

TECHNICAL DATA



**CANULC-S 705.1 CCMC 13244-L
AIR BARRIER CCMC 07273**

Polarfoam™ PF-7300-0 SOYA is a thermal insulation spray applied rigid polyurethane tested by an independent recognized laboratory. This foam product surpasses the req S705.1-01 (Including amendment 1 & 2) “Standard for thermal insulation – Spray applied medium density – Material Specification”.

Polarfoam™ PF-7300-0 SOYA material (i.e. the highest LTTR classification) meets Building code of Canada and is listed by the National Research Council Canada under CCMC Listing #13244-L.

Polarfoam™ PF-7300-0 SOYA ecological foam is formulated from recycled plastic material, renewable soya product and without any Ozone Depletion Substance blowing agent (Zero ODS). This product meets all the requirements of the Montreal protocol to protect the ozone layer. Polarfoam™ PF-7300-0 SOYA exceeds the highest requirements for VOC with the GREENGUARD Children and School® certifications. **Polarfoam™ PF-7300-0 SOYA** is applied exclusively by licensed installers and contractors under the application standard CAN/ULC S705.2.

PHYSICAL PROPERTIES

Method	Description	Value	
ASTM D1622	Core Density	34-37 Kg/m ³	2.1-2.3 lb/ft ³
ASTM C518	Initial Thermal Resistance, 25.4 mm	1.26 RSI/25 mm	R 7.2
	Aged Thermal Resistance, 180 days @ 23°C, 25.4 mm	1.17 RSI/25 mm	R 6.6
CAN/ULC S 770	CAN/ULC S705.1-01 (amendment 1 & 2) Classification	Classification (LTTR)	Type 2
ASTM D2856	Open Cells	<1%	
ASTM D 1621	Compressive Strength (10%)	195 kPa	28.3 psi
ASTM D1623	Tensile Strength	355 kPa	51.5 psi
ASTM D2842	Volumetric Water Absorption %	0.8%	
ASTM E96	Water Vapour Permeance (core), 50 mm	37 ng/Pa.s.m²	.65 Perm
CCMC 07273	Air Barrier Material, 25-30 mm	0.00004 L/s/m² @ 75Pa	
CAN/ULC S102	Flame Spread Classification	200	
	- Tunnel FSC-1=32		
	- Corner FSC-2=200		
CAN/ULC S101-04	Smoke Develop Index	396	
		Passed	
ASTM D2126	Dimensional Stability, 28 days (% Volume Change, sample without skin) -20°C 80°C 70°C, 97% R.H.	-0.03% +2.9% +9.8%	
CAN/ULC S774	VOC Emissions from polyurethane foam	Conform	24 hrs.
GREENGUARD	Indoor Air Quality®	Certified	
GREENGUARD	Children & Schools®	Certified	
ASTM E-1331	Colour	Peach	
ASTM C 1338	Fungi Resistance	No Fungal Growth	

LIQUID COMPONENTS PROPERTIES

Property	Isocyanate	Resin
Colour	Brown	Peach
Viscosity @ 25°C	150-350 cps	150-350 cps
Specific gravity	1.20-1.24	1.20-1.24
Shelf life*	12 months	6 months
Mixing ratio (volume)	100	100
Vapour pressure @ 25°C	10 ⁻⁷ psi	7-9 psi

Note: Components system storage temperature recommendation 15-25°C (59-77°F)

*See MSDS for more information

MACHINE PROCESSING PARAMETERS USED

Type of machine	Gusmer H20/35, D Gun, mix chamber #62
Components Iso & Resin Temperature	38°C (100°F)
Components Iso & Resin Pressure	5860-6900 kPa (850-1000psi)
Ambient temperature	23° (73°F)
Thickness per pass	30 mm (1 ¼ inches)
Number of passes	2
Substrate	Polyethylene Board

REACTIVITY PROFILE

Cream Time	Gel Time	Tack Free Time	End of Rise
0-1 sec.	2-3 sec.	4-5 sec.	4-5 sec.

RECOMMENDED PROCESSING CONDITIONS

Mixing ratio Iso/Resin	1/1
Mixing temperature at the gun	38°C (100°F) @ 49°C (120°F)
Mixing pressure (minimum)	5516 kPa (800 psi)
Substrate & Ambient temperature	> -10°C (14°F)
Curing temperature	> -10°C (14°F)
Maximum thickness per pass	50 mm (2 inches)
Maximum thickness of successive passes	100 mm (4 inches)
Minimum cooling time period before applying over 4 in. thick application	4 hours

GENERAL INFORMATION

It is recommended that the foam be covered with an approved thermal barrier in accordance to the local and national building codes when used in buildings and a protective coating when used outside. This product should not be used when the continuous service temperature of the substrate is outside the range of -60°C to 82°C.

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, express 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 covered by an approved thermal barrier. The exclusive remedy for all proven claims is replacement of our materials.

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