

## DATA SHEET

### TORLON 5030

Extruded Polyamide-imide with 30% Glass Fiber Filler

PROPERTY	UNITS	VALUE
<b>MECHANICAL</b>		
Specific Gravity	-	1.60
Tensile Strength	psi	29,700
Tensile Modulus	psi	1,560,000
Elongation (at break)	%	7.0
Flexural Strength	psi	48,300
Flexural Modulus	psi	1,700,000
Compressive Strength	psi	38,300
Hardness, Rockwell	-	E94
Coefficient of Friction (Dry vs. Steel)	-	--
Limiting PV (with 4:1 safety factor)	psi x fpm	35,000
<b>THERMAL</b>		
Coefficient of Linear Thermal Expansion	in/in/F	$0.9 \times 10^{-5}$
Heat Deflection Temperature (264 psi)	F	539
Glass Transition Temperature	F	527
Continuous Service Temperature	F	500
Thermal Conductivity	BTU/in/hr.ft.F	2.50
<b>ELECTRICAL</b>		
Dielectric Strength	volts/mil	840
Volume Resistivity	ohm-cm	$6 \times 10^{16}$
<b>OTHER</b>		
Water Absorption, Immersion, 24 hrs.	% by wt.	.24
Water Absorption, Immersion, Saturation	% by wt.	1.5

#### **ENGINEERING NOTES:**

- \* Excellent bearing performance at high speeds
- \* Excellent creep resistance
- \* Good chemical resistance