



DRAGON JACKET — INSULATION —

DRAGON JACKET S4™ TECHNICAL DATA SHEET

UPDATED 11/7/18

TYPICAL PHYSICAL PROPERTIES

Tensile Strength ASTM D638	± 3,000 psi (21 mpa)
Elongation ASTM D638	± 100%
Hardness (Shore D) ASTM D2240-81	65 ± 5
Permeance ASTM D96-80	Perms-inch 0.007
*Exposure Temperature <small>*Test performed in a dry, static environment</small>	-40°F to +200°F (-40°C to +93°C)

COLORS

Dragon Jacket S4™ is available in high pigment black and silver. Custom colors will be quoted upon request.

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

**It should be noted that Dragon Jacket S4™ 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)	3.99
Average Thermal Conductance - C (Btu/hr·ft ² ·°F)	0.080
Average Thermal Resistance - R (hr·ft ² ·°F/Btu)	12.53
Average Thermal Resistance - R _{si} (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 (inches)	2.183
†Specimine Average Density (lbs/ft ³)	5.7

TEST METHOD

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

†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.

IMMERSION*

CHEMICAL	WEIGHT GAIN %	
Acetic 50%	9.75%	11 months
Diesel	0.10%	3 years
Gasoline (Unleaded)	4.75%	17 months
Sulphuric Acid 14%	-0.86%	2 years
Phosphoric Acid 30%	0.02%	1 month
Jet Fuel JP - 1,2,3	1.4%	5 years
Methanol	9.12%	19 months
Skydrol	16.5%	1 year
Sulphuric Acid 50%	6.15%	1 year

TEST INFORMATION

Mandrel Bend Test
ASTM D522-93a

Passed | Mandrel Size 1"
Test Temperature -40°F

**Immersion samples were 'free films' (6 sides exposed). In service, containment liners have only one side of liner exposed to reagents. To calculate approximate chemical absorption, divide the weight gain percentage indicated on the chart by two. All tests performed at SPI location at room temperature. Certified free film samples are available for immersion evaluation.*



WWW.DRAGONJACKET.COM

(208) 772-8640 • INFO@DRAGONJACKET.COM
14080 N. THAYER ST. RATHDRUM, IDAHO 83858