



HEATLOK® HIGH TEMP TECHNICAL DATA SHEET

Heatlok® High Temp is a two component, closed cell, spray applied, rigid polyurethane foam system specially formulated for high service temperatures up to 250°F (121°C) in tank, pipe and other applications. This product uses recycled plastic materials, rapidly renewable soy oils, and the blowing agent has zero ozone depleting potential.

PHYSICAL PROPERTIES			
ASTM D 1622	Density	2.5 lb/ft ³	40 kg/m ³
ASTM C 518	Thermal Resistance (R-value @ 1 inch)	7.27 ft ² h°F/BTU	1.28 Km ² /W
ASTM D 1621	Compressive Strength	38 psi	263 kPa
ASTM D 2126	Dimensional Stability 176°F (80°C), ambient relative humidity 158°F (70°C), 100% relative humidity -4°F (-20°C)	Vol. chng @ 7 days	Vol. chng @ 28 days
		3.1%	4.9%
		8.0%	12.0%
		-0.04%	-0.29%
ASTM D 2842	Water Absorption (96 hrs immersion, volume)	0.7%	
ASTM D 2856	Closed Cell Content	> 92%	

LIQUID COMPONENT PROPERTIES*		
PROPERTY	A-PMDI ISOCYANATE	HEATLOK HIGH TEMP RESIN
Color	Brown	Brown
Viscosity @ 77°F (25°C)	180 – 220 cps	160 – 260 cps
Specific Gravity	1.24	1.20 – 1.23
Shelf Life of unopened drum properly stored	12 months	6 months
Storage Temperature	50 – 100°F (10 – 38°C)	59 – 77°F (15 – 25°C)
Mixing Ratio (volume)	1:1	1:1

*See SDS for more information.

REACTIVITY PROFILE			
Cream Time 0 – 1 seconds	Gel Time 3 – 4 seconds	Tack Free Time 7 – 8 seconds	End of Rise 5 – 6 seconds

RECOMMENDED PROCESSING CONDITIONS*		
Initial Primary Heater Setpoint Temperature	110°F	43°C
Initial Hose Heat Setpoint Temperature	110°F	43°C
Initial Processing Setpoint Pressure	1200 psi	8274 kPa
Substrate & Ambient Temperature	59 – 90°F	15 – 32°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 Heatlok High Temp 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. Due to the exothermic reaction of the isocyanate and polyol blend, mixed components should be applied in layers (maximum 2" thickness per layer). Allow foam to cool completely before applying successive layers.

Heatlok High Temp 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. Heatlok High Temp must be sprayed at a minimum thickness of 1" 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 250°F (121°C). Heatlok High Temp should not be used 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.