



### PRODUCT CAPABILITIES:

- Sheet : 1/4" - 2"

### PRODUCT COLORS:

- Black

### ADVANTAGES:

- Easily Machined To Close Tolerances
- Ideal For Structural Applications In Corrosive Environments Or As A lower Temperature Replacement For PEEK
- UL94, V-0 RATED
- Superior Electrical Properties
- Extremely Low Moisture Absorption
- Better Dimensional Stability

### APPLICATIONS INCLUDE:

- High Pressure Liquid Chromatography Components
- Wafer Retaining Rings For CMP Polishing
- Hydrocarbon Pump, Valve, And Compressor Components
- Oil Field Parts
- Aerospace Components
- Medical And Diagnostic Device Parts

GENERAL PROPERTIES	ASTM or UL Test	RYTON® PPS 40% G.F Typical Values
<b>PHYSICAL</b>		
Specific Gravity (g/cm <sup>3</sup> )	D792	1.7
Water Absorption, 24 hrs (%)	D570	0.02
<b>MECHANICAL</b>		
Tensile Strength (psi)	D638	13,000
Tensile Modulus (psi)	D638	730,000
Tensile Elongation at Break (%)	D638	2
Flexural Strength (psi)	D790	23,000
Flexural Modulus (psi)	D790	1,000,000
Compressive Strength (psi)	D695	24,000
Compressive Modulus (psi)	D695	1,300,000
Hardness, Rockwell	D785	M94 / R125
IZOD Notched Impact (ft-lb/in)	D256	1
<b>THERMAL</b>		
Coeff. of Thermal Expansion (x 10 <sup>-5</sup> in./in./°F)	D696	2.5
Heat Deflection Temp (°F / °C) @ 264 psi	D648	490 / 254
Glass Transition Temp (°F / °C)	D3418	–
Max Operating Temp (°F / °C)	–	450 / 232
Thermal Conductivity (BTU-in/ft <sup>2</sup> -hr-°F)	C177	2.1
Flammability Rating	UL94	V-0
<b>ELECTRICAL</b>		
Dielectric Strength (V/mil) short time, 1/8" thick	D149	385
Dielectric Constant at 1 MHz	D150	–
Dissipation Factor at 1 MHz	D150	–
Volume Resistivity (ohm-cm) at 50% RH	D257	–

NOTE: The information contained here in is typical values intended for reference only. They should NOT be used as a basis for design specifications or quality control.