



**DEMILEC** (USA) LLC.  
POLYURETHANE SYSTEMS MANUFACTURER

## TECHNICAL BULLETIN

### SEALECTION™ 500 RESIDENTIAL INSULATION

#### SEMI-RIGID SPRAY APPLIED POLYURETHANE FOAM

SEALECTION 500 is a two-component, open celled, spray-applied, semi-rigid polyurethane foam system. This product is a fully water blown foam system having a very low in-place density. SEALECTION 500 meets the off gassing requirements of CGSB 51.23-92 for new residential construction. SEALECTION 500 has been approved by the Environmental Choice Program of Canada and is listed as an **environmentally friendly product**. SEALECTION 500 complies with the intent of the US Building Codes for foam plastics insulation.

<b>PHYSICAL PROPERTIES</b>		
<b>Method</b>	<b>Description</b>	<b>Value</b>
<b>ASTM D 1622</b>	Density	<b>0.45-0.5 lb./ft<sup>3</sup></b>
<b>ASTM C 518</b>	Thermal Resistance 2 days @ 76° F Thermal Resistance 90 days @ 76° F	<b>3.81 ft.<sup>2</sup>h.°F/BTU.in</b> <b>3.81 ft.<sup>2</sup>h.°F/BTU.in</b>
<b>ASTM E 283-91</b>	Air Leakage @ 75 Pa (25 miles/hr. wind)	<b>0.00013 ft<sup>3</sup>/s.ft<sup>2</sup></b>
	Sustained Wind Load for 60 minutes @ 1000 Pa (90 miles/hr. wind)	<b>No damage</b>
	Gust Wind Load Test @ 3000 Pa (160 miles/hr.)	<b>No damage</b>
<b>ASTM D 1621</b>	Compressive Strength	<b>0.7 psi</b>
<b>ASTM D 1623</b>	Tensile Strength	<b>2.5 psi</b>
<b>ASTM E 413-87</b>	Sound Transmission Class (STC)	<b>39</b>
<b>ASTM C 423</b>	Noise Reduction Coefficient (NRC)	<b>75</b>
<b>ASTM E 96</b>	Water Vapor Permeance (Dry cup)	<b>5.47 Perms</b>
<b>CGSB 51.23-92</b>	Off Gassing Tests (VOC Emissions)	<b>Pass (No toxic vapors)</b>
<b>ASTM E84</b>	Surface Burning Characteristics (6")	
	<ul style="list-style-type: none"> <li>• Flame Spread Index</li> <li>• Smoke Development</li> </ul>	<b>21 Class I</b> <b>216</b>

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.

# SEALECTION™ 500

## LIQUID COMPONENTS PROPERTIES

<b>PROPERTY</b>	<b>ISOCYANATE</b>	<b>RESIN</b>
	<b>A500</b>	<b>B500</b>
Color	<b>Brown</b>	<b>Transparent Clear</b>
Viscosity @ 77°F	<b>180 - 220 cps</b>	<b>250-450 cps</b>
Specific gravity	<b>1.22-1.25</b>	<b>1.09-1.11</b>
Shelf life*	<b>6 months</b>	<b>6 months</b>
Mixing ratio (volume)	<b>100</b>	<b>100</b>

\* Drum unopened, consult MSDS for more information.

All Properties were measured on core samples processed with the parameters listed below:

Type of machine	Gusmer HF1600, Gap gun # 02 mix chamber
Primary heater (A&B)	130 <sup>0</sup> F
Hose temperature	130 <sup>0</sup> F
Ambient temperature	70 <sup>0</sup> F
Thickness of passes	4 inch
Substrate	Plaster board

## REACTIVITY PROFILE

<b>Cream time</b>	<b>Gel time</b>	<b>Tack free time</b>	<b>End of rise</b>
(s)	(s)	(s)	(s)
<b>1-2</b>	<b>3-4</b>	<b>6-7</b>	<b>6-7</b>

## RECOMMENDED PROCESSING CONDITIONS

Primary Heater	<b>130<sup>0</sup>F</b>
Hose temperature	<b>130<sup>0</sup>F</b>
Pressure of mix	<b>900 psi</b>
Substrate & Ambient temperature	<b>&gt; 23<sup>0</sup>F</b>
Curing temperature	<b>&gt; 23<sup>0</sup>F</b>

### **GENERAL INFORMATION:**

It is recommended that the foam be covered with an approved thermal barrier in accordance with 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<sup>0</sup>F to 176<sup>0</sup>F