

DATA SHEET

TORLON 4301

Extruded Polyamide-imide with PTFE and Graphite Fillers

PROPERTY	UNITS	VALUE
MECHANICAL		
Specific Gravity	-	1.45
Tensile Strength	psi	12,000
Tensile Modulus	psi	900,000
Elongation (at break)	%	3.0
Flexural Strength	psi	23,000
Flexural Modulus	psi	800,000
Compressive Strength	psi	22,000
Hardness, Rockwell	-	M106
Coefficient of Friction (Dry vs. Steel)	-	.20
Limiting PV (with 4:1 safety factor)	psi x fpm	22,500
THERMAL		
Coefficient of Linear Thermal Expansion	in/in/F	1.40×10^{-5}
Heat Deflection Temperature (264 psi)	F	534
Glass Transition Temperature	F	532
Continuous Service Temperature	F	500
Thermal Conductivity	BTU/in/hr.ft.F	3.70
ELECTRICAL		
Dielectric Strength	volts/mil	--
Volume Resistivity	ohm-cm	$>10^{13}$
OTHER		
Water Absorption, Immersion, 24 hrs.	% by wt.	.4
Water Absorption, Immersion, Saturation	% by wt.	1.5

ENGINEERING NOTES:

- * Excellent bearing performance at high speeds
- * Excellent slip-stick performance
- * Good chemical resistance