

## DATA SHEET

### POLYPROPYLENE

#### Homopolymer Polypropylene

PROPERTY	UNITS	VALUE
<b>MECHANICAL</b>		
Specific Gravity	-	0.905
Tensile Strength	psi	4,800
Tensile Modulus	psi	180,000
Elongation (at break)	%	12
Flexural Strength	psi	7,000
Flexural Modulus	psi	180,000
Compressive Strength	psi	--
Hardness, Rockwell	-	R92
Coefficient of Friction (Dry vs. Steel)	-	.18
Limiting PV (with 4:1 safety factor)	psi x fpm	1,000
<b>THERMAL</b>		
Coefficient of Linear Thermal Expansion	in/in/F	$6.20 \times 10^{-5}$
Heat Deflection Temperature (264 psi)	F	125
Glass Transition Temperature	F	125
Continuous Service Temperature	F	180
Thermal Conductivity	BTU/in/hr.ft.F	--
<b>ELECTRICAL</b>		
Dielectric Strength	volts/mil	575
Volume Resistivity	ohm-cm	$10^{17}$
<b>OTHER</b>		
Water Absorption, Immersion, 24 hrs.	% by wt.	0.02
Water Absorption, Immersion, Saturation	% by wt.	0.02

#### **ENGINEERING NOTES:**

- \* FDA, USDA compliant
- \* Chemically inert
- \* Poor performance at speeds over 20 fpm