SEALECTION® | PIP

DEMILEC

TECHNICAL DATA SHEET

Sealection® PIP is a two component, open cell, semi-rigid polyurethane foam system specially formulated for pour-in-place applications. This product is a fully water blown foam system that can be used as a thermal insulation for filling wall cavities. Sealection PIP complies with the intent of the International Code Council's residential and commercial building codes for spray polyurethane foam plastic insulation.

PHYSICAL PROPERTIES			
ASTM D 1622	Density	0.5 – 0.6 lb/ft³	8 – 9.6 kg/m³
ASTM C 518	Aged Thermal Resistance (R-value @ 1 inch)	3.43 ft²h°F/BTU	0.6 Km²/W
ASTM E 283	Air Leakage (air impermeable IAW 2006, 2009 & 2012 IRC, IBC & IECC requirements)		
	Air Permeance @ 75 Pa @ 3.5" (25 mph wind)	0.001 L/sm²	
ASTM E 2178	Air Permenace of Building Materials		
	Air Permeance @ 75 Pa @ 3.5" (25 mph wind)	0.002 L/sm²	
ASTM E 96	Water Vapor Permeance @ 3.5" Water Vapor Permeance @ 5.5" Qualifies as a Class III vapor retarder at normal installed thicknesses	6.6 perms 4.2 perms	378 ng/Pa•s•m² 240 ng/Pa•s•m²
ASTM D 1621	Compressive Strength	0.7 psi	4.8 kPa
ASTM D 1623	Tensile Strength	5.6 psi	38.6 kPa

FIRE TEST RESULTS		
ASTM E 84	Surface Burning Characteristics, 6" thick Flame Spread Index Smoke Developed	Class I 21 216
ASTM D 1929	Ignition Properties (spontaneous ignition temperature)	1040°F (560°C)

LIQUID COMPONENT PROPERTIES*		
PROPERTY	**A-PMDI ISOCYANATE**	**SEALECTION PIP RESIN**
Color	Brown	Amber
Viscosity @ 77°F (25°C)	180 – 220 cps	250 – 450 cps
Specific Gravity	1.24	1.09 – 1.11
Shelf Life of unopened drum properly stored	12 months	6 months
Storage Temperature	50 – 100°F (10 – 38°C)	50 – 100°F (10 – 38°C)
Mixing Ratio (volume)	1:1	1:1

*See SDS for more information.

REACTIVITY PROFILE			
	Cream Time	Gel Time	Tack Free Time
Hand Mix*	13 – 16 seconds	46 – 53 seconds	66 – 74 seconds
Machine Mix	3 – 5 seconds	15 – 20 seconds	20 – 25 seconds

*Hand mixed using a 2" mixer @ 2500 RPM for 10 seconds, liquid components at 68°F (20°C).

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RECOMMENDED PROCESSING CONDITIONS*		
Initial Primary Heater Setpoint Temperature	130°F	54°C
Initial Hose Heat Setpoint Temperature	130°F	54°C
Initial Processing Setpoint Pressure	800 psi	5516 kPa
Substrate & Ambient Temperature	> 23°F	> -5°C
Moisture Content of Substrate	≤ 19%	≤ 19%
Moisture Content of Concrete	Concrete must be cured, dry and free of dust and form release agents.	

*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 sprayed 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 Sealection PIP 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.

Sealection PIP must be separated from the interior of the building by an approved thermal barrier or an approved finish material equivalent to a thermal barrier in accordance with applicable codes. This product must not be used when the continuous service temperature of the substrate or foam is below -60°F (-51°C) or above 180°F (82°C). Sealection PIP should not be used in contact with bulk water or to cover flexible ductwork.

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.