

SIMIRON HIGH-WEAR URETHANE

PRODUCT DATA SHEET Edition 04/2019 Version 001

PRODUCT DESCRIPTION

SIMIRON High-Wear Urethane is a unique high performance, three-component, high solids, low VOC urethane floor coating that provides superior resistance against abrasion, chemicals, corrosion, UV exposure and weathering while imparting excellent flexibility. Simiron High-Wear Urethane works great in auto service centers, warehouses, computer rooms, laboratories, aircraft hangers, cafeterias, and some chemical exposure areas. Simiron High-Wear Urethane is a clear topcoat that has a textured satin finish

FEATURES & BENEFITS

- Excellent Abrasion resistance
- Excellent UV Stability
- Weather Resistant
- Excellent Chemical Resistance
- Excellent Flexibility
- Satin Finish
- Clear

RECOMMENDED 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 DATA

PHYSICAL DATA				
Finish	Satin			
Color	Clear			
Mix Ratio	1.08 lbs. Part A + 6.45 lbs. Part B + 3.0 lbs. Part C			
Components	Three			
Solids by Volume	0.92			
Solids by Weight	0.955			
Recommended Film Thickness	2—3 mils			
VOC (EPA Method 24)	95 g/L			

THEORETICAL COVERAGE			
600 ft ² /Gallon			
14.55 m ² /Liter			

PHYSICAL PERFORMANCE PROPERTIES						
Abrasion Resistance	ASTM D4060 CS17 Wheel, 1000 cycles, 1Kg load	12 mg loss				
Adhesion	ASTM D4541	300 psi Concrete failure; no delamination				
Flexibility	ASTM D522	No Cracks on a 1/8" mandrel				
Gloss @ 60°	ASTM D523	20 - 40				
Gloss Retention	500 QUV A hours	88%				
Impact Resistance	Gardner Impact	160 in. lb.				
Tensile Strength	ASTM D2370	7,200 psi				
Coefficient of Friction	ASTM D2047	>0.60				
Hardness	ASTM D3363	4H				
UV Resistance	500 QUV A Hours	Excellent				
Mixed Viscosity	Brookfield	750 cPs				



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Drying Schedule	Pot Life	Tack Free	Light Traffic	Full Cure
60°F, 35% R.H.	3 hours	6 hours	24 hours	5 days
60°F, 50% R.H.	2.5 hours	5 hours	22 hours	5 days
60°F, 80% R.H.	2 hours	4 hours	18 hours	4 days
75°F, 35% R.H.	2.5 hours	5 hours	20 hours	5 days
75°F, 50% R.H.	2 hours	4 hours	16 hours	4 days
75°F, 80% R.H.	1.5 hours	3 hours	14 hours	3 days
90°F, 35% R.H.	2 hours	4 hours	18 hours	4 days
90°F, 50% R.H.	1.5 hours	3 hours	16 hours	3 days
90°F, 80% R.H.	1 hours	2 hours	14 hours	3 days

SURFACE PREPARATION

It is crucial that the epoxy basecoat is thoroughly sanded until the surface is de-glossed and appropriately and thoroughly scratched. It is recommended that a minimum 100 grit SCREEN be used.

PACKAGING

Size/Finish Item Number 1 Gal Kit 40005030

Premeasured 1-Gallon Kits

APPLICATION

Pour the mixed material into the application tray. Apply at the rate of 600 square feet per gallon in a uniform manner with a 3/8" nap roller. For uniform appearance, it is critical that the material is not applied thicker than this application rate. Dip the roller in the coating and roll out excess material in the roller tray prior to the actual application to the substrate. Overlap subsequent passes being sure no excess material is applied when overlapping. Make sure the floor has just enough material to cover evenly in a thin application. Finally, re-roll the area in the opposite direction of the first pass applications to level and even the application. The final re-rolling for the entire floor should be in the same direction. Remix the material in the application tray to maintain a uniform mix throughout the application process. If the appearance is not satisfactory, re-roll until the area is uniform in appearance. It is almost impossible to over-roll this material. The last step in the application process (wearing spiked shoes) is to pull the roller tool across the entire slab in one direction without applying any pressure and repeating this process by overlapping until the entire slab has been re-rolled. This will help blend in any roller and overlap marks. Maintain temperatures and humidity within the recommended ranges during the application and during the curing process. Make sure the substrate has a suitable epoxy primer that has been de-glossed (see surface preparation above) It is best to maintain a wet edge to avoid roller marks. Direct sunlight or high temperatures may cause visible roller marking during application. Too thick of an application may result in solvent entrapment and product failure. The Surface must be dry before the application of this product.

RECOATING

Multiple coats of this product are not recommended without thoroughly evaluating the adhesion in conjunction with a thorough de-glossing. If you opt to apply multiple coats of this product, a test area must be applied to test adhesion before attempting to apply multiple coats over the entire job. If you opt to recoat this product, you must first be sure that all of the solvents have evaporated from the coating during the curing process and properly de-gloss and roughen the surface [see surface preparation above]. The information on the front side are reliable guidelines to follow. However, it is best to test the coating before recoating or top-coating. This can be done by pressing on the coating with your thumb to verify that no fingerprint impression is left. Always remember that colder temperatures will require more cure time for the product. Before recoating or top-coating, check the coating to insure no contaminants exist. If contaminants are present on a previous coat, remove with a standard detergent cleaner and allow to thoroughly dry. Although not recommended, when recoating this product with subsequent coats, it is advisable to apply the recoat before 24-48 hours pass only after proper surface preparation and adhesion testing has been completed.

LIMITATIONS

Simiron High-Wear Urethane should not be applied more than three mils wet. Make sure that the floor temperature and materials are between 60° and 80°. Do not coat the floor if any moisture is present. Do not coat the floor unless floor temperature is more than 5° above the dew point. Do not apply if relative humidity is below 25% or above 85%. Do not roll into product that begins to tack as it could leave visible roller lines.

MIXING

This product has three components. The part A should be mixed with the part B thoroughly and then the part C should be added slowly while mixing insure a uniform mixture. The kits come prepackaged and should be used in their entirety and should not be broken down. After the three parts are combined, mix extremely well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. Avoid whipping air into the coating. Improper mixing may result in product failure. Once the material is opened, it cannot be re-sealed for later use.



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STORAGE AND HANDLING

Store product at normal room temperature before using. Storage should be between 60°F - 90°F in a dry area away from sparks.

Shelf life is one year when stored in proper conditions.

CLEANUP

Use ketone solvents or other suitable cleaning solvent

TECHNICAL ASSISTANCE

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



DISPOSAL

Be sure to follow all local, state and federal regulations when disposing of materials.

TECHNICAL & SAFETY LITERATURE

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

To acquire additional information or technical and safety literature, please visit: www.simiron.com

SIMIRON

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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.

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