



Material Properties & Comparisons

Fluoropolymers				
Properties	Test Method / Unit	FEP	PFA	PTFE
MECHANICAL				
Specific Gravity	D792	2.15	2.15	2.18
Tensile Strength (psi)	D638	2,800 ~ 5,000	4,000 ~ 4,500	2,000 ~ 7,000
Flexural Strength (psi)	D790	No Break	No Break	No Break
Flex Life	D2176	5,000 ~ 80,000	10,000 ~ 500,000	>1,000,000
Hardness Durometer Shore D	D636	D55	D55 ~ 60	D55 ~ 60
Coefficient of Friction	On steel	.05	.025	0.2
THERMAL				
Shrink Temperature	°F	300°	300°	625°
	°C	149°	149°	327°
Service Temperature	°F	392°	500°	500°
	°C	200°	260°	260°
Flame Rating	UL 94	V-0	V-0	V-0
Melting Point	°F	500°	582°	621°
	°C	260°	305°	327°
Low Temperature Embrittlement	°F	-450°	-450°	-450°
	°C	-268°	-268°	-268°
ELECTRICAL				
Dielectric Constant	D150/103Hz	2.1	2.1	2.1
	D150/106Hz	2.1	2.1	2.1
GENERAL				
Chemical/Solvent Resistance	D543	Excellent	Excellent	Excellent
Water Absorption, 24h	%	<0.01	<0.03	<0.01
Refractive Index		1.338	1.34	1.35
Properties	Test Method / Unit	FEP	PFA	PTFE

✕ Fluoropolymer Tubing is made to meet both Mil and ASTM Specifications.