



SEALECTION® NM

TECHNICAL DATA SHEET

Sealection® NM is a two component, open cell, spray applied, semi-rigid polyurethane foam system. This product is a fully water blown foam system with a low in-place density with excellent adhesion to various substrates and to itself. Sealection NM incorporates the single phase solution technology developed by Huntsman Building Solutions for excellent shelf life and consistent processing. Sealection NM complies with the intent of the International Code Council's residential and commercial building codes for spray polyurethane foam plastic insulation. Sealection NM meets the USDA guidelines for incidental food contact.

PHYSICAL PROPERTIES

ASTM D 1622	Density	0.45 – 0.65 lb/ft ³	7.2 – 10.4 kg/m ³
ASTM C 518	Aged Thermal Resistance (R-value @ 1 inch)	3.7 ft ² h ² F/BTU	0.65 Km ² /W
ASTM E 283	Air Permanence @ 75 Pa @ 3.5"	< 0.02 L/sm ²	
ASTM E 96	Water Vapor Permeance	33 perms	
CAN/ULC-S774-09	VOC Emissions Standard	24 hr re-occupancy time	
ASTM D 1621	Compressive Strength	2.4 psi	16.5 kPa
ASTM D 1623	Tensile Strength	3.1 psi	21.4 kPa
ASTM D 2126	Dimensional Stability (158°F (70°C) 97% RH, 28 days, vol. %)	< 5%	
ASTM D 2842	Open Cell Content	> 95%	
ASTM C 1338	Fungi Resistance	Pass, with no growth	

FIRE TEST RESULTS

ASTM E 84	Surface Burning Characteristics Flame Spread Index Smoke Developed	Class I < 25 < 450
NFPA 286 AC377 Appendix X	Ignition Barrier – Compliant with IBC and IRC, and ICC-ES AC-377 AC377 Appendix X, for use NFPA 286 in attics and crawl spaces with: DC 315 3 Dry Mils - 4 Wet Mil No-Burn Plus XD 4 Dry Mils - 6 Wet Mils Fireshell F10E 11 Dry Mils - 17 Wet Mils	Pass
NFPA 286	Thermal Barrier – Compliant with the IBC and IRC, as an interior finish without a 15 minute thermal barrier with: DC 315 18 Dry Mils - 12 Wet Mils No-Burn Plus XD 16 Dry Mils - 11 Wet Mils Fireshell F10E 18 Dry Mils - 12 Wet Mils	Pass

REACTIVITY PROFILE

Cream Time 1 – 2 seconds	Tack Free Time 4 – 10 seconds
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LIQUID COMPONENT PROPERTIES		
PROPERTY	A-PMDI ISOCYANATE	SEALECTION NM RESIN
Color	Brown	Amber
Viscosity @ 77°F (25°C)	180 – 220 cps	175 cps
Specific Gravity	1.24	1.10
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.

RECOMMENDED PROCESSION PARAMETERS*		
Initial Primary Heater Setpoint Temperature	120 – 145°F	49 – 63°C
Initial Hose Heat Setpoint Temperature	≤ 135°F	≤ 57°C
Initial Processing Setpoint Pressure	1100 – 1500 psi	7584 – 10342 kPa
Substrate & Ambient Temperature	> 30°F	> -1°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 NM 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 NM 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. Sealection NM 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). Sealection NM 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.

