

Technical Data Sheet



3555

EPO-FLEX® HD Epoxy Coating

PRODUCT DESCRIPTION

General Polymers 3555 EPO-FLEX HD EPOXY COATING is a high solids, chemical resistant, elastomeric epoxy which combines the toughness, adhesion, and durability of epoxies with the flexibility common to polyurethane elastomers. Flexibility is achieved without the use of plasticizers or other additives which migrate from a material as it ages. EPO-FLEX HD EPOXY COATING is self-leveling and may be used with fiberglass reinforcement to enhance system properties, or as a waterproofing membrane.

ADVANTAGES

- Tough, abrasion resistant
- Bridges cracks in concrete structures up to 65 mils
- Retains long-term flexibility due to unique chemistry
- May be installed in occupied facilities
- Thermal shock resistance
- Remains flexible at low temperatures

TYPICAL USES

EPO-FLEX HD EPOXY COATING is recommended for use as a flexible coating and as a component of EPO-FLEX Industrial Floor and EPO-FLEX MER (Mechanical Room Flooring Systems. 3555 EPO-FLEX HD EPOXY COATING can also be used as a waterproofing membrane under any General Polymers flooring systems.

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 the Technical Service Department).
- 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 WFT	40-80 sq. ft.
Pot Life, 1 gallon mass	20-25 minutes
Cure Time @ 6 mils	5 hours
Dry to Touch	6-24 hours min.
Recoat	48 hours
Full Cure	
Adhesion ACI 503R	300 psi (concrete failure)
Hardness, Shore D ASTM D 2240	50/40
Tensile Strength ASTM D 412	1,700 psi
Elongation ASTM D 412	80%
Thermal Cycling ASTM C 884 (24 hours, -21C to 25C)	No Cracking
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. 36 months shelf life is expected for products stored between 50°F - 90°F.

• APPLICATION INSTRUCTIONS

1. Premix 3555A (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 3555A (resin) to 1 part 3555B (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 and cross roll with a 3/8" nap roller. 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.

4. After the membrane is cured, check for surface blush. Remove any blush with detergent wash completing installation of desired system.

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.

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.

