

PLUSFOAM-R-101-18

Open Cell Spray Polyurethane Foam

TECHNICAL DATA SHEET

PLUSFOAM-R-101-18 is a two component, low density, open cell, spray applied, rigid polyurethane foam system. Water based system is used as the blowing agent. The product is used as high adhesion strength on various surface and high sound insulation with diffusion values on different surfaces.

REACTION PROFILE

Cream Time (second)	Cream Time (second)	Cream Time (second)	Free Rise Density (LB/Cubic Foot)
3-5	-	6-8	0.46-0.53

*Tests are done manually in a laboratory. The test was done with the laboratory mixer at 3000 rpm. Component temperature set 68°F during the test. The given values will change for low pressure machine and high-pressure machine. The given durations begin with mixing of the components.

PHYSICAL PROPERTIES

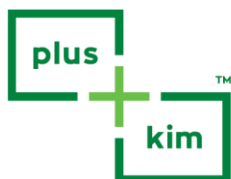
Parameter	Result	Test Method
Core Density (LB / Cubic Foot)	0.49	ASTM D-1622
Air Leakage Rate (ft ³ /sft ²)	< 0.003	ASTM E-283
Air Impermeable (L/s-m) 1"	< 0.02	ASTM 2178
Fungi Resistance	Zero Rating	ASTM C-1338
Open Cell Content	>90 %	ASTM D2856
R Value (ft ² h°F/BTU)	3.61	ASTM C518

LIQUID COMPONENT PROPERTIES

Component A: PLUSNATE-R-100-01

Component B: PLUSFOAM-R-101-18

Properties (Physical)	Component A (Iso)	Component B (Polyol Resine)
Viscosity at 77 °F	200-250 cp	150-450 cp
Mixing Ratio (Volumetric)	100	100
Shelf Life (Month)	12	4
Storage Temperature	50-75 °F	59-68 °F

**RECOMMENDED PROCESSING PARAMETER**

Parameter	Result
Drum Quantitiy-A(MDI)	551 lb
Drum Quantitiy-B(Polyol)	507 lb
Initial Hose Heat Setpoint Temperature	105-115 °F
Initial Heater Primer Temp. Set-B (°F)	105-115 °F
Pressure B-Side-PSI	1100-1700 PSI
Pressure A-Side-PSI	1100-1700 PSI
Substrate & Ambient Temperature (°F)	Summer > 50 °F Winter > 15 °F
Moisture Content of Substrate (%)	< 20 %
Moisture Content of Concrete (%)	< 10 %

PROCESS CONDITION

- Mixing ratio of component should be as written above.
- Temperatures of raw materials should be between 105°F-115°F.
- At the process during the application component's pressure should be 1100-1700 psi.
- Thickness of each layer should be between 0.75 and 1.5 inc.
- Ambient temperature should be 41°F- 104°F. At the other conditions Polyurethane chemical structure may be shown different facilities.

Temperature variables during production should be as;

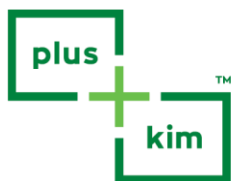
Raw Materials	105- 115 °F
Component Pressure	1100-1700psi

Relative humidity

Should be less than 85 %

Wind speed less than 30 km/h

- It is critical to satisfy required temperature conditions mentioned to obtain desired quality for polyurethane regarding adhesion, foam appearance and curing etc.
- Necessary air should be provided to mixing head to obtain good mixing quality.
- It is recommended to check suitability of the system routine production.



STORAGE AND HANDLING

Component A should be stored between 50-75 °F and component B should be stored between 59-68 °F. Component A should be protected from freezing. The shelf life of component B is 6 months, component A is 12 months.

Do not store material on rigs other than what is required for the current application needs. Material left inside rigs can easily exceed this recommended temperature in the warmer months. The excessive heat will degrade the component B (resin) material and the blowing agent will gas out rendering the material useless. If the material was transported in freezing conditions, store it in room temperature for a minimum of 24 hours to get proper material condition. Do not attempt to heat up drum during storage.

CAUTION: If components are below suggested temperatures, the increased viscosity of the components may cause pump cavitation resulting in unacceptable SPF application. If components are above suggested temperatures, there may be loss of blowing agent resulting in diminished yield.

HEALTH SAFETY AND ENVIRONMENTAL INFORMATION

Isocyanate and polyol components might affect respiratory organs, eyes. It can be allergic reaction when inhale and in contact with skin. Attention should be paid when using these materials. MSDS information must be read before use. Waste Material Data Sheet Located Methods and Environmental Legislation should be disposed of in accordance. Please read Safety Data Sheet before use.

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