POLYASPARTIC HS

PRODUCT DESCRIPTION

Simiron POLYASPARTIC HS is a two-component, high performance, aliphatic polyaspartic floor coating designed for application up to 16 mils thick in a single pass over full broadcast systems. It provides superior protection through its excellent adhesion, durability, and resistance to stains, chemicals, and damaging UV rays. It can be be used in both interior and exterior applications. XTRA Slow, Slow, Medium, and Fast cure options allow more flexibility to adapt to different temperature and humidity needs in various markets.

Polyaspartic HS XTRA Slow Cure has extended working time for extremely hot and/or humid environments.

Polyaspartic HS Slow Cure has longer working time. It is an excellent choice for applicators with less experience or installations that may require more work time.

Polyaspartic HS Fast Cure is a polyaspartic with reduced work and cure times for experienced installers with large crews and jobs that need to be turned quickly.

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
- CDPH Std Method v1.2 compliant (LEED credits available)

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 XTRA Slow Cure Kit	2-Gallon	Clear / Gloss	40010980
Polyaspartic HS Slow Cure Kit	2-Gallon	Clear / Gloss	40008918
Polyaspartic HS Medium Cure Kit	2-Gallon	Clear / Gloss	40009038
Polyaspartic HS Fast Cure Kit	2-Gallon	Clear / Gloss	40008925
Polyaspartic HS Activator	5-Gallon	Clear	40008956
Polyaspartic HS XTRA Slow Cure Base	5-Gallon	Clear	40010997
Polyaspartic HS Slow Cure Base	5-Gallon	Clear	40008932
Polyaspartic HS Medium Cure Base	5-Gallon	Clear	40009045
Polyaspartic HS Fast Cure Base	5-Gallon	Clear	40008949

TECHNICAL DATA

PHYSICAL DATA	
Components	2 (Base & Activator)
Mix Ratio (by volume)	1: 1
Curing Mechanism	Chemical reaction between components
Solids by Volume/Weight	90 – 93%
Mixed Viscosity	400 - 500 cP
VOC (EPA Method 24)	< 50 g/L

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

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TECHNICAL DATA - CURE TIMES

	72F, 20% R.H.		72F, 50% R.H.		72F, 80% R.H.			
PRODUCT NAME	WORK TIME	TACK-FREE TIME	WORK TIME	TACK-FREE TIME	WORK TIME	TACK-FREE TIME	FOOT TRAFFIC	HEAVY TRAFFIC*
Simiron Polyaspartic XTR Slow	100 min	10.5 hours	65 min	8 hours	48 min	6.5 hours	30 - 34 hours	3 days
Simiron Polyaspartic Slow	60 min	6.5 hours	49 min	4.5 hours	28 min	3.75 hours	17 - 20 hours	24 hours
Simiron Polyaspartic Medium	32 min	3.5 hours	25 min	2.5 hours	17 min	90 min	10 - 12 hours	24 hours
Simiron Polyaspartic Fast	25 min	1.5 hours	19 min	60 min	14 min	40 min	4 - 6 hours	24 hours

Polyaspartic cure is greatly influenced by both temperature and humidity. Higher temperatures and humidities will shorten pot-life and working time.You can dip & roll to apply the material to almost double the work time. If applying a second coat, it must be applied as soon as the first is tack free.
**These times assume a temperature of at least 72F and a humidity of at least 50%. If either condition is lower during cure, expect traffic times to be extended.*

PHYSICAL PERFORMANCE PROPERTIES

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Coefficient of Friction (Wet DCOF)	ANSI A326.3	.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
10% Acetic Acid	G
Vinegar	G
10% Citric Acid	G
10% Hydrochloric Acid	G
30% Hydrochloric Acid (muriatic)	G
10% Nitric Acid	NR
50% Phosphoric Acid	F
10% Sulfuric Acid	F
37% Sulfuric Acid	F
70% Sulfuric Acid	F
20% Ammonium Nitrate	E
20% Sodium Chloride	E
50% Sodium Hydroxide	G

CHEMICAL	RESULTS
Methyl Ethyl Ketone	E
Xylene	E
Ethylene Glycol	E
Isopropyl Alcohol	E
Mineral Spirits	F
Brake Fluid	E
Transmission Fluid	E
Motor Oil	E
50: 1 Gas/Oil Mixture	E
E85 Gasoline	E
E95 Gasoline	E
Unleaded Gasoline	E
Skydrol	E

CHEMICAL	RESULTS
Betadine	E
Bleach	E
Urine	E
Coffee	E
Cola	E
Ketchup	E
Mustard	G*
Red Wine	E

*Stain is only defect.

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

Chemical resistance was tested on fully cured material (after 5 days minimum).

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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.

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

TEMPERATURE

Air	35° — 85°F	2° — 29°C
Surface	35° — 85°F	2° — 29°C
Material	60° — 85°F	16° — 29°C

Higher temperatures and humidity will shorten pot-life and working time.
Polyaspartic HS applications below 60°F, must use the Fast Cure version.

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 within the work times on page 2 (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 as soon as it is tack free.

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

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. Reapplication may be necessary in heavy traffic areas.

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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 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 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: 11/05/2026

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