



# POLYASPARTIC HS SLOW CURE

## PRODUCT DESCRIPTION

**Simiron POLYASPARTIC HS SLOW CURE** is a two-component, high performance, aliphatic polyaspartic floor coating designed for application over full broadcast systems. It provides superior protection through its excellent adhesion, durability, and resistance to stains, chemicals, and damaging UV rays.

**Simiron POLYASPARTIC HS SLOW CURE** can be applied up to 16 mils thick in a single pass to seal floors broadcast with Decorative Chip, decorative quartz and silica sand. It has a longer work time for a polyaspartic and can be applied in moderate to warm temperatures. It dries to a hard, non-yellowing finish with superior chemical resistance that can be used in both indoor and outdoor applications. Because of the high build that can be achieved in a single pass, and the wide range of application temperatures, installation, and return to service time is greatly reduced over other coatings.

## FEATURES & BENEFITS

- Easy-to-Clean, High Gloss Finish
- Resists Abrasion and Scratches
- Superior Chemical Resistance
- UV Stable
- User-Friendly Polyaspartic, 1:1 Mix Ratio
- Fast Return-to-Service
- High Solids, Low Odor
- LEED Compliant

## RECOMMENDED USES

- Restaurants, Bars & Cafeterias
- Sports Arenas/ Stadiums
- Schools & Universities
- Corridors & Lobbies
- Kennels & Labs
- Locker Rooms / Restrooms
- Garages & Auto Service Areas
- Offices & General Rooms
- Exterior or Areas Exposed to UV
- Topcoat for Floors Broadcast to Refusal or Other Floor Systems

## PRODUCT INFORMATION

PRODUCT NAME	SIZE	COLOR/FINISH	ITEM NUMBER
Polyaspartic HS Slow Cure Kit	2-Gallon	Clear / Gloss	40008919
Polyaspartic HS Activator	5-Gallon	Clear / Gloss	40008956
Polyaspartic HS Slow Cure Base	5-Gallon	Clear / Gloss	40008932

## TECHNICAL DATA

PHYSICAL DATA	
Components	2 (Base & Activator)
Color	Clear
Finish	High Gloss
Mix Ratio (by volume)	1:1
Curing Mechanism	Chemical reaction between components
Solids by Volume	90 - 93%
Solids by Weight	90 - 93%
Mixed Viscosity	400 - 500 cP
VOC (EPA Method 24)	< 50 g/L
Pot-Life	30 - 35 minutes (@73°F, 45% RH) *

THEORETICAL COVERAGE		
Wet Mils (microns)	10 (250) - min.	16 (406.4) - max.
Coverage sq. ft./gal. (m <sup>2</sup> /L)	160 (4.1) - min.	100 (2.05) - max.

CURE TIMES	
Drying Schedule @ 10 mils	72°F (25°C) 50% RH
Tack Free	3.5 hours
Light Foot Traffic	10 - 12 hours
Heavy Traffic	48 hours
Full Cure	5 days
Minimum Recoat	10 hours
Maximum Recoat	24 hours **

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

\*\*If applying a second coat, it must be applied within 24 hours after the first. If the re-coat window is missed, the coating system will need to be sanded and re-broadcast.

## PHYSICAL PERFORMANCE PROPERTIES

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Coefficient of Friction (Wet SCOF)	ANSI / NFSI B101.1	.63 (14 mils over full flake)
Elongation	ASTM D2370	5 - 10%
Flammability	—	Self-extinguishing over concrete
Flexibility 1/8" Mandrel	ASTM D522	Passes; No Cracking
Hardness, Shore D (24 hours, 5 days)	ASTM D2240	70, 86
Taber Abrasion (CS-17 Wheel, 1000 g Load, 1000 Cycles)	ASTM D4060	30 mg loss
Tensile Strength	ASTM D2370	4,000 psi
Gloss @ 60° Angle	ASTM D523	92 - 95
UV Resistance (Gloss after 1000 hours, in QUV)	ASTM G154	87 - 89

## CHEMICAL RESISTANCE

CHEMICAL	RESULTS	CHEMICAL	RESULTS	CHEMICAL	RESULTS
10% Acetic Acid	F	Methyl Ethyl Ketone	G	Betadine	G*
Vinegar	F	Xylene	F	Bleach	E
10% Citric Acid	E	Ethylene Glycol	E	Urine	E
10% Hydrochloric Acid	E	Isopropyl Alcohol	E	Coffee	E
30% Hydrochloric Acid (muriatic)	E	Mineral Spirits	E	Cola	E
10% Nitric Acid	NR	Brake Fluid	NR	Ketchup	F
50% Phosphoric Acid	NR	Transmission Fluid	E	Mustard	F
10% Sulfuric Acid	E	Motor Oil	E	Red Wine	E
37% Sulfuric Acid	G	50:1 Gas/Oil Mixture	E	<i>*Stain is only defect.</i>	
70% Sulfuric Acid	NR	E85 Gasoline	E	<b>KEY</b> E = Excellent      G = Good F = Fair              NR = Not Recommend	
20% Ammonium Nitrate	E	E95 Gasoline	E		
20% Sodium Chloride	E	Unleaded Gasoline	E		
50% Sodium Hydroxide	G	Skydrol	E		

## 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. MVT rate must not exceed three pounds per 1,000 square feet per 24 hours, as directed by ASTM F1869. The relative humidity (RH) of the slab must not exceed 75%, 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 1-3 surface profile. 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:

This product is only designed to seal full broadcast systems. Thoroughly sand/grind with 60 grit sandpaper or diamonds and clean existing coating to provide proper surface profile and proceed with application of a full broadcast system per manufacturers instructions.



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## SAFETY AND TECHNICAL

Refer to the SDS sheet before use. Safety precautions must be strictly followed during storage, handling, and use. To acquire additional information or technical and safety data, please visit: [www.simiron.com](http://www.simiron.com)

## TEMPERATURE

Air	60° – 85°F	15.6° – 29°C
Surface	60° – 85°F	15.6° – 29°C
Material	55° – 85°F	13° – 29°C

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

## MIXING

1 Parts Base to 1 Part Activator by volume. Mix with low speed drill and Jiffy blade for three minutes until uniform. Do not mix more material than can be applied in 10 – 15 minutes (material will stiffen or tack-up).

## APPLICATION EQUIPMENT

**Squeegee**—Flat or notched rubber squeegee (depending upon DFT required) with EPDM rubber blade, available from Simiron and other manufacturers of quality application tools such as Midwest Rake Company.

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

## APPLICATION PROCEDURE

1. Apply at a spread rate of 100 – 160 sq. ft. per gal. to yield 10 – 16 wet film thickness using a squeegee and back-roll with a non-shedding 3/8" nap roller.
2. In hot or humid conditions, apply via 18" roller in a dip and roll method from a roller pan as increased heat and humidity will decrease the working time of the material.
3. This material will cure faster with exposure to moisture in the air.
4. To avoid visible differences in texture or mix-to-mix "tie-ins" do not exceed 5 – 10 minutes from one mix to another.
5. Use joints as natural breaks to divide sections of the floor.
6. If less texture is desired for a broadcasted floor, apply a second coating of 6 – 8 mils (no more than 200 sq. ft. per gal.) on top of the previous coat within 24 hours.

Applying thicker than recommended, allowing material to pool, or rolling into late may leave a white, hazy appearance.

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## 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 as a topcoat for a smooth floor coating system. Designed to be used over full broadcast systems (Decorative Chip, quartz, or silica sand) only.
- ⚠ Do not apply at a temperature not recommended. For cool applications, use Fast Cure polyaspartic.
- ⚠ 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.
- ⚠ Applying thicker than recommended, allowing material to pool, or rolling into late may leave a white, hazy appearance.
- ⚠ Tire marking may occur.

## SHELF LIFE AND STORAGE

12 months when stored indoors at 55°F – 85°F (13°C – 29°C) in a dry location with humidity below 65%.

- ⚠ Do not allow materials to freeze.

Shelf life of 12 months from the date of manufacture on the label in the original unopened container stored in recommended conditions.

## 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.