

PRECIDIUM™ Vapour and Particle Barrier

DESCRIPTION

PRECIDIUM™ Vapour/Particle Barrier is a 100% solids high performance two-component polyurea elastomer with excellent moisture and methane barrier properties. It provides an effective barrier to particles such as asbestos and many organic vapours encountered in brownfield developments. The improved green strength allows for better application in colder temperatures. It has consistent spray properties over a wide temperature range and excellent resistance to a wide range of chemicals. This fast-set system is intended for use with plural component spray equipment with a mix ratio of 1 to 1.

FEATURES

- Excellent abrasion resistance even at high temperatures.
- Highly resistant to impact over wide temperature range.
- Resistant to cracking under high flex conditions.
- Remains flexible at low temperature.
- Excellent barrier properties to water and a wide range of chemicals vapours.

PROPERTIES

Volume Solids 100%

VOC 0

Density 1.10G/cc

Methane Transmission was undetectable under a pressure differential of 15 psi over 7 days during in house test.

Service Temperature -50°C to 200°C

	<u>Test Method</u>	<u>Result</u>
Durometer D Hardness	ASTM D2240	~40-55
Tensile Strength (Die C)	ASTM D412	2800 psi
Elongation (Die C)	ASTM D412	400%
Tear Strength (Die C)	ASTM D624	400 pli
Abrasion Resistance	ASTM D4060	1000 cycles
(CS-17 Wheel, 1000g load)		0 mg loss
(H-18 Wheel, 1000g load)		140 mg loss
Pot Life		~6 seconds
Tack Free		~12 seconds

Sprayed with a Graco E-10 proportioner, using a Fusion AP Gun with AR4242 mix module. Results are for specific testing requirements; other conditions and equipment may result in different physical properties.

INSTRUCTIONS

For application use a regulated high-pressure proportioner (1:1) and spray gun system capable of producing a minimum of 2000-2500 psi (ie: Graco EXP2/HXP2/HXP3). Thoroughly mix RESIN for 45 to 60 minutes prior to use.

To ensure adequate mixing is achieved, a Dynamix Series MMX Drum Mixer or similar is recommended. This will re-suspend and maintain product uniformity.

Mixer Specifications:

- Drive: Air Motor 3 hp (½ hp @ 300rpm)
- Mount: 2" Bung Mount (Aluminum)
- Shaft: Shaft Assy. 3/4" x 28" Long Shaft (304 SS)
- Two Impellers: Impeller Assembly Fixed 8" Diameter

Preheating RESIN may be necessary to achieve uniform mix. Check that no residue is left on bottom of drum after mixing to ensure performance of cured product. This is achieved using a band heater or recirculating the material through the machine with the heaters set to 140° F. Target RESIN temperature before spraying is 100° F or above.

Recommended Heat Settings:

Line/Pre-Heaters	150° - 160° F
Hose Heat	150° - 160° F

Recommended Pressure Settings: 2000-2500 psi

Recommended Gun: Fusion AP

Recommended Tip: AR4242/AW3939

Apply only to properly prepared substrate. Apply first coat at less than 10 mils and allow to become tack free before continuing. Apply following coats at 20 mils per coat and allow surface to become tack free before application of subsequent coats. Spray with uniform motion and allow 50 to 75% overlap.

STORAGE

Store in a cool, dry place for product integrity. Store in tightly sealed containers to protect from moisture and foreign materials.

AVAILABILITY

PRECIDIUM Vapour/Particle Barrier is packaged in 50 US gallon drums.

PRODUCT SAFETY

An SDS is available from Quantum Chemical.