



### PRODUCT CAPABILITIES:

- Rod : 1/4" - 1.75"
- Sheet : 1/4" - 2"

### PRODUCT COLORS:

- Translucent (Natural)

### ADVANTAGES:

- Negligible moisture absorption
- Low coefficient of friction
- Non-stick surfaces
- Chemically inert to most industrial chemicals and solvents
- Exceptional dielectric insulation properties
- May be welded with hot air welding equipment
- Very low gas permeation and outgassing
- Does not support combustion

### APPLICATIONS INCLUDE:

- Pump housings and pipe linings
- Fluid handling or chemical processing equipment
- Wet bench equipment
- Semiconductor wafer carriers
- Hostile environment involving chemical, thermal or mechanical stress
- Food processing and packaging
- Tanks

GENERAL PROPERTIES	TEST METHOD	PFA 350 & 450HP Typical Values	FEP 9302 Typical Values
<b>PHYSICAL</b>			
Specific Gravity (g/cm <sup>3</sup> )	D792	2.12 - 2.17	2.12 - 2.17
Water Absorption, 24 hrs (%)	D570	< 0.03	< 0.01
<b>MECHANICAL</b>			
Tensile Strength (psi)	D683	3,625 - 4,000	4,350
Tensile Elongation at Break (%)	D683	300	300 - 325
Flexural Modulus (psi)	D790	90,000	95,000
Compressive Strength (psi)	D695	3,500	-
Hardness, Shore D	D2240	55 - 60	55 - 56
IZOD Notched Impact (J/m)	D256	No Break	No Break
Coefficient of Friction	D1894	0.21	0.25
Deformation Under Load 23°C, 1 Kpsi, 24hr (%)	D621	2	-
<b>THERMAL</b>			
Coeff. of Thermal Expansion (x 10 <sup>-5</sup> mm/mm/°C)	D696	14	-
Heat Deflection Temp (°F / °C) @ 66 psi	D648	-	-
Melting Temp (°F / °C)	D3418	576 - 590 / 302 - 310	491 - 500 / 255 - 260
Maximum Service Temperature(°F / °C)	-	500 / 260	401 / 205
Thermal Conductivity (W/m-K)	-	0.19	-
Flammability Rating	UL94	V-O	V-O
<b>ELECTRICAL</b>			
Dielectric Strength (V/mil)	D149	2,000	2,000
Dielectric Constant at 1 MHz 23°C, 60- 10 <sup>6</sup> Hz	D150	2.03 - 2.1	2.15
Dissipation Factor at 1 MHz 23°C, 60- 10 <sup>6</sup> Hz	D150	0.0001	0.0003
Arc Resistance (sec)	D495	>180	>180
Volume Resistivity (ohm-cm)	D257	10 <sup>18</sup>	10 <sup>18</sup>
Surface Resistivity (ohm-sq)	D257	10 <sup>17</sup>	10 <sup>16</sup>

NOTE: The information contained here in is typical values intended for reference only. They should NOT be used as a basis for design specifications or quality control.