



# CITADEL® SLE 100™

## 100% SOLIDS DECORATIVE EPOXY

### DESCRIPTION AND USES

SLE 100™ is a two component, 100% solids, cyclo-aliphatic hybrid coating system that has exceptional adhesion properties to concrete substrates. Due to its unique chemistry, this coating exhibits great flexibility, working times and self-leveling properties while offering great chemical resistance as well. Low odor makes it a great choice for interior applications.

### PRODUCT FEATURES AND BENEFITS

- Emits virtually no odors and can be applied indoors
- VOC Free
- 60 minute pot life
- Convenient 2 parts A :1 part B mixing ratio
- Serves as both a primer and basecoat in 1 coat
- 100% solids formulation
- Exhibits great self-leveling properties with a built in shine

### PRODUCTS

SKU	DESCRIPTION
10255A	Dunes Tan 3-Gallon Kit
382429	Dunes Tan 15-Gallon Kit*
10257A	Light Gray 3-Gallon Kit
382430	Light Gray 15-Gallon Kit*
388943	Armor Gray 3-Gallon Kit
389161	Armor Gray 15-Gallon Kit*
10232BB	Clear 3-Gallon Kit
382434	Clear 15-Gallon Kit*
367480	Custom 3-Gallon Kit*
382435	Custom 15-Gallon Kit*

\*Made-to-Order only. Contact Rust-Oleum Customer Service for details.

### PRODUCT APPLICATION

#### READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING PROJECT

#### SURFACE PREPARATION

The concrete surface must be free of all dirt, grease, oil, fats, and other contamination. Remove surface contamination by cleaning with Krud Kutter® Original Cleaner Degreaser, detergent, or other suitable cleaner. Rinse thoroughly with clean, fresh water and allowed to dry.

**NEW CONCRETE:** Laitance must be removed by diamond grinding or shot blasting. On concrete that has been cured with curing compounds or has had a hard steel troweled finish, shot blasting, sandblasting or other methods of mechanical preparation will be required. New concrete should be cured for a minimum period of 28 days at 70°F prior to application.

**EXISTING CONCRETE:** Concrete must be clean and sound. Old coatings and toppings must be removed. Concrete must be clean and free of previous coatings, oil, wax, paint, and other contaminants.

### PRODUCT APPLICATION (cont.)

#### SURFACE PREPARATION (cont.)

**EXISTING CONCRETE (cont.):** The surface of the concrete must be clean and properly profiled to enable the coating to achieve maximum bond. Water soluble contaminants can be hosed off with water. Some water insoluble materials are difficult to remove and may require sandblasting, scabbling, or other methods of removal. For either new or existing concrete, when preparation is complete, the surface texture should be similar to 60-80 grit sandpaper or ICRI CSP Level 2 or 3. Concrete must be visibly dry at time of application.

#### MIXING EQUIPMENT

Low speed drill and spiral mixing wand. Must pre-mix prior to use.

Important: Hand mixing will produce inconsistent results and is not an approved method.

Note: Three gallon kits are packaged in Citadel's new and exclusive All-In-One packaging. Both A and B components are shipped together inside an outer 5 gallon pail that can be used for combining both components at the application site. For best results use narrow spiral paint mixer (SKU:388011) to premix individual components within the 3 gallon kits.

#### MIXING

Note: Before starting, ensure that the material, concrete surface, and the ambient air are all at 60-90°F. Mixing ratio is 2 parts A to 1 part B.

Pre-mix both A and B sides prior to combining.

Add part "A" to the mixing container.

Add part "B" to the mixing container and mix for 60-90 seconds.

#### THINNING

None required.

**NOTE:** If necessary, can be thinned with xylene.

#### EQUIPMENT RECOMMENDATIONS

**SQUEEGEE:** Use a high quality notched rubber squeegee.

**ROLLER:** Use a high quality ¾ inch lint-free roller with a phenolic core.

**BRUSH:** Use a disposable natural fiber chip brush, 2-4 inch wide for cut in work.

#### APPLICATION

Apply only when air, material and floor temperatures are between 60-90°F (15-32°C) and the surface temperature is at least 5°F (3°C) above the dew point and RH less than 85%.



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**100% SOLIDS DECORATIVE EPOXY**

**PRODUCT APPLICATION (cont.)**

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SLE 100 can be applied by roller working from a roller pan or it can be poured directly onto the floor in a ribbon and spread out with a rubber squeegee to spread the material out and achieve the 100 sq. ft./gal. spread rate. Back roll the material smooth using a 3/8" lint free roller with a phenolic core to smooth out the finish.

**CLEAN UP**

Clean tools and application equipment immediately after use with active solvent like xylene (in SCAQMD use acetone only). Clean spills or drips while still wet with solvent. Dried product will require mechanical abrasion for removal.

**PERFORMANCE CHARACTERISTICS**

**COMPRESSIVE STRENGTH**

METHOD: ASTM C695  
 TYPICAL VALUE: 7950 psi

**TENSILE STRENGTH**

METHOD: ASTM D412  
 TYPICAL VALUE: 4500-5200 psi

**BOND STRENGTH TO CONCRETE**

METHOD: ASTM D4541  
 TYPICAL VALUE: Exceeds tensile strength of concrete (concrete fails first)

**TABER ABRASION**

METHOD: ASTM 4060, CS 17, 1,000 gram load  
 TYPICAL VALUE: Loss/1000 cycles = 55 mg

**FLAMMABILITY**

METHOD: ASTM D635  
 TYPICAL VALUE: 1.2 cm./min.

**COEFFICIENT OF FRICTION**

METHOD: ASTM D2047  
 TYPICAL VALUE: 0.77 unglazed

**FILM HARDNESS, SHORE D**

METHOD: ASTM D2240  
 TYPICAL VALUE: 85

**IMPACT RESISTANCE**

METHOD: ASTM D2794  
 TYPICAL VALUE: Direct/Reverse, 85/65 inch pounds

**KONIG PENDULUM HARDNESS**

METHOD: ASTM D4366  
 TYPICAL VALUE: 125

This product complies with USDA FSIS regulatory sanitation performance standards for food establishment facilities. This coating is impervious to moisture and easily cleaned and sanitized. Meets USDA requirements for incidental food contact.

**CHEMICAL RESISTANCE**

CHEMICAL	RESULT
Acetic Acid 100%	R
Acetone	R
Ammonium Hydroxide 50%	RC
Benzene	RC
Brine saturated H <sub>2</sub> O	R
Chlorinated H <sub>2</sub> O	R
Clorox(10%) H <sub>2</sub> O	R
Diesel fuel	R
Gasoline	R
Gasoline/5% MTBE	R
Gasoline/5% Methanol	R
Hydrochloric Acid 20%	RC
Hydrofluoric Acid 10%	RC
Hydraulic fluid (oil)	RC
Isopropyl Alcohol	R
Jet fuel (JP-4)	R
Lactic Acid	RC
MEK	RC
Methanol	R
Methylene Chloride	C
Mineral Spirits	R
Motor Oil	R
MTBE	C
Muriatic Acid 10%	R
NaCl/ H <sub>2</sub> O 10%	R
Nitric Acid 20%	RC
Phosphoric Acid 10%	RC
Phosphoric Acid 50%	C
Potassium Hydroxide 10%	R
Potassium Hydroxide 20%	R, Dis
Propylene Carbonate	R
Skydrol	R
Sodium Hydroxide 25%	R
Sodium Hydroxide 50%	R
Sodium Hypchlorite 10%	R
Sodium Bicarbonate	R
Stearic Acid	R
Sugar/ H <sub>2</sub> O	R
Sulfuric Acid 10%	R
Sulfuric Acid >50%	RC
Toluene	R
1, 1,1-Trichlorethane	C
Trisodium Phosphate	R
Vinegar/ H <sub>2</sub> O 5%	R
H <sub>2</sub> O 14 days at 82° C	R
Xylene	RC

**Chemical Resistance: Chart Key**

R=recommended/little or no visible damage  
 RC=recommended conditional/some effect, swelling or discoloration  
 C=Conditional/Cracking-wash within one hour of spillage to avoid affects  
 NR=Not recommended  
 Dis=discolorative

	<b>TECHNICAL DATA</b>	<b>CDK-12</b>
	<b>CITADEL® SLE 100™</b> <b>100% SOLIDS DECORATIVE EPOXY</b>	

**PHYSICAL PROPERTIES**

		<b>SLE 100</b>
<b>Resin Type</b>		Amine Cured Epoxy
<b>Weight<sup>1</sup></b>	<b>Per Gallon</b>	8.5-10.8 lbs./gal.
	<b>Per Liter</b>	1.0-1.3 kg
<b>Solids by Volume<sup>1</sup></b>		100%
<b>Volatile Organic Compounds<sup>1</sup></b>		<50 g/l (0.42 lbs./gal.)
<b>Mixing Ratio</b>		2:1 (Part A to Part B, by volume)
<b>Induction Time</b>		None required
<b>Pot Life<sup>†</sup></b>		60 minutes @ 70°F (21°C)
<b>Recommended Dry Film Thickness (DFT) per Coat</b>		16 mils
<b>Practical Coverage at Recommended DFT</b>		Approximately 100 sq. ft./gal.
<b>Dry Times @ 70-80°F (21-27°C) and 50% Relative Humidity</b>	<b>Recoat</b>	12-48 hours
	<b>Light Traffic</b>	12-16 hours
	<b>Vehicle Traffic</b>	36-48 hours
	<b>Full Cure<sup>2</sup></b>	7 days
<b>Shelf Life</b>		5 years
<b>Flash Point</b>		>200°F
<b>Safety Information</b>		See SDS

<sup>1</sup>Activated material

<sup>2</sup>Coating achieves its full physical and chemical resistant properties.

Calculated values are shown and may vary from the actual manufactured material.

<sup>†</sup> Pot life is affected by air temperature and the amount of material activated.

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