



1150FC

PRODUCT DESCRIPTION

Simiron 1150FC is a 100% solids, zero VOC, fast-cure epoxy primer. **1150FC** allows users to achieve a fast return to service flooring system. Combine with **Decorative Chip** or quartz flooring systems to create an attractive and durable finish that can be applied in a day. Use with **Polyaspartic HS Fast Cure** at temperatures as low as 35°F (2°C).

FEATURES & BENEFITS

- Fast curing formula for quick return to service
- Low Temperature Application
- Resistant to Moisture Vapor Transmission up to 12 lbs. per ASTM F1869 or 85% RH per ASTM F2170.
- 100% Solids
- Zero VOC
- Solvent Free
- Durable
- Excellent Adhesion Properties
- Impact Resistant

RECOMMENDED USES

- Prime and build under other SIMIRON products where fast cure is needed.
- Apply 16 mils total for moisture vapor tolerance.
- Use in combination with fast-cure products from SIMIRON for installation in cool conditions

PRODUCT INFORMATION

PRODUCT NAME	SIZE	COLOR/FINISH	ITEM NUMBER
1150FC Hybrid Base	2-Gallon	Clear / Gloss	40008086
1150FC Hybrid Activator	1-Gallon	Clear / Gloss	40002800

3-gallons 1150FC clear can be pigmented with 1 pint Simiron E-Tints in the following colors: Haze Gray, Light Gray, Deck Gray, Sandstone, White, Black, & Tile Red.

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	2800 cP
VOC (EPA Method 24)	0 g/L
Work Time	10 – 15 minutes (@73°F, 45% RH) *

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

THEORETICAL COVERAGE		
Wet Mil (microns)	3 (76) – min.	16 (406) – max.
Coverage sq. ft./gal. (m ² /L)	100 (2.5) – min.	533 (13.1) – max.

CURE TIMES	
Drying Schedule	72°F (25°C) 50% RH
Tack Free	2.5 hours
Light Foot Traffic	5 hours
Heavy Traffic	48 hours
Full Cure	5 days
Minimum Recoat	4 hours
Maximum Recoat	24 hours **

***Apply a second coat or next coat within 24 hours of the initial coat of 1150FC. 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 7234	> 400 psi (100% Concrete Failure)
Compressive Strength	ASTM D695	10,600 psi
Flammability	—	Self-extinguishing over concrete
Flexural Strength	ASTM D790	9,600 psi
Hardness, Shore D (24 hours)	ASTM D2240	75
Taber Abrasion (CS17 Wheel, 1000 g Load, 1000 Cycles)	ASTM 4060	90 mg loss
Tensile Strength	ASTM D638	9,200 psi

SURFACE PREPARATION

Concrete and coated concrete surfaces must be sound, clean, dry and free of contaminants such as dirt, dust, grease, oil, silicones and other contaminants that may negatively affect adhesion.

MOISTURE VAPOR BARRIER:

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 moisture vapor transmission (MVT) regardless of results measured prior to coating application. For 16 mils of 1150FC, the MVT rate must not exceed twelve pounds per 1,000 square feet per 24 hours, as directed by ASTM F1869. The relative humidity (RH) of the slab must not exceed 85%, as directed by ASTM F2170. If there is a moisture situation in excess of the above rate, the use of Simiron MVB Moisture Vapor Barrier Primer may be required. Consult a Simiron Representative for details and application procedures.

NEW/BARE CONCRETE:

Diamond grind or shotblast to a CSP 3 or greater surface profile, depending on total thickness of system. Refer to SSPC-SP13/NACE 6 or ICRI Technical Guideline No. 310.2.

New concrete must be cured a minimum of 28 days and should meet moisture vapor transmission (MVT) and relative humidity (RH) thresholds as described in Surface Preparation section.

PREVIOUSLY COATED SURFACES:

Clean surface to prevent any contaminants from being spread/redistributed to a greater area being prepared. Thoroughly grind the surface with 30 grit metal diamonds to completely remove any grout or topcoats that are not epoxy based and provide proper surface profile required for adhesion of the system.

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.

TEMPERATURE

Air	35° – 85°F	2° – 29°C
Surface	35° – 85°F	2° – 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 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



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APPLICATION PROCEDURE

1150FC mix ratio is 2 Parts Base to 1 Part Activator by volume.

1. Pre-mix Base at low speed for 1 minute. Pour base into a 2–5 gallon mixing pail. If pigmenting, mix E-Tint into the Base. Then, add Activator and mix for three minutes until uniform. Do not mix more material than can be applied in 10 – 15 minutes (material will stiffen or tack-up).
2. Immediately pour all mixed **1150FC** on the floor in a long bead approximately 8 – 12 inches wide. Do not attempt to roll material out of a bucket or roller pan.
3. Wearing spiked shoes, spread evenly at 3 – 8 mils by pushing a flat squeegee or metal spring blade along the bead. Overlap previous passes in order to ensure concrete pinholes are filled. **A tight, thin coat of primer with no backroll is the best way to minimize outgassing bubbles.**
4. If back-rolling, use a non-shed 3/8" roller and back-roll the primer evenly across the squeegee passes to minimize application lines and leave a consistent film thickness.
5. After the **1150FC** Primer has set, apply the balance of the material to equal 16 mils total in order to get tolerance to Moisture Vapor Transmission up to 12 lbs. per ASTM F1869 or 85% RH per ASTM F2170. Use a flat or notched squeegee to spread the material and back-roll to reduce squeegee lines and even out the material.

CLEAN UP & DISPOSAL

Clean up mixing and application equipment immediately after use. Use toluene, 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.

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 they 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.

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PRODUCT DATA SHEET: 3/2023