



# DRAGON JACKET S-1

## PIPE, FITTING, AND TANK INSULATION

### DRY PROPERTIES @ 45 MILS (1MM) WITH TEXTURE\*

Tensile Strength	ASTM D 638	> 4,000 psi (27.80 mpa)
Elongation	ASTM D 638	> 300%
Hardness (Shore D)		57
Modulus @ 100% Elongation	ASTM D 412	± 1,700 (11.82 mpa)
Modulus @ 200% Elongation	ASTM D 412	± 2,800 psi (19.46 mpa)
Tear Resistance	ASTM D 624	> 400 PLI
Service Temperature		-60°F to +250°F (-50°C to +121°C)

### TEST INFORMATION

#### ABRASION RESISTANCE

1 kg. 1,000 rev. CS-17 wheel 1.0 mg lost

### TEST METHOD

ASTM C518-10, Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.

### HEAT FLOW METER THERMAL TRANSMISSION (R-VALUE)

Test Specimine ID	1
Test Duration (Minutes)	50
Average Heat Flux (Btu/hr-ft <sup>2</sup> )	3.99
Average Thermal Conductance - C (Btu/hr-ft <sup>2</sup> -°F)	0.080
Average Thermal Resistance -R (hr-ft <sup>2</sup> -°F/Btu)	12.53
Average Thermal Resistance -R <sub>si</sub> (m <sup>2</sup> -K/W)	2.21
Average Thermal Resistivity -r (hr-ft <sup>2</sup> -°F/Btu-in)	5.74
Apparent Thermal Conductivity -k (Btu-in/hr-ft <sup>2</sup> -°F)	0.174
Specimine Average Thickness (inches)	2.183
†Specimine Average Density (lbs/ft <sup>3</sup> )	5.7

### COLORS

Dragon Jacket S-1 is available in high pigment black and silver. Custom colors will be quoted upon request.

\*It should be noted that Dragon Jacket S-1 is an aromatic polyurea; therefore, as with all aromatics, color change and superficial oxidation will occur.

**TEST METHOD:** 3,000 hour QUV Test with 0 degradation. Longer term testing is ongoing, and results will be available upon request.

*\*All cured film properties are approximate since processing parameters, admixture types, and quantities change physical properties of the cured elastomer. All samples for above tests were force cured or aged for more than three weeks.*

*\*\*Complete polymerization to achieve final strength can take up to several days or weeks depending on a variety of conditions or product type.*

*The samples for tests were sprayed with Graco HXP3 @ 3,000 psi (16.68 mpa). Primaries/Hose Heat 170°F (76°C) Fusion MP Gun w/XR2929 module and .040 ceramtip.*

*†The density of the sample was determined by dividing the average weight of the sample by its volume. The weight was measured using a calibrated scale and the volume was determined by measuring the length, width, and height of a sample.*