



85% SOLIDS POLYASPARTIC

PRODUCT DATA SHEET
Edition 2/2021
Version 001
30000265

PRODUCT DESCRIPTION

SIMIRON 85% Solids Polyaspartic is a two-component, high performance, fast-drying, 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 85% Solids Polyaspartic 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 can be applied in a wide range of temperatures and 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 — 85% Solids
- Non-yellowing formula
- Fast Return-to-Service
- Zero VOC
- LEED Compliant

RECOMMENDED USES

- High Traffic Areas
- Cold Storage Areas
- Food Processing facilities
- Residential & Commercial Garages
- Industrial Factories & Warehouses
- Commercial Kitchens
- Cafeterias
- Exterior Applications — Walkways, Pool Decks & Other UV Exposed Areas
- Topcoat or Finish Coat for Other Floor Systems
- Topcoat or Finish Coat for Floors Broadcast to Refusal with Decorative Chip, Quartz, or Silica Sand.

PRODUCT INFORMATION

ITEM/SIZE	COLOR/FINISH	ITEM NUMBER
Complete Kit — 1.5 Gal Kit	Clear — Gloss	40005559
Activator — 5 Gal	Clear — Gloss	40005689
Base — 5 Gal	Clear — Gloss	40005672

TECHNICAL DATA

PHYSICAL DATA	
Components	Two Components (Base & Activator)
Color	Clear
Finish	High Gloss
Mix Ratio (by volume)	2:1
Curing Mechanism	Chemical reaction between components
Solids by Volume	85%
Solids by Weight	85%
Mixed Viscosity	250 — 350 cps
VOC (EPA Method 24)	0 VOC
Pot-Life	30 — 35 minutes (@73°F, 45%RH) **

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

THEORETICAL COVERAGE		
Wet Mils (microns)	10 (250) — Min	16 (406.4) — Max
Coverage sq. ft/gal (m2/L)	160 (4.1) — Min	100 (2.05) — Max

CURE TIMES	
Drying Schedule @ 10 mils	77°F (25°C) 50% RH
Tack Free	2 Hours
Light Foot Traffic	6 Hours
Heavy Traffic	48 Hours
Full Cure	5 Days
Minimum Recoat	4 Hours
Maximum Recoat	24 Hours **

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

PHYSICAL PERFORMANCE PROPERTIES

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Elongation	ASTM D638	5—10%
Flammability	—	Self-extinguishing over concrete
Flexibility 1/8" Mandrel	ASTM D522	Passes; No Cracking
Hardness, Shore D	ASTM D2240	75/80
Taber Abrasion	ASTM D4060	30 mg loss
Tensile Strength	ASTM D638	4,000 psi
Gloss @ 60° Angle	ASTM D523	92%
Gloss Retention 60° After 1,000 hrs in QUV	ASTM G154	85%

CHEMICAL RESISTANCE

CHEMICAL	RESULTS
10% Acetic Acid	F
10% Citric Acid	E
10% Hydrochloric Acid	E
10% Nitric Acid	E
10% Sodium Hydroxide	E
10% Sulfuric Acid	E
10% Trisodium Phosphate	E
100% Ethanol (200 proof)	G
20% Ammonium Nitrate	E
20% Sodium Chloride	E
30% Hydrochloric Acid	F
50% Sodium Hydroxide	E
70% Sulfuric Acid	NR
85% Lactic Acid Solution	F
Ammonia (28%)	E
Bleach	E
Brake Fluid Dot 3	E
Coffee	E

CHEMICAL	RESULTS
Cola	E
Ethylene Glycol	E
Grape Juice	E
Isopropyl Alcohol	E
Ketchup	E
Methyl Ethyl Ketone	G
Mineral Spirits	E
Motor Oil (SAE 30)	E
Power Steering Fluid	E
Skydrol PE-5	E
Transmission Fluid Dextron III	E
Unleaded Regular Gasoline	E
Water	E
Xylene	G

KEY

E = Excellent

G = Good

F = Fair

NR = Not Recommend

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. 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

TEMPERATURE

Air	35°—95°F	1.6° —35°C
Surface	35°—95°F	1.6° —35°C
Material	35°—95°F	1.6° —35°C

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

MIXING

2 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 square feet per gallon 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, apply a second coating of 6—8 mls (no more than 200 SF per gal) on top of the previous coat within 24 hrs.

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 for long-term performance and life expectancy of the newly sealed surface it is imperative to continue routine maintenance program. Each sealer type, traffic and other conditions require a certain routine maintenance program. To increase the life of the floor use inside and outside walk-off mats. Some cleaning products and equipment or improper use of products can damage a wear surface appearance over time. Reapplication may be necessary in heavy traffic areas with greater frequency. Periodic light applications are recommended to maintain gloss and protection.

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 below 35°F (1.6°C) or above 95°F (35°C).
- ⚠ Do not delay in pouring mixed material onto the floor. ⚠ 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. ⚠ 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.

SHELF LIFE AND STORAGE

12 months when stored indoors at 55°F — 85°F (13°C — 35°C) in a dry location.
⚠ 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

? **QUESTIONS?**
866.515.8775

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. Warranty is nontransferable.

Disclaimer: All information provided by Simiron, Inc. concerning Simiron products, including but not limited to, any recommendations and advice relating to the application and use of Simiron products, is given in good faith based on Simiron's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Simiron's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Simiron's control are such that Simiron assumes no liability for the provision of such information, advice, recommendations or instructions related to its products. The use of Simiron product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s).

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