



1100LV - LOW VISCOSITY EPOXY

PRODUCT DESCRIPTION

SIMIRON 1100LV is a low-viscosity 100% solids, zero VOC, blush-resistant, self-leveling epoxy. This epoxy base is designed to be mixed with 1100SL Slow Activator and **Metallic Additive** and applied over tinted basecoat.

FEATURES & BENEFITS

- Self Leveling
- Seamless
- Solvent Free
- 100% Solids
- Chemical Resistant
- Durable
- Excellent Adhesion Properties
- Impact Resistant
- Safe For Incidental Food Contact
- User-Friendly Work Time

RECOMMENDED USES

- Use with **1100SL Slow Cure Activator** and **Metallic Additive**

PRODUCT INFORMATION

PRODUCT NAME	SIZE	COLOR/FINISH	ITEM NUMBER
1100LV Base	2-Gallons	Clear / Gloss	40008901
1100SL Slow Activator	1-Gallon	Clear / Gloss	40008383

TECHNICAL DATA

PHYSICAL DATA	
Components	2 (Base & Activator)
Color	Clear
Finish	High Gloss
Mix Ratio (by volume)	2 Base: 1 Activator
Curing Mechanism	Chemical reaction between components
Solids by Volume	100%
Solids by Weight	100%
Mixed Viscosity	500 - 600 cP
VOC (EPA Method 24)	0 g/L

THEORETICAL COVERAGE	
Wet Mils (microns)	10 (254) - min.
Coverage sq. ft./gal. (m ² /L)	160 (3.9) - min.

CURE TIMES @ 72°F (25°C) 50% RH *	
	with 1100SL Slow Activator
Work Time	35 - 40 minutes
Tack Free	7 hours
Light Foot Traffic	16 hours
Heavy Traffic	2 days
Full Cure	5 days
Minimum Recoat	14 hours
Maximum Recoat	24 hours **

**Higher temperatures will shorten pot-life and working time.*

***Apply another coat of epoxy or a topcoat within 24 hours of the initial coat of 1100SL. If the re-coat window is missed, the coating system will need to be sanded.*

PHYSICAL PERFORMANCE PROPERTIES

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Adhesion	ASTM D7234	> 400 psi (100% Concrete Failure)
Coefficient of Friction (Wet DCOF)	ANSI A326.3	> .55
Compressive Strength	ASTM D695	11,600 psi
Flammability	–	Self-extinguishing over concrete
Flexural Strength	ASTM D790	12,800 psi
Gloss @ 60° Angle	ASTM D523	> 90
Hardness, Shore D (24 hours)	ASTM D2240	75
Taber Abrasion (CS17 Wheel, 1000 g Load, 1000 Cycles)	ASTM D4060	50 mg loss
Tensile Strength	ASTM D638	9,600 psi

CHEMICAL RESISTANCE

CHEMICAL	RESULTS	CHEMICAL	RESULTS	CHEMICAL	RESULTS
10% Acetic Acid	G	Methyl Ethyl Ketone	G	Betadine	G*
Vinegar	G	Xylene	F	Bleach	E
10% Citric Acid	G	Ethylene Glycol	G	Urine	E
10% Hydrochloric Acid	G	Isopropyl Alcohol	F	Coffee	E
30% Hydrochloric Acid (muriatic)	G	Mineral Spirits	E	Cola	E
10% Nitric Acid	G*	Brake Fluid	F	Ketchup	G
50% Phosphoric Acid	F	Transmission Fluid	E	Mustard	G
10% Sulfuric Acid	G	Motor Oil	E	Red Wine	E
37% Sulfuric Acid	F	50: 1 Gas/Oil Mixture	E		
70% Sulfuric Acid	F	E85 Gasoline	E		
20% Ammonium Nitrate	E	E95 Gasoline	E		
20% Sodium Chloride	E	Unleaded Gasoline	G		
50% Sodium Hydroxide	E	Skydrol	E		

*Stain is only defect.

KEY	
E = Excellent	G = Good
F = Fair	NR = Not Recommend

SURFACE PREPARATION

Simiron **1100LV** Base was developed to be mixed with **1100SL Slow Activator** and **Metallic Additive**. The mix should be applied over pigmented base after proper surface prep and prime to reduce outgassing.

SAFETY AND TECHNICAL

Refer to the SDS sheet before use. Safety precautions must be strictly followed during storage, handling, and use. Personal Protective Equipment (PPE) should be worn at all times. PPE will include (but is not limited to): Safety glasses with side shields and high-quality nitrile gloves. To acquire additional information or technical and safety data, please visit: www.simiron.com.



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TEMPERATURE

Air	60° – 85°F	16° – 29°C
Surface	60° – 85°F	16° – 29°C
Material	60° – 85°F	16° – 29°C

Higher temperatures will shorten pot-life and working time.
Floor temperature must be at least 5 degrees over the current dew point.

APPLICATION PROCEDURE

1100LV mix ratio is 2 Parts Base to 1 Part Slow Cure Activator by volume. Treat 2 gallons clear base with 32 ounces of **Simiron Metallic Additive** (to equal 32 oz **Metallic Additive** per 3-gal mixed epoxy).

1. Pre-mix base at low speed for 1 minute. Add **Metallic additive** and mix for 3 minutes. Add activator and mix for three minutes until uniform. Do not mix more material than can be applied in 20 minutes (material will stiffen or tack-up).
2. Immediately pour the entire contents of the mixed metallic epoxy onto the floor into ribbons or puddles, depending on style.
3. Wearing spiked shoes, spread evenly at 33 – 54 square feet per gallon to yield 30 – 48 mils wet film thickness using a squeegee or roller..
4. After evening out the epoxy, go back over the floor using circular, swirling patterns to create a unique, three-dimensional appearance.
5. Use joints as natural breaks to divide sections of the floor.

Apply the **1100SL Slow Cure with Metallic Pigment** material in a uniform thickness to yield consistent, metallic affects. The effect you create will change as the **Metallic Additive** flows and settles while the epoxy cures.

CLEAN UP & DISPOSAL

Clean up mixing and application equipment immediately after use. Use acetone or xylene; do not use alcohol. Follow solvent manufacturer's safety instructions. Be sure to follow all local, state and federal regulations when disposing of materials.

MAINTENANCE

To maintain the appearance and extend the life of the newly sealed surface, it is imperative to have a routine maintenance program. Dirt and debris that is tracked over a finished floor will quickly scratch and dull the surface. Place walk-off mats at entrances. Sweep and mop/scrub floors regularly using soft bristles/pads and a mild cleaner. Some cleaning products and equipment or improper use of these can damage a surface. Remove spills quickly to minimize damage and/or stains. For systems that support parked vehicles or other heavy items on rubber wheels, place a small piece of nonporous material, such as sheet metal or plexiglass between the tires and floor to prevent tire marks. Reapplication may be necessary in heavy traffic areas.

CORPORATE OFFICE:
Simiron Inc
3000 Research Drive
Rochester Hills, MI 48309-3580
USA
(248) 686-3600 / (866) 515-8775



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APPLICATION EQUIPMENT

Assemble all equipment. Equipment will include (but is not limited to):

- Drill and Jiffy® type mixing blade
- Spiked Shoes
- Flat metal spring blade or flat EPDM squeegee.
- 3/8" shed-resistant woven roller covers with phenolic core (tape to remove loose roller hair).
- Edge rollers, chip brushes
- Painter's tape, duct tape, measuring and mixing containers

LIMITATIONS

- ⚠ Do not apply at a temperature or thickness not recommended.
- ⚠ Do not delay in pouring mixed material onto the floor.
- ⚠ 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.
- ⚠ Moving joints and shrinkage cracks may reflect through system. Joints that are designed to move may reflect through the finished flooring system if the are not honored.
- ⚠ Tire marking may occur.

SHELF LIFE AND STORAGE

12 months from date of manufacture when stored indoors in the original unopened container at 60°F – 85°F (16°C – 29°C) in a dry location with humidity below 65%.

- ⚠ Do not allow materials to freeze.

TECHNICAL ASSISTANCE

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

LIMITED WARRANTY

SIMIRON warrants this product to be free from defect in the material that affects its performance for a period of one year (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. Warranty is void if Simiron products are mixed with or used in conjunction with materials that are substituted for Simiron products. Warranty is nontransferable.

PRODUCT DATA SHEET: 03/20/2025