

## DATA SHEET

### TEFLON

#### Unfilled PTFE (Polytetrafluoroethylene)

PROPERTY	UNITS	VALUE
<b>MECHANICAL</b>		
Specific Gravity	-	2.2
Tensile Strength	psi	3,000
Tensile Modulus	psi	50,000
Elongation (at break)	%	300
Flexural Strength	psi	1,500
Flexural Modulus	psi	50,000
Compressive Strength	psi	1,200
Hardness, Shore D	-	55
Coefficient of Friction (Dry vs. Steel)	-	.08
Limiting PV (with 4:1 safety factor)	psi x fpm	1,500
<b>THERMAL</b>		
Coefficient of Linear Thermal Expansion	in/in/F	$8.4 \times 10^{-5}$
Heat Deflection Temperature (264 psi)	F	132
Glass Transition Temperature	F	68-75
Continuous Service Temperature	F	550
Thermal Conductivity	BTU/in/hr.ft.F	1.7
<b>ELECTRICAL</b>		
Dielectric Strength	volts/mil	600
Volume Resistivity	ohm-cm	$>10^{18}$
<b>OTHER</b>		
Water Absorption, Immersion, 24 hrs.	% by wt.	<0.01
Water Absorption, Immersion, Saturation	% by wt.	.01

#### **ENGINEERING NOTES:**

- \* FDA, USDA, 3-A DAIRY compliant
- \* Chemically inert
- \* Very little strength or stability