



DRAGON JACKET

TECHNICAL DATA SHEET

DRY PROPERTIES	S1	S2	S3	S4
Tensile Strength ASTM D6 38	>4,000 psi (27.80 mpa)	±3,150 psi (22 mpa)	±5,200 psi (36 mpa)	±3,000 psi (21 mpa)
Elongation ASTM D6 38	>300%	±630%	±300%	±100%
Hardness (Shore D) ASTM D2240-81	57	33±5	65±5	65±5
Hardness (Shore A) ASTM D2240	N/A	80±5	N/A	N/A
Service Temperature	-60°F to +250°F (-51°C to +121°C)	-109°F to +250°F (-78°C to +121°C)	-40°F to +350°F (-40°C to +176°C)	-40°F to +200°F (-40°C to +93°C)

COLORS*

Dragon Jacket is available in High Pigment Black and High Pigment Silver. Custom Colors will be quoted upon request.

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

HEAT FLOW METER THERMAL TRANSMISSION (R-VALUE)

Test Specimen ID	1
Test Duration (Minutes)	50
Average Heat Flux (Btu/hr-ft ² -°F)	3.99
Average Thermal Conductance -C (Btu/hr-ft ² -°F)	0.080
Average Thermal Resistance -R (Btu/hr-ft ² -°F)	12.53
Average Thermal Resistance -R _{s1} (m ² -K/W)	2.21
Average Thermal Resistivity -r (hr-ft ² -°F/Btu-in)	5.74
Apparent Thermal Conductivity -k (Btu-in/hr-ft ² -°F)	0.174
Specimen Average Thickness (in)	2.183
† Specimen Average Density (lbs/ft ³)	5.7

† 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 the sample.

- Recommended for Constant Contact
- Recommended for Secondary Contact
- Not Recommended for Contact

CHEMICAL RESISTANCE	S4							
	CHEMICAL	WEIGHT GAIN PERCENTAGE*						
		24 HRS.	7 DAYS	30 DAYS	60 DAYS	6 MOS.	1 YR.	>1 YR.
Acetic 10%	0.0002%	0.03%	0.13%	0.11%				
Acetic 40%	0.38%	1.90%			7.32% 10 MOS.			
Acetic 50%					9.75% 11 MOS.			
Diesel	0.00%	0.00%	0.00%	0.01%			0.1% 3 YRS.	
Ethanol					8.73% 3 MOS.			
Ethanol 47.5% Methanol 47% MIBK 5%	2.48%	4.19%	5.43%		8.13%			
Gasoline (Unleaded)	0.07%	0.50%	1.40%	2.30%	5.16%		4.75% 17 MOS. SHORE D 34	
Hydrochloric Acid HCl 24%	0.00%	0.01%	0.02%					
Jet Fuel JP-1,2,3	0.00%	0.00%	0.00%	0.01%			1.4% 5 YRS.	
Jet Fuel JP-7 Toluene 60%	0.61%	2.41%	4.10%	4.93%	8.34%		8.67% 19 MOS.	
Methanol	2.30%	3.41%			12.4%		9.12% 19 MOS.	
Phosphoric Acid H3PO4 50%	0.00%	0.001%	0.02%					
Sodium Hypochlorite 12%					-1.5% 8 MOS.			
Sodium Hydroxide NaOH 50%	0.00%	0.001%		0.70%			2.36% 2 YRS.	
Sulfuric Acid H2SO4 50%	0.00%	0.00%				6.15%		
Sulfuric Acid 14% Phosphoric Acid 30%						2.36%	-0.86% 2 YRS.	
Water	0.00%	0.00%						
Skydrol	0.39%	2.30%	4.93% 25 DAYS		13.7%	16.5%		
Xylene	1.10%	4.60%		20.0%	21.63%			
Sulfuric Acid H2SO4 93%	Destroyed 2 Days							

* Immersion samples were "free films" (6 sides exposed). In service, containment liners have only one side of liner exposed to reagents. To calculate the approximate chemical absorption, divide the weight gain percentage indicated on the adjacent chart by two.