

TD.468 – TECHNICAL DATA: E100-VB5™ Epoxy Vapor Barrier

Revised: 5.14.20

Product Name: E100-VB5™ Epoxy Vapor Barrier

Product Class: An epoxy vapor barrier for concrete surfaces that are to be top coated with an epoxy coating.

Description: E100-VB5™ Epoxy Vapor Barrier is a high-solids, low viscosity, three-component epoxy primer system designed to eliminate out gassing bubbles in concrete and seal out moisture vapor penetration. Excellent impact resistance, chemical resistance, and superior substrate penetration. Outperforms solvent-based sealers and primers.

Typical Uses:

- Sealing green concrete surfaces (7 days depending on conditions).
- Sealing existing concrete surfaces.
- Eliminates out gassing bubbles in concrete.
- Resistant up to 97% R.H. per independent testing. Results available upon request. Project conditions vary; be sure to speak with a technical representative regarding specific project conditions prior to application.
- Seals concrete from moisture intrusion.
- Excellent chemical resistance.

Key Features:

- Slows hydration in new concrete, increasing strength
- Eliminate out-gassing bubbles in top coats
- Seals out moisture intrusion
- Nearly no odor
- VOC compliant (0 g/l)
- Air releasing
- Low viscosity
- Fast cure rate
- Excellent strength properties
- Excellent impact resistant
- Meets USDA, FDA, and CFIA standards

Product Properties:

Material and curing conditions at 75°F/ 23°C unless noted, 50% R.H.

- Color: Amber/Green
- Viscosity @ 75°F / 23° C
 - Part A: 900 cps
 - Part B: 1000 cps
 - Mixed: 300 cps (with water added)
- Pot life: 25 minutes
- Tack free: 4 to 6 hours
- Recoat or top coat: 6 to 8 hours
- Foot traffic: 8 to 12 hours
- Heavy traffic: 24 + hours

Physical Properties

(@77°F / 24° C, 7-day ambient cure)

Solids by volume	58%		
Volatile organic content	0%		
Color	Amber/ Green		
Recommended thickness	5-8 mills (3-6 mills dry)		
Coverage per mixed gallon	225 to 300 sq. ft. per gallon		
Packaging	2 gallon or 10-gallon kits. 100-gallon kits available as special request		
Mix ratio	1 Part A to 1 Part B by volume (Note: add 32 oz./ 1 L of water per mixed gallon after mixing A & B)		
Shelf life	1 year in unopened containers (do not store below 45 F° / 7°C)		
Abrasion resistance			
Taber Abrasion			
CS-17 wheel with 1000 gm. load	ASTM D4060	45 MG loss	
Impact resistance			
Gardner impact direct	ASTM D5420	50 in. lb. (passed)	
Bond strength	ASTM D4541	Substrate Failure 450 psi	
Perm rating	ASTM E96	> 0.2	

Chemical Resistance

Splash & Spill Immediate Cleanup

Water (fresh and salt)	Butanol
10% Sodium Hydroxide	Xylene
10% Sulfuric Acid	111 Trichloroethane
10% HCL	Gasoline

Note: Mix Part A and Part B thoroughly for 2 minutes with slow speed drill and mixing paddle. Then add 32 oz. / 1 L of clean potable water to each mixed gallon. Applicator must first mix Part A and Part B before adding the water.

Packaging: 2-gal, 10-gal, 100-gal. kits available as special order.