971 EPS

PRODUCT DESCRIPTION

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

FEATURES AND BENEFITS

- Excellent abrasion and chemical resistance
- Excellent UV Stability
- Low Odor
- Excellent acid and corrosion resistance
- High Solids, Low VOC
- Isocyanate free

RECOMMENDED USES

- Restaurants & Bars
- Showroom Floors
- Residential Homes
- Schools & Universities
- Retail Shops
- Cafeterias
- Lobby/Waiting Areas
- Chemical Storage/Laboratories

PRODUCT INFORMATION

Size / Finish	**Item Number**
1 Gal Gloss Kit	40002626
1 Gal Satin Kit	40002688

TECHNICAL DATA

PHYSICAL DATA	
Finish	Gloss, Satin
Color	Clear
Components	2
Mix Ratio by volume	2 Base : 1 Activator
Recommended Film Thickness	2.4 – 4 mils (cured)
Solids by Volume	81%
Solids by Weight	83%
VOC (EPA Method 24)	< 100 g/L

THEORETICAL COVERAGE		
3 mils (76.2 microns)	535 ft^2/Gal	13 m^2/Liter
5 mils (127 microns)	320 ft^2/Gal	8 m^2/Liter

Do not apply coating thicker than 8 mils.

CURE TIMES @ 72F (22C), 50% RH	
Work Time	25 minutes
Tack Free	3-5 hours
Light Foot Traffic	12-16 hours
Full Cure	5 days

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PHYSICAL PERFORMANCE PROPERTIES

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Adhesion	ASTM D4541	>400 psi (Concrete failure, No delamination)
Abrasion Resistance	ASTM D4060 CS17 Wheel, 1000 cycles, 1Kg load	40 mg loss
Hardness, Shore D (24 hours)	ASTM D2240	70
Gloss at 60° Angle	ASTM D523	90
UV Resistance (gloss after 1000 hours in QUV)	ASTM G154	>85

CHEMICAL RESISTANCE

CHEMICAL	RESULTS
10% Acetic Acid	E
Vinegar	G
10% Citric Acid	G
10% Hydrochloric Acid	E
30% Hydrochloric Acid (muriatic)	E
10% Nitric Acid	G
50% Phosphoric Acid	G
10% Sulfuric Acid	G
37% Sulfuric Acid	G
70% Sulfuric Acid	G*
20% Ammonium Nitrate	E
20% Sodium Chloride	E
50% Sodium Hydroxide	E

CHEMICAL	RESULTS
Methyl Ethyl Ketone	E
Xylene	E
Ethylene Glycol	E
Isopropyl Alcohol	E
Mineral Spirits	E
Brake Fluid	G
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	G*
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

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:

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

Diamond grind or shotblast to a CSP 1-3 surface profile. Refer to SSPC-SP13/NACE 6 or ICRI Technical Guideline No. 310.2.

This product is a topcoat, typically applied over an epoxy primer and basecoat. 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. Vacuum and scrub or tack the area to remove all dust before topcoating.

PREVIOUSLY COATED SURFACES:

This product is a topcoat, typically applied over an epoxy system. Clean surface to prevent any contaminants from being spread/redistributed to a greater area being prepared. To recoat the existing surface, the surface must be abraded by using an 80/100 grit sandpaper, diamonds, or Diamabrush. Be sure to sand the previous coating until no gloss is visible. Vacuum and scrub or tack the area to remove all dust before topcoating.

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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. Personal Protective Equipment (PPE) should be worn at all times. PPE will include (but is not limited to): Safety glasses with side shields, high-quality nitrile gloves, and properly fitted NIOSH approved respirators. To acquire additional information or technical and safety data, please visit: www.simiron.com.

TEMPERATURE

Air	45° – 95°F	7° – 35°C
Surface	45° – 95°F	7° – 35°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 required application equipment. Equipment will include (but is not limited to):

- Stir stick
- High quality non-shed 3/8" nap roller covers
- Edge rollers & chip brushes
- Roller pans

APPLICATION PROCEDURE

1. Mix material by hand using stir stick provided for 2 - 3 minutes. Do not drill mix. Never mix more than 1 kit at a time.
2. Pour mixed material into a roller pan and apply with a non-shed 3/8" nap roller cover directly to the floor at 320-535 sq. ft. per gallon. Roll once or twice to evenly cover the area and let the product settle.
3. Do not over-roll or roll back in to coating that has begun to tack up. This could trap air into film or cause roller marks.
4. To help prevent visual differences in application be sure to minimize the time between tie-ins. Use control joints or natural breaks as breaking points between mixes.
5. Apply at 320 to 535 sq. ft. per gallon kit for best results.

TECHNICAL ASSISTANCE

Information is available by calling SIMIRON
Toll Free: **1.866.515.8775 / +1.248.686.3600**

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CLEAN UP AND DISPOSAL

Clean up mixing and application equipment immediately after use. Use 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 drill mix.
- Do not apply at temperatures and thicknesses not recommended.
- Do not make partial mixes or mix more than one kit at a time.
- 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.
- 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.

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.

PRODUCT DATA SHEET: 02/15/2025