

EPOXY	TECHNICAL DATA	CS-41
	TVB 100% SOLIDS TOPSIDE VAPOR BARRIER	

DESCRIPTION AND USES

Topside Vapor Barrier 100% Solids Epoxy is a two component epoxy primer for concrete floors. It has excellent adhesion to moisture laden slabs and can be used to remedy concrete floors with high moisture levels before the application of the finish coating.

PRODUCT FEATURES AND BENEFITS

- Tenacious adhesion to damp concrete
- Holds back up to 25 lbs of moisture vapor transmission and is unaffected by pH levels up to 14
- Compatible with most floor coating technologies including acrylic, epoxy and polyurethane
- Can be used as part of a solid color or broadcast resinous flooring system or underneath tile, carpet or hardwood flooring
- VOC compliant nationwide

PRODUCTS

SKU	DESCRIPTION (Clear)
277500	Activator (2 gallons in a short filled 3.5 gallon pail)
278269	Base Component (3 gallons in 5 gallon pail)

NOTE: Components are sold separately

RECOMMENDED TOPCOATS

Contact Rust-Oleum Technical Service Department for approved systems and more detailed information.

PRODUCT APPLICATION

READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING PROJECT

SURFACE PREPARATION

New concrete must be allowed to cure for a minimum of 14 days before application of the TVB 100% Solids Topside Vapor Barrier. All concrete surfaces must be free of all dirt, grease, oil, fats, and other contamination. Remove surface contamination by cleaning with Krud Kutter® Original Cleaner/Degreaser, detergent, or other suitable cleaner.

The concrete surface texture must be comparable to ICRI CSP Level 3 for moderate environments or Level 5 for severe environments. Contact Rust-Oleum Technical Service Department for more detailed information.

CONCRETE REPAIR

All spalls and cracks must be chased out and repaired to ICRI standards using Concrete Saver InstaPatch. For floors with very high moisture levels, cracks should be repaired with a mix of TVB 100% Solids Topside Vapor Barrier and Cab-O-Sil® fumed silica to create a paste and applied by trowel or putty knife.

PRODUCT APPLICATION (cont.)

MIXING

Both components and environment should be pre conditioned to a minimum of 60°F (15°C) prior to use. Hand mixing is not adequate. You must combine the base and activator by power mixing using either a 3" Jiffler Mixer or Hanson Plunge Mixer. Mix at 500-750 rpm for 1-3 minutes. Do not over mix or use higher speeds. This can introduce air into the coating causing small bubbles in the finish.

Start mixing the Base component in the short filled 5- gallon pail then add in the two gallons of Activator while maintaining mixing.

It is very important to transfer as much activator as possible. Mix the two components together for 1-3 minutes being careful to not pull air into the mixture. Do not mix more material than what can be applied within 25 minutes of mixing.

If mixing less than the pre measured amounts, mix each component separately before accurately measuring out material. Use a 3:2 (base to activator) by volume mixing ratio and mix thoroughly.

EQUIPMENT RECOMMENDATIONS

SQUEEGEE: Use a high quality ¼ inch notched rubber squeegee.

ROLLER: Use a high quality ¾ inch lint-free roller with a phenolic core.

BRUSH: Use a disposable natural fiber chip brush, 2-4 inch wide for cut in work.

APPLICATION

Apply only when air, material and floor temperatures are between 60-80°F (15-27°C) and surface temperature is at least 5°F (3°C) above the dew point. The relative humidity of the air should not be greater than 85%. Do not apply in direct sunlight or when temperature is rising. Colder environmental conditions can slow the cure of TVB. Be sure the substrate is completely dry. Variability in these conditions during application may lead to surface defects. For application outside of this temperature range, please contact Rust-Oleum Technical Service.

TVB is to be applied at a minimum thickness of 16 mils. TVB when applied at a minimum of 16 mils thickness will reduce vapor emission rate up to 25 lbs./1,000 sq. ft./24 hour and maximum RH of 99%. To insure proper coverage, periodically check mil thickness using a wet film thickness gauge.

RUST-OLEUM®

TVB 100% SOLIDS TOPSIDE VAPOR BARRIER

PRODUCT APPLICATION (cont.)

APPLICATION (cont.)

NOTE: Do not try to work out of a pan or container, as the build-up of heat could shorten the pot life and create a hazardous condition. Do not scrape the sides or bottom of the container. Use only the material that flows naturally out of the container. Also, do not turn the container upside down and leave on the floor to drain. Doing so may result with unactivated material from the sidewall of the container being applied. This will cause soft spots in the coating.

Use a ¼ inch notched squeegee to spread the material out and achieve the 80-100 square feet per gallon spread rate. Roll out the material smooth using a ⅝ inch lint free roller with a phenolic core. If needed, a spiked roller can be used to release any entrapped air in the coating.

TVB should be allowed to flow down into saw cuts, but not allowed to fill the saw cut. Allow to cure for a minimum of 24 hours before the placement of backer rod and a suitable polyurethane sealant. All expansion joints must be honored.

COVERAGE

One activated gallon of TVB will cover 80-100 square feet. The full 5-gallon kit will cover 400-500 square feet. This spread rate must be honored to ensure the primer properly performs.

THINNING: Not required

CLEAN-UP: Acetone

PERFORMANCE CHARACTERISTICS

COMPRESSIVE STRENGTH

METHOD: ASTM D695

TYPICAL VALUE: 15,225 psi

TENSILE STRENGTH

METHOD: ASTM D638

TYPICAL VALUE: 10,000 psi

FILM HARDNESS, SHORE D

METHOD: ASTM D2240

TYPICAL VALUE: 85

FLEXURAL STRENGTH

METHOD: ASTM D790 @ 2 hours

TYPICAL VALUE: 16,100 psi

PERMEANCE

METHOD: ASTM E96

TYPICAL VALUE: 0.09 perms (grains/h/sq. ft./in. Hg)

EPOXY	TECHNICAL DATA	CS-41
	TVB 100% SOLIDS TOPSIDE VAPOR BARRIER	

PHYSICAL PROPERTIES

		TVB 100% TOPSIDE VAPOR BARRIER
Resin Type		Amidoamine Converted Epoxy
Weight*	Per Gallon	9.1 lbs.
	Per Liter	1.1 kg/l
Solids by Volume		100%
Volatile Organic Compounds		0 g/l
Mixing Ratio		3:2 (Base to Activator by volume)
Induction Time		None required
Working Time		25 minutes @ 77°F (25°C)
Practical Coverage		80-100 sq. ft./gal. Coverage rate can vary depending on the texture and porosity of the concrete
Recoat/Topcoat		12-14 hours. Scuff sanding is required if greater than 24 hours
Shelf Life		5 years
CAUTION		Protect from freezing
Safety Information		For additional information see SDS

Calculated values are shown and may vary slightly from the actual manufactured material.

*Activated material

The technical data and suggestions for use contained herein are correct to the best of our knowledge, and offered in good faith. The statements of this literature do not constitute a warranty, express, or implied, as to the performance of these products. As conditions and use of our materials are beyond our control, we can guarantee these products only to conform to our standards of quality, and our liability, if any, will be limited to replacement of defective materials. All technical information is subject to change without notice.



Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, Illinois 60061

Phone: 877-385-8155
www.rustoleum.com/industrial

Form: CFFS-10
Rev.: 103122