

## DATA SHEET

### PA 6/12 IMPACT MODIFIED

#### Impact Modified Type 6/12 Cast Nylon (Polyamide)

PROPERTY	UNITS	VALUE
<b>MECHANICAL</b>		
Specific Gravity	-	1.14
Tensile Strength	psi	10,000
Tensile Modulus	psi	400,000
Elongation (at break)	%	50
Flexural Strength	psi	16,300
Flexural Modulus	psi	350,000
Compressive Strength	psi	12,000
Hardness, Rockwell	-	R115
Coefficient of Friction (Dry vs. Steel)	-	.35
Limiting PV (with 4:1 safety factor)	psi x fpm	2,800
<b>THERMAL</b>		
Coefficient of Linear Thermal Expansion	in/in/F	$5.5 \times 10^{-5}$
Heat Deflection Temperature (264 psi)	F	200
Glass Transition Temperature	F	145
Continuous Service Temperature	F	220
Thermal Conductivity	BTU/in/hr.ft.F	--
<b>ELECTRICAL</b>		
Dielectric Strength	volts/mil	500
Volume Resistivity	ohm-cm	$>10^{15}$
<b>OTHER</b>		
Water Absorption, Immersion, 24 hrs.	% by wt.	.3
Water Absorption, Immersion, Saturation	% by wt.	8.0

#### **ENGINEERING NOTES:**

- \* Wear resistance is much better when dry
- \* Good abrasion resistance
- \* Good chemical resistance