

# TECHNICAL DATA SHEET

Eco-Pur® 517 is a rigid, two-component, pour-in-place urethane foam system, specially formulated for high density applications. This system meets the requirements of UL 94HBF fire testing and has 7% bio-based content. It is the user's responsibility to test their product to ensure it performs to their expectations.

Applications: Offshore pipeline industry, pipeline joint infill, structural pieces, wood simulation, picture frames, kitchen cabinets.

PHYSICAL PROPERTIES			
Density	10 lb/ft <sup>3</sup>	160 kg/m <sup>3</sup>	ASTM D 1622
Thermal Resistance R (2 in. thick panel, 2 days @ 73°F (23°C))	2.5 ft <sup>2</sup> h°F/BTU	0.44 m <sup>2</sup> °C/W	ASTM C 518
Thermal Conductivity K (2 in. thick panel, 2 days @ 73°F (23°C))	0.4 ft <sup>2</sup> h°F/BTU	2.27 m <sup>2</sup> °C/W	ASTM C 518
Compressive Strength	285 psi	1959 kPa	ASTM D 1621
Dimensional Stability (% volume change @ 28 days)			ASTM D 2126
158°F (70°C), Ambient Relative Humidity	N/A		
-22°F (-30°C), Ambient Relative Humidity	N/A		
158°F (70°C), 90% Relative Humidity	N/A		
Water Absorption (% volume)	< 1.0		ASTM D 2842
Bio-based Content	7%		ASTM D 6688
Fire Properties	Succeed		UL 94HBF

LIQUID COMPONENT PROPERTIES*		
PROPERTY	A-PMDI ISOCYANATE	ECO-PUR 517 RESIN
Color	Brown	Amber
Viscosity @ 77°F (25°C)	180 – 220 cps	1700 – 2600 cps
Specific Gravity	1.24	1.06 – 1.10
Shelf Life of unopened drum properly stored	12 months	6 months
Storage Temperature	50 – 100°F (10 – 38°C)	50 – 85°F (10 – 29°C)
Mixing Ratio (volume)	1:1	1:1

\*See SDS for more information.

REACTIVITY PROFILE*			
Cream Time	Gel Time	Tack Free Time	Free Rise Density
55 – 65 seconds	150 – 165 seconds	200 – 250 seconds	6.7 – 7.3 lb/ft <sup>3</sup>

\*Mixer 2 inches @ 2500 rpm for 10 seconds, liquid components at 77°F (25°C).

RECOMMENDED PROCESSING CONDITIONS*		
Initial Processing Setpoint Temperature	72 – 82°F	22 – 28°C

\*Foam application temperatures and pressures can vary widely depending on temperature, humidity, elevation, substrate, equipment and other factors. While processing, the applicator must continuously observe the characteristics of the poured foam and adjust processing temperatures and pressures to maintain proper cell structure, adhesion, cohesion and general foam quality. It is the sole responsibility of the applicator to process and apply Eco-Pur 517 within specification.

**General Requirements:** Equipment must be capable of delivering the proper ratio (1:1 by volume) of polymeric isocyanate (PMDI) and polyol blend at adequate temperatures and spray pressures. Substrate must be at least 5 degrees above dew point, with best processing results when ambient humidity is below 80%. Substrate must also be free of moisture (dew or frost), grease, oil, solvents and other materials that would adversely affect adhesion of the polyurethane foam.

**Disclaimer:** The information herein is to assist customers in determining whether our products are suitable for their applications. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, expressed or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent inferred. All patent rights are reserved. The foam product is combustible and must be protected in accordance with applicable codes. Protect from direct flame and spark contact, around hot work for example. The exclusive remedy for all proven claims is replacement of our materials.