

## PRODUCT DESCRIPTION

SIMIRON 1100SL is a 100% solids, two-component, high-build epoxy floor coating that's designed for applications where heavy-duty protection is required.

1100SL is easy-to-use, self-leveling, and delivers a high-gloss and chemically resistant surface. Combine with Decorative Chips, quartz, or Metallic Additive systems to create an attractive and durable finish or broadcast non-slip aggregates to produce a non-slip surface.

## FEATURES & BENEFITS

- Chemical resistant
- Solvent Free
- Seamless – high build coating
- Hard wearing & abrasion resistant
- Low Maintenance
- Excellent adhesion properties
- Impact resistant
- Self-Leveling
- Easy application features
- Combine with decorative vinyl chips, quartz & metallic powders to create an attractive and durable finish

## FEATURES & BENEFITS

- Industrial & Commercial Warehouses
- Food & Beverage Processing Facilities
- Electric Equipment Plants
- Manufacturing Facilities
- Pharmaceutical Plants
- Power Plants
- Clean rooms
- Automotive Service Areas
- High Traffic Applications
- Aircraft Hangars
- Workshops
- Assembly areas
- Schools
- Shop Floors
- Garages
- Laboratories
- Waste Water & Sewage Treatment Plants

## TECHNICAL DATA

### PHYSICAL DATA

Finish	High Gloss
Color Range:	Clear, Haze Gray, Deck Gray, Light Gray, Sandstone, Tile Red, White, Black
Components	Two
Mix Ratio (by volume)	2 parts Base to 1 part Activator by Volume
Curing Mechanism	Chemical reaction between components
Solids by Volume	100%
Solids by Weight	100%
VOC (EPA Method 24)	0 g/Liter
DFT Per Coat	10 – 30 mils / 250 – 750 microns

### THEORETICAL COVERAGE

10 mils (250 microns)	160 ft <sup>2</sup> /Gal	3.9 m <sup>2</sup> /Liter
20 mils (500 microns)	80 ft <sup>2</sup> /Gal	1.9 m <sup>2</sup> /Liter
30 mils (750 microns)	53 ft <sup>2</sup> /Gal	1.3 m <sup>2</sup> /Liter

### FLASH POINT

Base	478° F	248° C
Activator	198° F	92° C

### PHYSICAL PERFORMANCE PROPERTIES

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Compressive Strength	ASTM C579	11,600 psi
Tensile Strength	ASTM C638	9,600 psi
Flexural Strength	ASTM C790	12,800 psi
Hardness, Shore D	ASTM 2240	75
Abrasion Resistance	ASTM D4060 CS17 Wheel, 1000 Cycles, 1 Kg Load	50 mg loss

## SURFACE PREPARATION

Concrete and primed concrete surfaces must be clean, dry and free of contaminants such as dirt, dust, grease, oil and other foreign materials. A suitable moisture barrier must be in place for concrete slabs on-grade. If a moisture barrier is not in place, seasonal variations in ground moisture can cause excessive hydrostatic pressure regardless of results measured prior to coating application.

## SURFACE PREPARATION

### Bare Concrete:

Refer to SSPC-SP13, NACE 6, or ICRI No. 310.2, CSP 2-3. Surfaces should be thoroughly clean and dry. New concrete must be cured a minimum of 28 days. Concrete should be shot blasted or diamond ground to a surface profile CSP 2 or 3.

Concrete can be abrasive blasted (ASTM D4259) or mechanically abraded to achieve a profile equal to 60 grit sandpaper or coarser. Moisture vapor transmission should be 3 lbs. or less over a 1000 sq. ft. area during a 24 hour period, measured and confirmed through a calcium chloride test. Concrete should have a minimum surface tensile strength of 300 PSI verified by a pull-off adhesion test. Slabs on grade that do not have an appropriate moisture barrier installed may be subject to seasonal moisture migration that can result in coating disbandment. Should concrete not meet moisture vapor transmission or tensile strength requirements, contact your local sales representative for guidance. Consult the following ASTM methods: ASTM- 4263 – plastic sheet method for checking moisture in concrete; ASTM 4258 standard practice for cleaning concrete; ASTM 4259 standard practice for abrading concrete.

### Previously Painted Concrete:

*Old coatings and concrete must be in sound condition. Surfaces must be clean, dry and free of contaminants such as dirt, dust, grease, oil and other foreign materials. Old coatings must be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, or if the old coatings are peeling, chipping or are otherwise in poor condition, remove the coatings down to bare concrete and prepare the bare concrete as shown above.*

## APPLICATION DATA

APPLICATION TEMPERATURE CONDITIONS		
Air	55—95°F	13—35°C
Surface	55—95°F	13—35°C
Material	55—95°F	13—35°C

	DRYING SCHEDULE @ 10.0 MILS WET (250 MICRONS)		
	@ 55°F (13°C)	@ 72°F (22°C)	@ 95°F (35°C)
To Touch:	16—24 Hours	8—12 Hours	4—8 Hours
To Recoat (Minimum):	24 Hours	18 Hours	16 Hours
To Recoat (Maximum):	72 Hours	72 Hours	48 Hours
Foot Traffic:	36 Hours	24 Hours	18 Hours
Heavy Traffic:	96 Hours	72 Hours	60 Hours
Full Cure:	7 Days	7 Days	7 Days
Pot Life:	55 Minutes	45 Minutes	20 Minutes

*\*Recoating after maximum recoat hours requires surface abrasion to ensure proper adhesion.*

## APPLICATION EQUIPMENT

**SQUEEGEE** — Flat or notched rubber squeegee (depending upon DFT required) with EPDM rubber blade, available from manufacturers of quality application tools like Midwest Rake Company.

**ROLLERS** — Use a 3/8" shed-resistant woven roller cover with phenolic core for back-rolling, available from manufacturers of quality application tools like Wooster Brush Company.

## MIXING

**1100SL** is a two-component coating and proper mixing is required. Mix base thoroughly to disperse pigment before mixing with activator. Mix 2 parts base to 1 part activator by volume for three minutes, material is immediately ready for use after mixing base and activator; no induction time required. Do not mix more material than can be used within the working time. See charts for appropriate times and pot life. Material that has begun to set (thicken) cannot be satisfactorily used and must be discarded. Surface temperatures must be at least 5°F (3°C) above dew point to prevent condensation.

## APPLICATION PRECEDURE

Pour mixed material onto floor in a long bead approximately 12-18 inches wide. Do not drain or scrape remaining material in bucket.

Use either a flat or notched rubber squeegee and spread material to uniform thickness. As material is being spread, another applicator should immediately back-roll material with a 3/8" shed-resistant woven roller cover. **DO NOT BACKROLL MATERIAL AFTER IT BEGINS TO TACK-UP.**

**COLOR VARIATION:** When coating a single floor area, always use material with the same batch number. If using more than one batch number, be sure to mix the material from different batch numbers together to ensure color uniformity. Color uniformity cannot be guaranteed from batch to batch. To help prevent visual color differences during application, be sure to minimize the time between tie-ins. Use control joints or natural breaks as breaking points between mixes. Color differences can be caused by variations in temperature, humidity, substrate temperature, induction time, mil thickness, product reactivity and surface profile. Consult with a Simiron representative for help or questions with your project.



# 1100SL 100% SOLIDS SELF-LEVELING EPOXY

PRODUCT DATA SHEET  
Edition 04/2016t  
Version 001  
30000283

## PACKAGING

Size/Color	Item Number
1 Gal Standard Activator	40001155
2 Gal Base — CLEAR	40004156
2 Gal Base — HAZE GRAY	40004170
2 Gal Base — LIGHT GRAY	40004040
2 Gal Base — DECK GRAY	40004002
2 Gal Base — SANDSTONE	40004057
2 Gal Base — WHITE	40004569
2 Gal Base — BLACK	40004606
2 Gal Base — TILE RED	40006181

## CLEAN UP

Clean brushes, rollers, tools and equipment with acetone or xylene and follow solvent manufacturer's safety instructions. Use "waterless" hand cleaner to remove dried material from skin.

## SHELF LIFE AND STORAGE

36 months, unopened and stored indoors at temperatures between 50°F (10°C) and 100°F (38°C)

⚠ Do not allow materials to freeze.

## LIMITATIONS

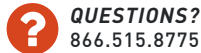
- ⚠ Do not apply at a temperature below 60°F (10°C) or above 85°F (29°C).
- ⚠ Do not delay in pouring. ⚠ Do not make partial mixes.
- ⚠ Do not apply over loose or unsound concrete, asphalt or bitumen substrates, glazed tile or nonporous brick and tile, magnesite, copper, metal, polyesters, or elastomeric membranes.

## SAFETY PRECAUTIONS

Refer to the SDS sheet before use. Safety precautions must be strictly followed during storage, handling, and use. Copy of SDS can be found within Simiron.com.

## TECHNICAL ASSISTANCE

Information is available by calling SIMIRON:  
Toll Free: 1.866.515.8775 / Telephone: +1.248.686.3600



## TECHNICAL & SAFETY LITERATURE

To acquire additional information or technical and safety literature, please visit:  
[www.simiron.com](http://www.simiron.com)

## LIMITED WARRANTY

SIMIRON warrants this product to be free from defect in the material that affects its performance for a period of 10 years (from date of purchase). SIMIRON will replace at no charge the quantity of the Coating that SIMIRON determines has failed to perform, as the sole and exclusive remedy for any breach of this warranty and/or any other defect or failure of the coating. Proof of purchase is required. Cost of labor for application of any product specifically is excluded.



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