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 compliant nationwide
- 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 Rust-Oleum® Professional 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.

PRODUCT APPLICATION (cont.)

SURFACE PREPARATION (cont.)

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. 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 both components prior to use. **Important:** Hand mixing will produce inconsistent results and is not an approved method.

NOTE: 3-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 between 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.

TINTING (Clear)

Pre-mix Universal Tint Packs prior to adding into floor coatings. Add Universal Tint Packs at 8 oz. per gallon of mixed floor coating material and combine thoroughly via power mix to achieve uniform colorant dispersal.

NOTE: Some colors, including safety colors, may require additional coats if desired coverage is not achieved in the first application. ***NOT FOR USE IN WATER BASED COATINGS***

THINNING

None required. **NOTE:** If necessary, can be thinned with xylene or acetone up to 2 oz. per gallon.

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PRODUCT APPLICATION (cont.)

EQUIPMENT RECOMMENDATIONS

SQUEEGEE: Use a high-quality notched rubber squeegee.

ROLLER: Use a high quality 3/8" lint-free roller with a phenolic core.

BRUSH: Use a disposable natural fiber chip brush, 2-4" 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%.

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 80-100 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.

CLEANUP

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.

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CHEMICAL RESISTANCE

CHEMICAL	RESULT
Acetic Acid 100%	R
Acetone	R
Ammonium Hydroxide 50%	RC
Benzene	RC
Brine saturated H_2O	R
Chlorinated H_2O	R
Clorox (10%) H_2O	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_2O 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 Hypochlorite 10%	R
Sodium Bicarbonate	R
Stearic Acid	R
Sugar/ H_2O	R
Sulfuric Acid 10%	R
Sulfuric Acid >50%	RC
Toluene	R
1, 1,1-Trichlorethane	C
Trisodium Phosphate	R
Vinegar/ H_2O 5%	R
H_2O 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

EPOXY	TECHNICAL DATA	CDL-12

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PHYSICAL PROPERTIES

		SLE-100
Resin Type		Amine Cured Epoxy
Weight[1]	**Per Gallon**	8.5-10.8 lbs./gal.
	Per Liter	1.0-1.3 kg
Solids by Volume[1]		100%
Volatile Organic Compounds[1]		<50 g/l (0.42 lbs./gal.)
Mixing Ratio		2:1 (Part A to Part B, by volume)
Induction Time		None required
Pot Life†		60 minutes @ 70°F (21°C)
Recommended Dry Film Thickness (DFT) Per Coat		16-20 mils
Practical Coverage at Recommended DFT		Approximately 80-100 sq. ft./gal.
Dry Times at 70-80ºF (21-27°C) and 50% Relative Humidity	**Recoat**	12-48 hours
	Light Traffic	12-16 hours
	Vehicle Traffic	36-48 hours
	Full Cure[2]	7 days
Shelf Life		5 years
Flash Point		>200°F
Safety Information		For additional information, see SDS

[1]Activated material
[2]Coating achieves its full physical and chemical resistant properties.
Calculated values are shown and may vary from the actual manufactured material.
† Pot life is affected by air temperature and the amount of material activated.