

Technical Data Sheet



3589

Smooth Epoxy Floor Coating

PRODUCT DESCRIPTION

General Polymers 3589 SMOOTH EPOXY FLOOR COATING is a high solids, clear or pigmented epoxy coating. 3589 SMOOTH EPOXY FLOOR COATING has good wear resistance as a concrete coating or flooring system topcoat.

ADVANTAGES

- High gloss
- Easy to maintain
- Self-priming over dry concrete
- Good wear resistance
- Low odor permits installation in occupied areas
- Resistant to*:

3 Day Exposure @ 72°F	Result
Alcohol	Slight discoloration
Ethylene Glycol	Slight down glossing
Fats, Oils & Sugars	NE
Gasoline, Diesel & Kerosene	Slight discoloration
Hydrochloric Acid (<35%)	Slight discoloration
Lactic Acid (Milk)	Slight discoloration
Mineral Oils	NE
MEK	NR
Muriatic Acid	Down Gloss / Stain
Nitric Acid (<10%)	Down Gloss / Stain
Nitric Acid (<30%)	NR
PM Acetate	Slight discoloration
Phosphoric Acid (<50%)	NR
Potassium Hydroxide (<50%)	NE
Sodium Hydroxide (<50%)	NE
Sulfuric Acid (<50%)	NR
Xylene	Slight discoloration

NE = No Effect

NR = Not Recommended

TYPICAL USES

3589 SMOOTH EPOXY FLOOR COATING is an economical, high gloss epoxy resin for use as an epoxy coating or topcoat for slurries, mortars and broadcast flooring systems where high chemical resistance is not required.

LIMITATIONS

- Slab on grade requires vapor/moisture barrier.
- 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).
- *Coating may stain, change color, or downgloss upon exposure to water or chemicals.
- Light colors may require two coats for proper hiding.
- Avoid ordering this product in "white" as yellowing can occur.
- **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.**

TYPICAL PHYSICAL PROPERTIES @ 73F

Mix Ratio A:B	4:1
Color	Clear, Standard Colors and Custom Colors
VOC (Volatile Organic Content)	
EPA Method 24	Compliant
SCAQMD Method 304	Compliant
Coverage @ 8-10 mils WFT	160-200 sq. ft.
Pot Life, 1 gallon mass	
ASTM D 2471	
Regular Cure	@ 50F 40 minutes @ 73F 20 minutes @ 90F 8 minutes
Fast Cure	@ 50F 30 minutes @ 73F 12 minutes @ 90F 6 minutes
Cure Time	
Regular Cure	Dry to Touch 12 hours Recoat 16 hours min. Light Traffic 24hours min. Full Cure 7 days
Fast Cure	Dry to Touch 2-3 hours Recoat 3-4 hours min. Light Traffic 8-12 hours min. Full Cure 7 days
Abrasion Resistance	100 mgs lost
ASTM D 4060, Type Wheel, CS17 1,000 Cycles	
Hardness, Shore D, 24 hours	70
ASTM D 2240	
Resistance to Elevated Temperatures	No slip or flow at required temperature of 158F
MIL-D-3134J	
Adhesion	300 psi
ACI 503R	(concrete failure)
Flammability	Self-extinguishing over concrete
Impact Resistance	Direct, inch, pound greater than 160, passes
ASTM D 2794	Reverse, inch pound greater than 80, passes

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.

• APPLICATION INSTRUCTIONS

1. Premix 3589A (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 4 parts 3589A (resin) to 1 part 3589B (hardener) by volume. Mix with low speed drill and Jiffy blade for three minutes and until uniform. Apply material using a 1/4" nap roller at a spread rate of 160-200 sq. ft. per gallon. Back roll with a spiked roller if necessary to help release entrapped air created from the mixing or application process.
3. Allow material to cure before applying second coat.
4. Repeat Steps 1 and 2 for seal coat application. Allow to cure 24 hours minimum before opening to light foot traffic and water exposure.

NOTE* After 20-30 minutes setup time, if required, spike roll coating to remove any entrapped air. Do not spike roll after 40 minutes.

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. Use toluene or xylene. 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.

