



PIPFOAM 80

TECHNICAL DATA SHEET

PIP Foam 80® is a two component, open-cell, pour-in-place, semi-rigid polyurethane foam system that contains more than 20% renewable agricultural based materials (refined vegetable oils). This product is a fully water blown foam system having a low in-place density with excellent adhesion to various substrates and to itself.

PIP Foam 80 incorporates the single phase solution technology developed by Huntsman Building Solutions for excellent shelf life and consistent processing. PIP Foam 80 meets the USDA guidelines for incidental food contact.

PHYSICAL PROPERTIES*			
ASTM D 1622	Density	0.6 – 0.8 lb/ft ³	9.6 – 12.8 kg/m ³
ASTM C 518	Aged Thermal Resistance (R-value @ 1 inch)	4.00 – 4.70 ft ² h ² F/BTU	22.7 – 26.7 W/m ² · C
ASTM D 2126	Dimensional Stability @ 158°F (70°C) 97% R.H. (28 days)	(% volume change)	
ASTM D 1621	Compressive Strength	1.70 – 2.00 psi	11.70 – 13.80kPa
ASTM D 1623	Tensile Strength	3.50 – 4.50 psi	24.1 – 31.0 kPa

LIQUID COMPONENT PROPERTIES*		
PROPERTY	A-PMDI ISOCYANATE	PIP Foam 80 RESIN
Color	Brown	Yellowish
Viscosity @ 77°F (25°C)	180 – 220 cps	250 – 450 cps
Specific Gravity	1.24	1.08 – 1.12
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	End of Rise
11 – 18 seconds	65 – 80 seconds	95 – 110 seconds	85 – 120 seconds

RECOMMENDED PROCESSING CONDITIONS*		
Initial Recirculating Setpoint Temperature	80 – 85°F	27 – 30°C
Initial Primary Heater Setpoint Temperature	120°F	49°C
Initial Hose Heat Setpoint Temperature	120°F	49°C
Initial Processing Setpoint Pressure	1300 psi	8963 kPa
Substrate & Ambient Temperature	Summer > 50°F Winter: 30°F - 60°F	Summer: > 10°C Winter: -1°C - 16°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 PIP Foam 80 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.

PIP Foam 80 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. PIP Foam 80 must be sprayed at a minimum thickness of 3" per pass. 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). PIP Foam 80 should not be used in contact with bulk water, below grade 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.

