

Technical Data Sheet



4409

WB Polyurethane Satin

PRODUCT DESCRIPTION

General Polymers 4409 WB Polyurethane Satin resin is a unique, environmentally friendly, water-based, breathable, aliphatic urethane available in clear, or as a tint base that provides the performance characteristics of solvent-based systems with the ease of application associated with water-based systems.

ADVANTAGES

- Satin Finish
- Meets USDA requirements for use in federally inspected facilities
- Color matching at local SW store
- Environmentally (Green) friendly formulation
- Breatheable
- UV stable
- Low odor
- Long working time
- Good chemical resistance

TYPICAL USES

4409 WB Polyurethane Satin is to be used as a final seal coat over General Polymers flooring systems to reduce gloss.

LIMITATIONS

- **DO NOT allow to freeze.**
- Substrate must be structurally sound, dry and free of bond inhibiting contaminants.
- During installation and initial cure cycle substrate and ambient air temperature must be at a minimum of 50F. Substrate temperature must be least 5F above the dew point (for lower temperature installation contact the Technical Service Department).
- Maximum dry surface temperature not to exceed 160F.
- **Thick or puddled material can result in CO2 entrapment.**
- **If a second coat is required the surface must be fully abraded with 100 grit or finer screens/paper. If the second coat is over a textured surface a tie primer may be required, contact Technical Service.**
- **This coating though resistant, is not a guarantee against tire staining. Vehicular tires from cars and trucks to tractors and boat trailers are varied and have the potential to leave a brown stain under certain conditions. Place rubber mats or carpet pieces under the tires to avoid the issue.**

**Chemical Resistance
24 hour exposure test (NE= No Effect)**

SafKleen	NE
10% Bleach	NE
CIP 100	NE
Vesphene	NE
LPHsE	NE
25% Phosphoric Acid	NE
50% Sodium Hydroxide	NE
IPA	NE

TYPICAL PHYSICAL PROPERTIES @ 73F

Color	Clear, Can be tinted at SW Store <u>NOTE: Bright White cannot be store tinted, must order 4408A59 or 4409A59 direct from the plant.</u>								
Mix Ratio: A:B	3:1								
Solids, by weight	50%-60% ±2%, depending on color or base								
Pot Life, gallon mass	1.5 hours								
VOC (Theoretical)	<50 g/L								
Viscosity	200-1800 cps								
Coverage	400-800 sq. ft.								
Cure Time	<table style="width: 100%; border: none;"> <tr><td style="width: 50%;">Dry to Touch</td><td style="width: 50%; text-align: right;">4-5 hrs</td></tr> <tr><td>Recoat</td><td style="text-align: right;">See Limitations</td></tr> <tr><td>Light Traffic</td><td style="text-align: right;">18 hrs min</td></tr> <tr><td>Full Cure</td><td style="text-align: right;">7 days</td></tr> </table>	Dry to Touch	4-5 hrs	Recoat	See Limitations	Light Traffic	18 hrs min	Full Cure	7 days
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Recoat	See Limitations								
Light Traffic	18 hrs min								
Full Cure	7 days								
Flammability	Self-extinguishing over concrete								
Abrasion Resistance ASTM D 4060, CS-17 Wheel, 1,000 Cycles	41 mgs lost								
Pencil Hardness	4H								
Finish	Satin								

SURFACE PREPARATION

Proper inspection and preparation of the substrate to receive resinous material is critical. Read and follow the "Instructions for Concrete Surface Preparation" (Form G-1) for complete details.

STORAGE / APPLICATION

• MATERIAL DELIVERY AND STORAGE

Store materials in accordance instructions, with seals and labels intact and legible. Keep resins, hardeners, and solvents separated from each other and away from sources of ignition. One year shelf life is expected for products stored between 50°F - 90°F. **DO NOT ALLOW MATERIAL TO FREEZE.**

• APPLICATION INSTRUCTIONS

1. Premix 4409A (resin) using a low speed drill and Jiffy blade. Mix for one minute and until uniform, exercising caution not to whip air into the materials.

2. Add 3 parts 4409A (resin) to 1 part 4409B (hardener), mix with low speed drill and Jiffy blade for three minutes and until uniform. Pour mixed material into a clean roller pan and apply using the "dip and roll" method using a 1/4" nap roller at a spread rate of 400-800 square foot per gallon evenly with no puddles making sure of uniform coverage. **NOTE:** 4409 can be reduced with up to 5% potable water to assist flow when required due to temperature or other environmental conditions.

3. Allow to cure 18 hours before applying an optional second coat. If a second coat is required the surface must be **fully** abraded with 100 grit or finer screens/paper. If the second coat is over a textured surface a tie primer may be required, contact Technical Service.

4. Allow 24 hours minimum before opening to wheeled traffic and water exposure.

NOTE: 4409 tacks quickly, you must maintain a wet edge to avoid the potential for roller lines, if you see lines during application cross roll to eliminate. 4409 is a satin finish and should be applied uniformly within the recommended coverage, uneven application can result in a "cloudy" appearance in thick areas.

CHEMICAL RESISTANCE

For comprehensive chemical resistance information, consult the Technical Service Department.

Cleanup

Clean up mixing and application equipment immediately after use with water. Observe all fire and health precautions when handling or storing solvents.

Safety

Refer to the MSDS sheet before use. All applicable federal, state, local and particular plant safety guidelines must be followed during the handling and installation and cure of these materials. Safe and proper disposal of excess materials shall be done in accordance with applicable federal, state, and local codes.

Maintenance

Occasional inspection of the installed material and spot repair can prolong system life. For specific information, contact the Technical Service Department.

Shipping

- Destinations East of the Rocky Mountains are shipped F.O.B. Cincinnati, Ohio.

- Destinations West of the Rocky Mountains are shipped F.O.B. Victorville, California.

For specific information relating to international shipments, contact your local sales representative.

Disclaimer

The information and recommendations set forth in this document are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product(s) offered at the time of publication. Published technical data and instructions are subject to change without notice.

Consult www.generalpolymers.com to obtain the most recent Product Data information and Application instructions.

Warranty

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams, NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



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