

## DATA SHEET

### ULTEM

#### Unfilled Extruded Polyetherimide (PEI)

PROPERTY	UNITS	VALUE
<b>MECHANICAL</b>		
Specific Gravity	-	1.28
Tensile Strength	psi	16,500
Tensile Modulus	psi	500,000
Elongation (at break)	%	80
Flexural Strength	psi	20,000
Flexural Modulus	psi	500,000
Compressive Strength	psi	22,000
Hardness, Rockwell	-	R125
Coefficient of Friction (Dry vs. Steel)	-	.42
Limiting PV (with 4:1 safety factor)	psi x fpm	1,875
<b>THERMAL</b>		
Coefficient of Linear Thermal Expansion	in/in/F	$3.1 \times 10^{-5}$
Heat Deflection Temperature (264 psi)	F	400
Glass Transition Temperature	F	410
Continuous Service Temperature	F	340
Thermal Conductivity	BTU/in/hr.ft.F	0.85
<b>ELECTRICAL</b>		
Dielectric Strength	volts/mil	830
Volume Resistivity	ohm-cm	$>10^{13}$
<b>OTHER</b>		
Water Absorption, Immersion, 24 hrs.	% by wt.	.25
Water Absorption, Immersion, Saturation	% by wt.	1.25

#### **ENGINEERING NOTES:**

- \* Good resistance to steam.
- \* FDA Compliant.
- \* Poor abrasion resistance.