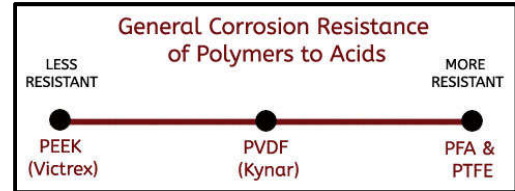


PFA polymer fasteners offer the best all-around corrosion resistant at high temperatures compared to other engineered polymers like PEEK or PVDF. They are virtually inert to most organics, acids, bases, mixed chemicals and hydrofluoric acid. Bio-inert, PFA screws will not contaminate or leach into pharmaceutical and food processes or products. PFA has a usable temperature limit of 500°F / 260°C. Like PTFE the trade off for excellent high temperature corrosion resistance is low strength.



Properties & Data

Property	ASTM or UL Test	Teflon® PFA
<b>PHYSICAL</b>		
Density (lb/in <sup>3</sup> ) (g/cm <sup>3</sup> )	D792	0.077 (2.14)
Water Absorption, 24 hrs (%)	D570	<0.03
<b>MECHANICAL</b>		
Strength/Weight Ratio	Tensile Strength / Density (g/cc)	1700
Tensile Strength (psi)	D638	3,600
Tensile Modulus (psi)	D638	80,000
Tensile Elongation at Break (%)	D638	330
Flexural Strength (psi)	D790	No Break
Flexural Modulus (psi)	D790	85,000
Hardness, Rockwell, R/M Scale	D785	R55
IZOD Impact Notched (ft-lb/in)	D256	No Break
<b>THERMAL</b>		
Coefficient of Linear Thermal Expansion (x 10 <sup>-5</sup> in./in./°F)	D696	7.8
Heat Deflection Temp (°F / °C) at 264 psi	D648	163 / 73
Melting Temp (°F / °C)	D3418	575 / 302
Max Operating Temp (°F / °C)	-	500 / 260
Thermal Conductivity (BTU-in/ft <sup>2</sup> -hr-°F)	C177	1.4
Flammability Rating	UL94	V-O
<b>ELECTRICAL</b>		
Dielectric Strength (V/mil) short time, 1/8" thick	D149	6500
Dielectric Constant at 1 MHz	D150	2.03
Dissipation Factor at 1 MHz	D150	0.0001
Volume Resistivity (ohm-cm) at 50% RH	D257	> 10 <sup>18</sup>

Key Benefits

- Excellent resistance to organics, acids and bases
- Excellent electrical insulator
- Ideal for pharmaceutical and food products and process due to their bio-inert attributes

PFA - Tensile Data

Temperature (°F)	Ultimate Tensile (ksi)	Yield Strength at 0.2% Offset (ksi)	Elongation %
Room Temp.	3.6	2.0	300
480	2.0	-	480

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