 1113 for VOC content
- · Thermal shock resistant
- · Excellent chemical resistance

#### **Features**

- · Low Odor
- Fast Setting
- · Low Temperature Cure
- FDA and USDA Compliant
- · Anti-Microbial Agents are available as an option
- · Anti-Skid Version Available
- · Coefficient of Thermal Expansion similar to Concrete
- VOC Compliant

Color

Industrial standard colors

Color Chart available upon request.

Finish | Matte

Primer | Self priming

#### Recommended Thickness

1/8" - 3/16"

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- · General Concrete Restoration
- Breweries and Beverage Plants
- Automotive Aisleways
- Food Processing Plants
- Meat Packaging Plants
- **Typical Uses**
- Loading Ramps
- · Packing Plants
- Machine Shops
- Laboratories
- · Wet Wells

## **Coverage Rate**

50 ft<sup>2</sup> at 1/8" per 52.4 lb unit 33-34 ft<sup>2</sup> at 3/16" per 52.4 lb unit

VOC Values | As Supplied : 35 g/l

Dry Temp. Resistance

32°F to 180°F (0°C to 82°C)

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#### · Organic Acids

- · Dilute Inorganic Acids · Alkali Solutions
- **Chemical Resistance Tables**
- Salts
- Oils
- · Aliphatic Solvents

## **Topcoats**

Topcoats are optional and selection will depend on exposure.

Contact Dudick for recommendations.

# SUBSTRATES & SURFACE PREPARATION

Concrete must be prepared mechanically to remove surface laitance. Oils, grease or other contaminant must be removed prior to surface preparation. Concrete must free of curing compounds and form release agents. Surface texture should be similar to 60-80 grit sandpaper or the visual standard, CSP-3 from the International Concrete Repair Institute. The prepared surface should have a nominal tensile strength of 250 PSI per ASTM D-4541.

#### Concrete

Additional surface preparation will be required if a 60-80 grit texture is not achieved and the surface laitance not completely removed with the first mechanical preparation procedure.

All concrete substrates must be checked for moisture prior to product application using the Plastic Sheet Test, ASTM D-4263. If moisture is found to be present in the concrete slab, contact Dudick for further recommendations on product and thicknesses.

# PERFORMANCE DATA

### All test data was generated under laboratory conditions. Field testing results may vary.

Test Method	Results	
Coefficient of Thermal Expansion (ASTM C-531)	2.2 x 10 <sup>5</sup>	
Compressive Strength (ASTM C579)	6,800 PSI	
Density	125 lb/cu. ft	
Flexural Strength (ASTM C-580)	2,600 PSI	
Modulus of Elasticity (ASTM C-580)	2.2 x 10 <sup>11</sup> PSI	
Taber Abrasion (ASTM C-4060)	70 mg	
Tensile Bond Strength (ASTM C-7234)	Cohesive Failure of Concrete	
Tensile Strength (ASTM C-307)	1,050 PSI	

## MIXING & THINNING

When deciding on mixing equipment, keep in mind that Shock-Crete SL has a 15-minute working time at 70°F (21°C).

#### **Mixer**

A 10-15-gallon rotating drum container is recommended. It is portable and easy to clean. The stationary mixing paddle provides both radial and axial action, scraping both the side and bottom of the container a mortar mixer can be used as long as it contains blades for uniform mixing.



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#### MIXING & THINNING

Mixing

Add Color Pack to Component A and thoroughly mixed to re-disperse any pigments or fillers that may have settled. Add the pre-measured Component A to the mixer followed by the addition of the pre-measured Component B and mix for one minute. Slowly add the aggregate and continue mixing until all the aggregate has been totally wetted.

#### DO NOT REDUCE AGGREGATE. DO NOT MIX PARTIAL KITS.

Pot Life

20 minutes @ 50°F (10°C) 15 minutes @ 75°F (24°C) 8-9 minutes @ 90°F (32°C)

### APPLICATION PROCEDURES

#### General

Shock-Crete SL can only be applied to properly prepared bare concrete or a previous layer of Shock-Crete. It will not bond to epoxy or other polymer systems.

Set the gauge rake to the desired thickness, then pour the mixed material and spread to the recommended thickness. After spreading the material roll with a spike roller to level and de-aerate. Timing of batches is important so as to avoid cold joints in the floor.

#### **Application**

**For Broadcast Application:** Use the same mixing sequence, bodycoat application as for ShockCrete SL and broadcast either 20-40 mesh sand or aluminum oxide into the wet bodycoat to complete saturation and allow to cure overnight. Once cured, remove excess sand or aluminum oxide with a broom or vacuuming.

## **APPLICATION CONDITIONS**

Condition	Material	Surface	Humidity
Minimum	50°F (10°C)	41°F (5°C)	0%
Maximum	90°F (32°C)	90°F (32°C)	90%

Substrate temperature must be 5°F (3°C) above the Dew Point.

Application in direct sunlight may lead to blistering, pinholes, or wrinkling due to outgassing of air in the concrete and high substrate temperatures. Shading or evening application may be required. Consult a Dudick representative.

### **CURING SCHEDULE**

Surface Temp.	Foot Traffic
50°F (10°C)	12 Hours
70°F (21°C)	6 Hours
90°F (32°C)	3 Hours

Recoat Time: Must be cured for 16-24 hours @ 70°F (21°C) before topcoated. If the material is applied neat, then it must be abraded prior to recoating if it has set longer than 48 hours.

### **CLEANUP & SAFETY**

Cleanup | Use S-10 Cleaning Solvent to clean tools and equipment.

Safety Read and follow all caution statements on this product data sheet and on the SDS. Employ normal safety precautions. Keep container closed when not in use.

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# PACKAGING, HANDLING & STORAGE

**Shock-Crete SL Bodycoat Packaging** 

Component A - 8.35 lbs Component B - 8 lbs

**Packaging** 

Aggregate - 36 lbs

Color Pack - Pre-measured Amount

Pre-measured units - Do Not Breakdown or Split Kits

**Shelf Life** 

6 months when stored in original, unopened containers at 50°F-75°F. Storage in direct sunlight or excessive heat will reduce working time and shelf life.

Storage

**Warning:** All Dudick products classified by DOT with either white, yellow or red labels must not be mixed or stored together as an explosive reaction may occur.

Store all products in a cool, dry area away from open flames, sparks or other hazards.

### WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance, injuries or damages resulting from use. Carbolines sole obligation, if any, is to replace or refund the purchase price of the Carboline product(s) proven to be defective, at Carbolines option. Carboline shall not be liable for any loss or damage. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated.