

Technical Data Sheet



3552

EPO-FLEX®

Flexible Epoxy Membrane

PRODUCTION DESCRIPTION

General Polymers 3552 EPO-FLEX FLEXIBLE EPOXY MEMBRANE is a high solids, flexible epoxy material which combines the toughness, adhesion and durability of epoxies with a degree of flexibility common to polyurethanes. Flexibility is achieved without the use of plasticizers or other additives which can separate or migrate out of the epoxy complex as the material ages or is degraded due to environmental conditions. 3552 EPO-FLEX FLEXIBLE EPOXY MEMBRANE may be used with fiberglass mesh in surfaces for larger cracks and joints.

ADVANTAGES

- Optional reinforcement
- Bridges hairline cracks, aids in suppression of reflective cracking of trowel applied flooring due to substrate movement associated with thermal movement.
- Flexible, yet tough
- State of the art chemistry assures long-term flexibility
- Remains flexible at low temperatures
- Waterproofing

TYPICAL USES

3552 EPO-FLEX FLEXIBLE EPOXY MEMBRANE is recommended for use as a flexible membrane under General Polymers trowel and fluid-applied flooring systems where substrate cracking is anticipated and/or evident or as a waterproofing membrane as required. Installations under aesthetic and functional overlays include: mechanical equipment rooms, kitchens, animal research, wet production, secondary containment and other areas requiring protection from substrate through-system cracking.

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 60F. Substrate temperature must be least 5F above the dew point (for lower temperature installation contact General Polymers).
- When required, adequate ventilation shall be provided and proper clothing and respirators worn.
- Extinguish all sources of ignition during the entire installation cycle.
- **Strictly adhere to published coverage rates.**
- **Strictly adhere to mixing ratios.**

TYPICAL PHYSICAL PROPERTIES @ 73F

Mix Ratio A:B		1:1
Color		Gray
VOC (Volatile Organic Content)		
EPA Method 24		Compliant
SCAQMD Method 304		Compliant
Coverage @ 20-40 mils		40-80 sq. ft.
Pot Life, 1 gallon mass		35 minutes
Cure Time	Dry to Touch	16 - 24 hours
	Recoat	24 hours min.
Adhesion		350 psi
ACI 503R		(100% concrete failure)
Hardness, Shore D		23
ASTM D 2240		
Tensile Strength		1,200 psi
ASTM D 412		
Elongation @ Break		145%
ASTM D 412		
Thermal Cycling		No Cracking
ASTM C 884 (24 hours, -21C to 25C)		
Flammability		Self-extinguishing over concrete

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 3552A (resin) using a low speed drill and Jiffy blade. Mix for one minute and until uniform, exercising caution not to whip air into the material.

2. Add 1 part 3552A (resin) to 1 part 3552B (hardener) by volume. Mix with low speed drill and Jiffy blade for three minutes and until uniform.

3. Immediately pour the mixed material onto the substrate and pull out using a 1/8" v-notched squeegee to yield 20 mils WFT. Readings must be taken continuously during application with a wet mil gauge to verify material is being applied at the proper thickness. Allow to cure overnight at 73°F surface temperature. Material cures slower at lower temperatures.

NOTE: Epoxy materials may tend to blush at the surface especially in humid environments. After surface is primed and before installation of each subsequent coat, surface must be examined for blush (a whitish greasy film and/or low gloss). The blush must be completely removed prior to recoating using warm detergent water or through solvent wipe.

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.



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