

PFA Datasheet compared to PTFE

ASTM or UL test	Property	PTFE (unfilled)	FEP
PHYSICAL			
D792	Density (lb/in ³) (g/cm ³)	0.078 2.16	0.078 2.15
D570	Water Absorption, 24 hrs (%)	< 0.01	< 0.03
MECHANICAL			
D638	Tensile Strength (psi)	3,900	3,600
D638	Tensile Elongation at Break (%)	300	300
D790	Flexural Strength (psi)	No break	No break
D2176	Folding Endurance (cycles)	> 10 ⁶	50-500 x 10 ³
D790	Flexural Modulus (psi)	72,000	85,000
D785	Hardness, Shore D	D50	D60
D256	IZOD Notched Impact (ft-lb/in)	3.5	-
THERMAL			
D3418	Melting Temp (°F / °C)	635 / 335	582 / 305
-	Max Operating Temp (°F / °C)	500 / 260	500 / 260
UL94	Flammability Rating	V-0	V-0
ELECTRICAL			
D150	Dielectric Constant at 1 MHz	2.1	2.1
D150	Dissipation Factor at 1 MHz	< 0.0002	0.0001
D495	Arc Resistance (sec)	< 300	< 180
D257	Volume Resistivity (ohm-cm)at 50% RH	> 10 ¹⁸	> 10 ¹⁸

NOTE: The informations contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control.

Contact us for manufacturers' complete material property datasheets.

All values at 73°F (23°C) unless otherwise noted.