

971 EPS EPOXY SILOXANE FLOOR COATING

DESCRIPTION

Simiron 971 EPS is a unique high performance, two-component, high solids, low VOC epoxy siloxane floor coating that provides superior resistance against abrasion, chemicals, corrosion, UV exposure and weathering. Simiron EPS provides the benefits of a high performance epoxy and polyurethane in one coating and is free from isocyanates.

FEATURES & BENEFITS

- Excellent abrasion and chemical resistance
- Excellent gloss and color retention from long term UV exposure
- Excellent UV Stability
- Weather Resistant
- Excellent acid and corrosion resistance
- High Solids, Low VOC
- Isocyanate free

TYPICAL USES

- Topcoat for epoxy systems
- Industrial & commercial warehouses
- Food & beverage processing facilities
- Electric equipment plants
- Manufacturing facilities
- Pharmaceutical plants
- Power plants
- Automotive service areas
- High traffic applications
- Hangars
- Schools
- Shop floors
- Garages

TECHNICAL

PHYSICAL DATA

Finish:	Gloss
Color:	Clear
Mix Ratio:	2 Parts Base: 1 Part Activator
Solids by Volume	81%
Solids by Weight	83%
Recommended Film Thickness:	3 - 5 Mils

THEORETICAL COVERAGE

	ft ² /Gallon	m ² /Liter
3 mils (76.2 microns)	534	13.1
5 mils (127 microns)	320	7.9

VOC (EPA Method 24): <100 g/L

FLASH POINT

	°F	°C
Base:	219 °F	104 °C
Activator:	232 °F	111 °C

Shelf Life: 24 months when stored indoors at 55°F to 95°F (13°C to 35°C) for Base and Activator

PERFORMANCE

Abrasion Resistance:	ASTM D4060 CS17 wheel, 1000 cycles,	40 mg loss 1 Kg load
Adhesion:	ASTM D4541 Concrete failure; no delamination	elcometer 2700 psi
Hardness, Shore D	ASTM 2240	70
Gloss Retention:	QUV 2000 hours	→85%

SURFACE PREPARATION

Bare Concrete:

Bare concrete and primed concrete must be clean, dry and free of contaminants such as dirt, dust, grease, oil and other foreign materials. A suitable moisture barrier must be in place for concrete slabs on-grade. If a moisture vapor barrier is not in place, seasonal variations in ground moisture can cause excessive hydrostatic pressure regardless of results measured prior to coating application. Concrete should be shot blasted or diamond ground to a surface profile CSP 1 or 2.

Topcoat for Epoxy System:

When applying on a newly coated epoxy, be sure to apply within the epoxy's recoat window to ensure proper adhesion to the epoxy coating. If applying topcoat outside of the epoxy's recoat window the surface must be abraded by using an 80/100 grit sandpaper, diamond or Diamabrush. Be sure to sand the previous coating until no gloss is visible. Before applying the coating, be sure the surface is clean, dry and free of contaminants such as dirt, dust, grease, oil and other foreign materials. If there is any blushing from the epoxy coating be sure to clean and remove with standard detergent.

APPLICATION DATA

Pot-Life:

50 °F (10 °C)/50% RH	72 °F (22 °C)/50% RH	90 °F (32 °C)/50% RH
90 minutes	45 minutes	30 minutes

Curing Schedule @ 72°F (22°C) and 50% Relative Humidity:

To Touch	3 - 5 hours
<i>*Mechanically abrade surface with 100-150 grit sandpaper after 12 hours.</i>	
Light Foot Traffic	12 - 16 hours
Full Cure	3 - 5 days

Application Temperature Conditions

Air	45°F - 95°F	7°C - 35°C
Surface	45°F - 95°F	7°C - 35°C
Material	45°F - 95°F	7°C - 35°C

Relative Humidity: Minimum 25% - Maximum 90%
Do not apply if temperature is within 5°F of dew point

MIXING

This product has a two part **Base** to one part **Activator** mix ratio by volume. Mix material by hand using stir stick provided for 2 - 3 minutes.

APPLICATION PROCEDURE

Equipment:

Brushing: Use a high-quality synthetic bristle brush.
Rolling: Use a 3/16" nap, woven, shed-resistant roller cover.
Squeegee: Use a 24" flat / straight flexible red rubber solvent resistant blade.

Application:

Apply within temperature ranges listed and below 90% relative humidity. Applying outside of those ranges can result in inconsistent film gloss and outgassing. Only mix enough material that can be used within the recommended pot-life. The material can be applied by using a squeegee and roller. After mixing pour the material directly onto the floor. Use the squeegee to distribute the material across the floor and back roll. When coating in higher temperatures or in direct sunlight be careful to prevent any roller line marks. Do not over roll or roll back into coating that has begun to tack up, this could trap air into film or cause roller marks. To help prevent visual differences during application, be sure to minimize the time between tie-ins. Use control joints or natural breaks as breaking points between mixes. Consult with a Simiron representative for help or questions with your project.

CLEAN UP

Clean brushes, rollers, tools and equipment with lacquer thinner or xylene, follow solvent manufactures safety instructions.

SHIPPING DATA

Packaging: Premeasured 1-Gallon Kits
Base: 0.66 gallons 86 fl. oz. (2.50L) in a 1 gallon (3.78L) Container
Activator: 0.33 gallons 42 fl. oz. (1.25L) in a 1 gallon (3.78L) Container

Shelf life is 24 months when stored indoors at 55°F to 95°F (13°C to 35°C) for Base and Activator

SAFETY PRECAUTIONS

Refer to SDS sheet before use. Safety precautions must be strictly followed during storage, handling and use.

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.



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