

15 Riel Drive, St. Albert, Alberta, Canada, T8N 3Z2
PH. 780.458.3355. Fax. 780.458.2852
info@quantumchemical.com
www.quantumchemical.com

rev. 01/10/26

DESCRIPTION

PRECIDIUM™ 850D-FR Membrane is a fire resistant, zero VOC, high-performance polyurea elastomer designed to provide a durable, and fire resistant membrane for applications where fire resistance is required. It is a fast-set system for fast “return-to-service”.

The **PRECIDIUM™ 850D-FR** is applied with two component, high-pressure spray equipment metered 1 to 1 by volume.

FEATURES

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

PROPERTIES OF CURED PRODUCT

Mix Ratio:	1:1 (Volume)
Resin Viscosity(23°C):	1800-3600 cps
ISO Viscosity(23°C):	700-1400 cps
Gel Time:	15-30 seconds
Tack Free Time:	4-5 minutes
Recoat Window:	0-2 hours
Shore D Hardness:	52 after 24 hours
Elongation:	ASTM D412: 200%
Tensile Strength:	ASTM D412 1300 psi
VOC:	Zero

STORAGE

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

AVAILABILITY

PRECIDIUM™ 850D-FR is packaged in 52.9 US Gallon drums.

SAFETY AND HANDLING

An SDS is available from Quantum Chemical.

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 mil and allow to become tack free before continuing. Apply following coats at 20 mil per coat and allow surface to become tack free before application of subsequent coats. Spray with uniform motion and allow 50 to 75% overlap.