



** TECHTRON® is the registered trademark of

MITSUBISHI CHEMICAL ADVANCED MATERIALS

PRODUCT CAPABILITIES:

- Rod : 3/8" - 2"
- Sheet : 1/4" - 2"

ADVANTAGES:

- Easily Machined To Close Tolerances
- Ideal For Structural Applications In Corrosive Environments Or As A Lower Temperature Replacement For PEEK
- Extremely Low Moisture Absorption

PRODUCT COLORS:

- Natural

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	TECHTRON®PPS Typical Values
PHYSICAL		
Specific Gravity (g/cm ³)	D792	1.35
Water Absorption, 24 hrs (%)	D570	0.01
MECHANICAL		
Tensile Strength (psi)	D638	13,500
Tensile Modulus (psi)	D638	500,000
Tensile Elongation at Break (%)	D638	15
Flexural Strength (psi)	D790	21,000
Flexural Modulus (psi)	D790	575,000
Compressive Strength (psi)	D695	21,500
Compressive Modulus (psi)	D695	-
Hardness, Rockwell	D785	M100
IZOD Notched Impact (ft-lb/in)	D256	0.6
THERMAL		
Coeff. of Thermal Expansion (x 10 ⁻⁵ in./in./°F)	E831	2.8
Heat Deflection Temp (°F / °C) @ 264 psi	D648	250 / 121
Glass Transition Temp (°F / °C)	D3418	-
Max Operating Temp (°F / °C)	-	425 / 218
Thermal Conductivity (BTU-in/ft ² -hr-°F)	F433	2
Flammability Rating	UL94	V-O
ELECTRICAL		
Dielectric Strength (V/mil) short time, 1/8" thick	D149	540
Dielectric Constant at 1 MHz	D150	3
Dissipation Factor at 1 MHz	D150	0.0013
Surface Resistivity (ohm/sq)	ANSI / ESD STM 11.11	> 10 ¹³
Volume Resistivity (ohm·cm)	IEC 60093	> 10 ¹⁴

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.