



TECHNICAL DATA SHEET

PVDF65D

1730 NE Miller Street
 McMinnville, OR 97128
 (503) 434-5561

Physical Properties	Standard Conditions	Units	Values
Refractive Index	D542 / at Sodium D line 77°F		1.41
Specific Gravity	D792 / 73°F		1.78 - 1.80
Water Absorption	D570 / 20°C Immersion / 24 Hours	%	0.04 - 0.07
Mechanical Properties	Standard Conditions	Units	Values
Flexural Strength @ 5% Strain	D790 / 73°F	psi	2,000 - 3,500
Flexural Modulus	D790 / 73°F	psi	49,000 - 58,000
Tensile Yield Elongation	D638 / 73°F	%	10 - 20
Tensile Yield Strength	D638 / 73°F	psi	2,600 - 3,500
Tensile Break Elongation	D638 / 73°F	%	200 - 400
Tensile Break Strength	D638 / 73°F	psi	3,300 - 4,000
Tensile Modulus	D638 / 73°F	psi	50,000 - 90,000
Compressive Strength	D695 / 73°F	psi	3,500 - 4,500
Deflection Temperature	D648 / AT 264 psi	°F	95 - 125
Deflection Temperature	D648/ at 66 psi	°F	120 - 150
Impact Strength Notched Izod	D256 / 73°F	Ft-Lb/In	NO BREAK
Impact Strength Unnotched Izod	D256 / 73°F	Ft-Lb/In	NO BREAK
Hardness	D2240 / 73°F	Shore D	62 - 67
Tabor Abrasion	CS-17 1000 g:load	mg/1000 cycles	21 - 25
Coefficient of Friction Static vs. Steel	ASTM D 1894 73°F		0.55
Coefficient of Friction Dynamic vs. Steel	ASTM D 1894 73°F		0.54
Thermal Properties	Standard Conditions	Units	Values
Melting Temperature	D3418	°F	266 - 273
Tg (DMA)	@ 1 Hz	°C	-44 -- -40
Coefficient of Linear Thermal Expansion	D696	10E - 5/°F	9.0 - 12.0
Thermal Conductivity	ASTM D433	BTU-in/hr ft^2°F	1.00 - 1.25
Specific Heat	DSC	BTU/Lb°F	0.28 - 0.36
Thermal Decomposition TGA	1% wt. Loss/in air	°F	707
Thermal Decomposition TGA	1% wt. Loss/in nitrogen	°F	770
Thermal Decomposition TGA	Ash weight %/ in air	%	0 - 5

Electrical Properties	Standard Conditions	Units	Values
Dielectric Strength 73°F	D149 / 73°F	KV / Mil	1.1 - 1.3
Dielectric Constant 73°F	D150 / 100 Hz		10.5 - 12.1
Dielectric Constant 73°F	D150 / 1kHz		8.9 - 11.4
Dielectric Constant 73°F	D150 / 10 kHz		8.6 - 9.8
Dielectric Constant 73°F	D150 / 100 kHz		8.2 - 9.4
Dielectric Constant 73°F	D150 / 1 MHz		7.1 - 8.5
Dielectric Constant 73°F	D150 / 100 MHz		3.8 - 4.7
Dissipative Factor 73°F	D150 / 100 Hz		0.05 - 0.09
Dissipative Factor 73°F	D150 / 1kHz		0.02 - 0.07
Dissipative Factor 73°F	D150 / 10 kHz		0.05 - 0.10
Dissipative Factor 73°F	D150 / 100 kHz		0.09 - 0.13
Dissipative Factor 73°F	D150 / 1 MHz		0.17 - 0.19
Dissipative Factor 73°F	D150 / 100 MHz		0.21 - 0.24
Volume Resistivity	D257 / DC 68°F / 65% R.H.	ohm - cm	2×10^{14}
Flame & Smoke Properties	Standard Conditions	Units	Values
Burning Rate	UL / Bulletin 94		V - 0
Limiting Oxygen Index	D2868	%O ₂	42 / 95

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