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# SEALECTION 500 SEMI-RIGID SPRAY APPLIED POLYURETHANE FOAM TECHNICAL DATA

SEALECTION 500 is a two component open cell spray-applied semi-rigid polyurethane foam insulation system. This product is a fully water blown foam system having a very low in-place density and recognized as an ECOLOGO product by Terra Choice. SEALECTION 500 meets the off gassing requirements of CAN/ULC S705.1-98. SEALECTION 500 has been evaluated by CCMC (#12697-R) SINCE 1995 for installation in open cavities such as stud walls, perimeter joist cathedral and garage ceilings and complies with the intent of the National Building Codes of Canada, Article 9.25.2.2. SEALECTION 500 shall be manufactured on site by licensed contractors using qualified installers as recognized by a third party organization and approved by PFSI Inc.

Method	Description	Value
ASTM D 1622	Density (core)	7.37 kg/m <sup>3</sup> (0.46 lb/ft <sup>3</sup> )
ASTM C 518	Thermal Resistance 90 days @ 23°C	0.671 m <sup>2</sup> .°C/W
		(3.8 ft <sup>2</sup> .h.°F/BTU.in)
ASTM D 2856	Open Cell Content	N/A
ASTM D 1621	Compressive Strength	5 kPa (0.7 psi)
ASTM D 1623	Tensile Strength	17 kPa (2.5 psi)
ASTM E 90	Sound transmission classification (STC)	39
and	of a 2" X 6" wood stud wall insulated	
ASTM E 413	with Sealection 500	
ASTM C 423	Noise reduction coefficient (NRC)	0.75
ASTM D 2842	Water Absorption (% volume)	47.9
ASTM E 96	Water Vapour Permeance	5575 ng/Pa.s.m <sup>2</sup> (97.04
		Perm)
ASTM E 283-91	Air Leakage	0.04L/s.m <sup>2</sup>
CAN/ULC S770	Volatile Organic Compound emission	pass
CAN/ULC	Surface Burning Characteristics	335
S102M		
ASTM E 84	Flame Spread Index (6")	21
	Smoke Development Index (6")	216
95-10-29	Ontario Ministry of municipal affairs and	Approved
	housing	

## **PHYSICAL PROPERTIES**



### -2- SEALECTION 500 LIQUID COMPONENT PROPERTIES

Properties	Isocyanate	Resin B 500
Colour	Brown	Transparent Yellow
Viscosity @ 25°C	150-250 cps	150-200 cps
Specific gravity	1.20-1.24	1.09-1.11
Shelf Life*	6 months	6 months
Mixing Ratio (volume	100	100

\*Consult MSDS for more information.

#### FOAM PROCESSING PARAMETERS

Type of Machine:	Gusmer H 2000, D gun, #62 mix chamber.
Primary Heater (Iso and Resin):	54°C (130°F)
Hose Temperature:	49°C (120°F)
Preheated Drum Material (Iso and Resin):	32°C (90°F)
Resin Side:	Continuous agitation
Ambient Temperature:	21°C (70°F)

#### **REACTIVITY PROFILE**

Cream Time	Gel Time	Tack Free Time	End of Rise
1 - 2 sec.	3 - 4 sec.	6 – 7 sec.	6 - 7 sec.

#### **RECOMMENDED PROCESSING CONDITIONS**

Primary Heater (Iso and Resin):	54°C (130°F)
Mixing Pressure (Iso and Resin):	6205 kPa (900 psi)
Preheated Drum Material (Iso and Resin)	32°C (90°F)
Resin Side	Continuous agitation
Substrate and Ambient Temperature:	-20 to 35°C (-4°F to 95°F)
Curing temperature	-20°C
Maximum Thickness Per Pass:	Unlimited
Waiting Time Between Passes:	> 20 seconds

#### **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. This product should not be used when the continuous service temperature of the substrate is outside the range of  $-60^{\circ}$ C ( $-76^{\circ}$ F) to  $80^{\circ}$ C ( $176^{\circ}$ F).

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. Apr. 30, 2004