

Technical Data Sheet



3744

High Performance CR Epoxy

PRODUCT DESCRIPTION

General Polymers 3744 HIGH PERFORMANCE CR EPOXY is a high solids, two component epoxy coating and binder resin. 3744 HIGH PERFORMANCE CR EPOXY may be used directly over approved primed substrates or as a gloss seal coat over decorative, slurry and mortar systems. Its outstanding broad spectrum chemical resistance provides protection in aggressive environments. Available in clear, pigmented or pigmented fast cure.

ADVANTAGES

- Stain Resistant
- Chemical Resistant
- Available with an antimicrobial agent
- Available in a fast cure version
- Suitable for use in USDA inspected facilities

TYPICAL USES

3744 HIGH PERFORMANCE CR EPOXY should be used in areas where maintenance of a high performance, aesthetically appealing and chemical resistant epoxy system is required. 3744 HIGH PERFORMANCE CR EPOXY is a high solids material, and has no offensive solvent odor during installation.

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).
- Maximum dry surface temperature not to exceed 160F.
- Strictly adhere to published coverage rates.
- Apply at 10 mils if using white for complete hiding.

TYPICAL PHYSICAL PROPERTIES @ 73F

Mix Ratio A:B	2:1
Color	Clear, Standard Colors Computer color matching available upon request
VOC (Volatile Organic Content)	
EPA Method 24	Compliant
SCAQMD Method 304	Compliant
Coverage @ 6-8 mils WFT	160-240 sq. ft.
Pot Life, 1 gallon mass	30 minutes
Cure Time @ 6 mils	
Standard Cure	Dry to Touch 4-6 hours Recoat 12-16 hours min. Light Traffic 24 hours min Full Cure 7 days
Fast Cure	Dry to Touch 3-4 hours Recoat 6-8 hours Light Traffic 10-12 hours Full Cure 7 days
Flexural Strength	12,400 psi
ASTM D 790	
Tensile Strength	6,000 psi
ASTM D 638	
Abrasion Resistance	100 mgs lost
ASTM D 4060, CS-17 Wheel, 1,000 Cycles	
Water Absorption	0.10%
ASTM C 413	
Resistance to Elevated Temperatures	No slip or flow at required temperature of 158F
MIL-D-3134J	
Hardness, Shore D	80
ASTM D 2240	
Adhesion	300 psi
ACI 503R	(concrete failure)
Flammability	Self-extinguishing over concrete
Gloss	85 millage units
60° Gloss Meter @ 73F, 50% RH	
Impact Resistance	Direct, inch pound greater than 160, passes Reverse, inch pound greater than 80, passes
MIL-D-3134J	

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 3744A (resin) using a low speed drill and Jiffy blade. Mix for one minute and until uniform, exercising caution not to introduce air into the material.
2. Add 2 parts 3744A (resin) to 1 part 3744B (hardener) by volume. Mix with low speed drill and Jiffy blade for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations.
3. Apply 3744 using a squeegee or trowel and back roll with a 1/4" nap roller at a spread rate of 160-240 square feet per gallon to yield 6-8 mils WFT with no puddles making sure of uniform coverage. **Take care not to puddle materials and insure even coverage.**
4. Allow to cure 24 hours minimum before opening to traffic and water exposure.

Note: Epoxy materials will appear to be cured and "dry to touch" prior to full chemical cross linking. Allow epoxy to cure 2-3 days prior to exposure to water or other chemicals for best performance.

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.

