



PRODUCT CAPABILITIES:

- Rod : 1/4" - 8"
- Heavy Gauge Sheet : 1/8" - 4"
- Thin Gauge Sheet : 0.030" - 0.125"
- Film : 0.001" - 0.029"

ADVANTAGES:

- Inherent Flame Resistance
- Extremely Low NBS Smoke Evolution
- Superior Limiting Oxygen Index
- Exceptional Tensile And Flexural Strength
- High Dielectric Strength
- Low Dissipation Factor
- Stable Electrical Properties Over A Wide Range Of Temperatures and Frequencies
- Broad Chemical Resistance
- U.V. Stable
- Excellent Finishing Characteristics
- FDA Compliant

PRODUCT COLORS:

- Black
- Light Amber

APPLICATIONS INCLUDE:

- Structural Probes
- Surgical Probes
- Manifolds In Pharmaceutical Process Equipment
- High Frequency Insulators Used In Microwave Communications
- Semiconductor
- Pump Housings
- Wafer Processing

GENERAL PROPERTIES	ASTM or UL Test	ULTEM® 1000 Typical Values
PHYSICAL		
Specific Gravity (g/cm ³)	D792	1.27
Water Absorption, 24 hrs (%)	D570	0.25
MECHANICAL		
Tensile Strength (psi) @ yield	D638	16,000
Tensile Strength @ break (psi)	D638	13,100
Tensile Modulus (psi)	D638	520,000
Tensile Elongation at Yield (%)	D638	7
Tensile Elongation at break (psi)	D638	60.0
Flexural Strength (psi)	D790	24,000
Flexural Modulus (psi)	D790	510,000
Compressive Strength (psi)	D695	-
Compressive Modulus (psi)	D695	-
IZOD Notched Impact (ft-lb/in)	D256	25
Hardness, Rockwell	D785	M109
THERMAL		
Coeff. of Thermal Expansion (x 10 ⁻⁵ in./in./°F)	E831	3.1
Heat Deflection Temp (°F / °C) @ 264 psi	D648	394 / 201
Max Operating Temp (°F / °C)	-	-
Limiting Oxygen Index (%)	D2863	47
Thermal Conductivity (BTU-in/ft ² -hr-°F)	C177	-
Flammability Rating @ 0.0295" / 0.118"	UL-94	V-0 / 5VA
ELECTRICAL		
Dielectric Strength (V/mil) 0.063" in oil	D149	710
Dielectric Constant at 1 KHz	D150	3.15
Dissipation Factor at 1 KHz	D150	0.0012
Volume Resistivity (ohm-cm)	D257	1.0 x 10 ¹⁷

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.