TPC

Technical Data Sheet

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TEXAS POLYMER COATINGS, INC. 331 Cochran Rd, Weatherford, TX 76085

texaspolymercoatings.com



Tex Tuff-MVB

Moisture Vapor Barrier Epoxy Coating

DESCRIPTION	Tex Tuff-MVB is a 100% solid, two component moisture vapor barrier epoxy coating, designed to be used as a moisture vapor retarder for concrete and a variety of finished floor coverings such as vinyl tiles and sheeting, hard wood etc. It can be used as a primer, bonding agent as well as top coat. It offers a long pot life while providing some fast-curing speed at ambient and low temperature conditions. It also exhibits excellent mechanical properties. Tex Tuff-MVB controls moisture vapor emission rates up to 25 lb. /24 hr. /1000 square feet while providing excellent mechanical properties and good chemical resistance.							
ADVANTAGES	 Dense surface resistant to bacteria, moisture and is easy to clean. May apply several layers onto itself with excellent adhesion. Excellent adhesive properties allow application onto many different types of substrates. 							
TECHNICAL DATA	Packaging	3 US gal. & 15 US gal.						
	Color		Part A Upon Requ	uest	Part B Clear to Amber	Mix Upon Request		
	Recommended Thickness	Primer 6-8 mils Finish Coat 8-12 mils						
	Coverage per gallon (8 mils tl	200 ft ²						
	Coverage for Slurry Applicati (50% Silica Sand) (12 mils thio	125 ft ²						
	Coverage for Trowel Epoxy Application (85% Silica Sand) (24 mils application)	60 ft ²						
	Shelf Life	12 months in original unopened factory sealed containers. Keep away from extreme cold, heat, or moisture. Keep out of direct sunlight and away from fire hazards.						
	Mix Ratio, by volume Clear/Colors		A: B = 2:1 (100:50)					
	Mix Ratio, by weight Clear/Co	A: B = 100:39:45						
	Gel Time (100 g)	75-85 Minutes @ 77°F						
PROPERTIES @ 73°F and 50% R.H.	Solids Content, by weight		100%					
	Solids Content, by volume	100%						
	VOC (g/L)		>40					
	Specific Gravity		Pa	rt A	Part B	Mix		
		Clear	1.10 -	· 1.15	0.9 - 1.0			
		Colors	1.15	- 1.20	0.9 - 1.0			
	Thinner Recommended		XYLENE					
	Bond Resistance (psi), ASTM D4541		> 300 (substrate ruptures)					
	Permeability (%), ASTM D570		0.8 % VRM					
	Hardness (Shore D), ASTM D2240		85-90					
	Abrasive resistance, ASTM D4 (CS17 / 1000 cycles / 1000 g)	4060	0.10 g					
	Viscosity @ 77°F		Part A		Part B	Mix		
		Clear	1200 - 14		200 - 400	1500-1800		
		Colors	1500 - 19	000	200 - 400	2300-2500		

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SCI-100-MVB

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	Overcoat			Substrate Temp ± 50°F	Minimum N.A	Maximum N.A	
				± 68°F	12 hours	1 day	
				± 86°F	8 hours	1 day	
	Curing Details Substrate Temp		Foot Traffic	Light Traffic	Full Cure		
		± 50	°F	N.A	N.A	N.A	
		± 68°F		1 day	2 days	7 days	
		± 86	°F	1 day	36 hours	5 days	
	Bond Resistance (psi), ASTM D4541		>300 (substrate ruptures)				
	Permeability (%), ASTM D570 Abrasive resistance, ASTM D4060 (CS17 / 1000 cycles / 1000 g)			0.2 %			
				0.10 g			
	Viscosity @ 77°F			Part A	Part B	Mix	
			Clear	1200-1400	200-400	800-1000	
			Colors	1400-1600	200-400	1000-1400	
	Tensile strength (psi), ASTM D638		6500				
	Compressive Strength (psi MPa), ASTM D695			9000-10000			
	Elongation (%), ASTM D638			6-7%			

Please note, that the indicated coverage is calculated for flat surfaces. A porous or imperfect surface will require more material in order to cover the same surface area.

SURFACE PREPARATION

Old Concrete

Concrete surface must be cleaned and mechanically prepared using shotblasting, sand blasting, and/ or diamond grinding. All oils, sealers, curing agents, waxes and fats must be removed prior to product application. Do not apply onto wet substrates. Chloride, moisture, and pH levels should be checked prior to application. TexTuff-100 MVB primer is suggested prior to application on porous concrete substrates. All cracks and substrate imperfections should be filled and repaired with TexTuff-4400 prior to application.

New Concrete

New concrete should be allowed to cure for a minimum of 28 days. Compression resistance of concrete must be at least 25 MPa (3625 lbs./inch2) after 28 days and traction resistance must be at least 1.5 MPa (218 lbs./inch2). Shotblasting, sand blasting, and/or diamond grinding is required to remove the surface laitance that appears during the concrete finishing and curing process. TexTuff-100 primer should be used to seal porous concrete surfaces prior to application. All cracks and substrate imperfections should be filled and repaired with TexTuff-4400 prior to application.

MIXING

Materials should be pre-conditioned to a minimum of 50°F prior to use. Thoroughly mix each component separately using paddle mixers and a drill for a minimum of 2 minutes to place the solids content evenly in suspension. Pour component B into component A using the proper mixing ratio of 2A:1B by volume. Mix both components for at least 3 minutes using a drill at low revolution (300 to 450 rpm) to reduce trapping of air. While mixing, scrape bottom and walls of container at least once to ensure a homogeneous mix. Only prepare quantity that may be applied during pot life of mixture.



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APPLICATION	Apply mixed product on the prepared surface tightly (thin film) using a rubber rake and pass a roller to obtain a uniform coating. Avoid creating puddles.			
CLEANING	Clean all tools and materials with the cleaner/thinner for epoxies. Wash hands and skin carefully with warm soapy water. Once product has hardened, it may only be removed through mechanical means.			
RESTRICTIONS	 Minimum/Maximum temperature of substrate: 59°F / 86°F. Maximum relative humidity during application and curing: 85%. Substrate temperature must be 59°F. Humidity content of substrate must be <4 % when coating is applied. Do not apply on porous surfaces where a transfer of humidity may occur during application. Avoid exterior use on substrates at ground level. Protect from humidity, condensation and contact with water during the 24-hour initial curing period. Surface may discolor in areas exposed to regular ultraviolet light. 			
HEALTH AND SAFETY	In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with v for at least 15 minutes. Consult a physician. For respiratory irritations, move affected person outdoor fresh air. Remove contaminated clothes and wash before reuse. Components A and B contain toxic ingredients. Prolonged contact of this product with the sk susceptible to provoke irritation. Avoid eye contact. Contact with product may cause severe burns. A breathing vapors released from this product. This product is a strong sensitizer. Wear safety glasses chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/M is recommended. Always work in a properly ventilated area. *Consult the material safety data sheet for further information.*			
IMPORTANT NOTICE	All statements, recommendations and technical information contained in this document are accurate to the best knowledge of TEXAS POLYMER COATINGS, INC. The data relates only to the specific material designated herein. It may not be valid if used in combination with any other materials. It is the users' responsibility to verify suitability of this information for their own particular use, and to test this product before use. TEXAS POLYMER COATINGS, INC. assumes no legal responsibility for use upon these data. TEXAS POLYMER COATINGS, INC. assumes no legal responsibility for any direct, indirect, consequential, economic, or any other damage except to replace the product or refund the purchase price as set out in the purchase agreement.			