

Technical Data Sheet



3554

EPO-FLEX® Matrix Resin

PRODUCT DESCRIPTION

General Polymers 3554 EPO-FLEX MATRIX RESIN is a clear, high solids, flexible epoxy material which combines toughness, adhesion, and durability with flexibility. 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. 3554 EPO-FLEX MATRIX RESIN may be used to absorb shock and cushion heavy loads.

ADVANTAGES

- Self-leveling
- Flexible, yet tough
- VOC compliant allowing for installation in occupied facilities
- State of the art chemistry assures long-term flexibility
- May be poured-in-place to form an absorption pad for heavy loads and substrate movement

TYPICAL USES

3554 EPO-FLEX MATRIX RESIN is recommended as a flexible membrane under hard rigid products where cracking is a problem. Typical uses are under, parking garage, balconies, mezzanines, machine bases, resinous floors and other areas requiring protection from substrate cracking is 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 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.
- **Strictly adhere to published coverage rates.**

TYPICAL PHYSICAL PROPERTIES @ 73F

Mix Ratio A:B	3.75:1
Color	Clear
VOC (Volatile Organic Content)	
EPA Method 24	Compliant
SCAQMD Method 304	Compliant
Coverage @ 20 mils WFT	80 sq. ft.
Pot Life, 1 gallon mass	25 minutes
Cure Time	
Dry to Touch	16 - 24 hours
Recoat	24 hours
Adhesion	300 psi
ACI 503R	(concrete failure)
Hardness, Shore D	60/55
ASTM D 2240	
Tensile Strength	1,500 psi
ASTM D 412	
Elongation @ Break	85%
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 3554A (resin) using a low speed drill and Jiffy mixer. Mix for one minute and until uniform, exercising caution not to whip air into the material.

2. Add 3.75 parts 3554A (resin) to 1 part 3554B (hardener) by volume. Mix with low speed drill and Jiffy mixer for three minutes and until uniform.

3. Immediately pour the mixed material onto the substrate and pull out using a 1/4" or 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. Material cures slower at lower temperatures.

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.

