

440 Conestogo Road Waterloo, Ontario N2L 4E2 Phone: 519 884-0688 Fax: 519 884-7300 Toll Free: 1-888-783-0751 www.polyurethanefoamsystems.com

TECHNICAL DATA SHEET

POLARFOAMTM PF-7217-0 ZERO ODP CLASS 1 SPRAY APPLIED RIGID POLYURETHANE FOAM THERMAL INSULATION

Polarfoam™ PF-7217-0 is a two component spray-applied rigid polyurethane foam system specially formulated to meet the zero ozone depletion potential (ODP) requirement of the Montreal Protocol and to meet the Classification 1 requirement of the ASTM E-84.

This friendly 0 ODP environmental foam product is also manufactured with recycled plastics and renewable soya beans material.

Method	Description	Value
ASTM D1622	Density	35 +/- 2 Kg/m ³
		(2.2 +/- 0.1 lb/ft ³)
ASTM C518	Thermal Resistivity 2 days @ 23°C	
	-0°C (32°F)/25°C (77°F)	1.26 m ² .°C/W
		(7.14 ft ² .h.°F/BTU.in)
	-10°C (50°F)/35°C (95°F)	1.19 m ² .°C/W
		(6.74 ft ² .h.°F/BTU.in)
ASTM D2856	Closed Cell Content (%)	>92
ASTM D1621	Compressive Strength (parallel)	152 kPa (22 psi)
ASTM D2126	Dimensional Stability	
	(% Volume Change)	7 days
	80°C, ambient R.H.	-0.1
	70°C, 97% R.H.	+3.6
	-30°C, ambient RH	-1.3
ASTM D2842	Water Absorption (% Volume)	1.0
	(96 hrs. immersion)	
ASTM E84	Surface Burning Characteristics, thickness	2" 3"
	Flame spread index	15 25
	Smoke developed	400 450

PHYSICAL PROPERTIES

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.



POLARFOAMTM PF-7217-0

LIQUID COMPONENTS PROPERTIES

PROPERTY	ISOCYANATE	RESIN
Colour	Brown	Brownish
Viscosity @ 25°C	150-250 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 psi
*See MSDS for more inform	nation.	

FOAM PROCESSING PARAMETERS

Type of machine:	Gusmer H20/35, #62 mix chamber	
Components Iso&Res. temperature	40°C (105°F)	
Components Iso&Res. temperature:	5860-6900 kPa (850-1000 psi)	
Ambient temperature:	20°C (68°F)	
Thickness per pass:	35mm (1 ¼ inch)	
Number of passes:	2	
Substrate:	Plasterboard	

REACTIVITY PROFILE

Cream time	Gel time	Tack free time	End of rise
0-1 sec.	2 sec.	4 sec.	3 sec.

RECOMMENDED PROCESSING CONDITIONS

Mixing Ratio Iso&Res:	1/1
Mixing temperature:	40°C (105°F)
Mixing pressure (minimum):	5516 Kpa (800 psi)
Substrate & Ambient temperature:	>10°C (50°F)
Maximum thickness per pass:	2 inches

Note: Never apply foam with pass thickness greater than 2 inches because foam will be dimensionally unstable (too much of elongated cells).

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. April 6, 2006