



Protective & Marine Coatings

GENERAL POLYMERS® 4409 WB POLYURETHANE SATIN

PART A
PART B

GP4409
GP4409B01

SERIES
HARDENER

Revised September 23, 2014

PRODUCT INFORMATION

PRODUCT DESCRIPTION

GENERAL POLYMERS 4409 WB POLYURETHANE SATIN resin is a unique, environmentally friendly, water-based, breathable, aliphatic urethane available in a low gloss, clear and or tinted that provide the performance characteristics of solvent-based systems with the ease of application associated with water-based systems.

ADVANTAGES

- Satin Finish
- Acceptable for use in USDA inspected facilities
- Color matching at local SW store
- Environmentally friendly formulation
- Breathable
- UV stable
- Water-based
- Long working time
- Good chemical resistance

TYPICAL USES

GENERAL POLYMERS 4409 WB POLYURETHANE SATIN can be used to seal terrazzo, concrete or other floor systems where a satin finish is desired. Typical coating applications include: hangars, light manufacturing, garages, and auto service areas.

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 50°F (10°C). Substrate temperature must be least 5°F (3°C) above the dew point (for lower temperature installation contact the Technical Service Department).
- Maximum dry surface temperature not to exceed 160°F (71°C).
- **Thick or puddled material can result in CO2 entrapment.**
- **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 stain under certain conditions. Place rubber mats or carpet pieces under the tires to avoid the issue.**
- **Do not install if raining or when rain is imminent, or a reduction in gloss and working time can be experienced.**

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

Skydrol	Slightly discolored/stain
SafKleen	NE
10% Bleach	NE
CIP 100	NE
Vesphene	NE
LPHsE	NE
25% Phosphoric Acid	NE
50% Sodium Hydroxide	NE
IPA	NE

PRODUCT CHARACTERISTICS

Color:	Clear, and Tint Bases Can be tinted at SW Store
Mix Ratio:	3:1 Can be reduced up to 20% with potable water
Volume Solids:	50% ± 2%, mixed
Weight Solids:	60% ± 2%, mixed
VOC (EPA Method 24):	<50 g/L mixed; 0.41 lb/gal
Viscosity, mixed:	200-1,800 cps

Drying Schedule @ 4.0 mils (100 microns) wet:

	@ 72°F (22°C)
To touch:	4-5 hours
To recoat:	See Page 2 Application Instructions
Light traffic:	18 hours minimum
Wheeled traffic:	48 hours minimum
	<i>Minimize air movement to maintain a wet edge</i>
	<i>Drying time is temperature, humidity, and film thickness dependent.</i>
Pot Life:	gallon mass 1.5 hours @ 72°F (22°C)

Shelf Life:	Part A: 12 months, unopened Part B: 6 months, unopened Store indoors at 50°F (10°C) to 90°F (32°C).
Flash Point:	>212°F (>100°C), ASTM D 93, mixed

PERFORMANCE CHARACTERISTICS

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS17 wheel, 1,000 cycles	41 mg loss
Finish		Satin
Flammability		Self-extinguishing over concrete
Pencil Hardness	ASTM D 3363	4H

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.



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APPLICATION

APPLICATION INSTRUCTION

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 up to 20% with potable water to assist flow when required due to temperature or other environmental conditions.

3. 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.

4409 cure(s) to a very hard, glass-like film, recoating after cure is difficult. If a second coat is required or planned apply the second coat 2-4 hrs after installation of the first coat. On a floor this will require spiked shoes, the film will still be tacky and care will need to be taken to roll out any cleat marks. If the first coat has cured overnight it will require sanding and the application of an epoxy primer, contact Technical Service.

ORDERING INFORMATION

Packaging:

Part A: 5 gallon (18.9L) containers
Part B: 5 gallon (18.9L) containers

Weight: 10.1± 0.2 lb/gal; 1.21 Kg/L
mixed, may vary by color

CHEMICAL RESISTANCE

For comprehensive chemical resistance information, consult the Chemical Resistant Guide.

INSTRUCTIONS FOR TINTING

Tint Part A with Envirotoners at 150% strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color. DO NOT EXCEED 8 ounces of colorant per gallon of Part A resin.

CHEMICAL RESISTANCE

For comprehensive chemical resistance information, consult the Chemical Resistant Guide and contact the Technical Service Department.

CLEANUP

Clean up mixing and application equipment immediately after use with soap and water.

SAFETY

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

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 Product Data Sheet 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 offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

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.