

Halar® 902 (ECTFE) Resin

PROPERTY	NOMINAL VALUES	TEST METHOD
Physical		
Density @ 73 °F	1.71 g/cm ³	ASTM D792
Water Absorption, 24 hr immersion	0.0027 %	ASTM D570
Mechanical		
Tensile Yield Strength (73 °F, 2 in/min)	4300 – 4600 psi	ASTM D638
Tensile Break Strength (73 °F, 2 in/min)	6500 – 7400 psi	ASTM D638
Tensile Elongation at Yield (73 °F, 2 in/min)	4 – 5 %	ASTM D638
Tensile Elongation at Break (73 °F, 2 in/min)	250 – 300 %	ASTM D638
Tensile Modulus (73 °F, 2 in/min)	265,000 psi	ASTM D638
Flexural Strength (73 °F, 0.1 in/min)	7840 psi	ASTM D790
Flexural Modulus (73 °F, 0.1 in/min)	252,000 psi	ASTM D790
Hardness, Shore D	68	ASTM D2240
Hardness, Rockwell R	90	ASTM D785
Abrasion Resistance, CS 17 (0.5 kg)	5 mb/1000 rev	Taber
Friction Coefficient		ASTM D1894
Static	0.2	
Dynamic	0.2	
Thermal		
Melting Point	428 – 445 °F	DSC
Specific Heat @ 73 °F	0.23 BTU/lb-°F	
DTUL, 66 psi	180 °F	ASTM D648
DTUL, 264 psi	172 °F	ASTM D648
Glass Transition Temperature (T _g)	185 °F	DMA
Thermal Stability, 1% Mass Loss, N ₂	760 °F	TGA
Linear Thermal Exp. Coefficient	51 10 ⁻⁶ /°F	ASTM D696
Thermal Conductivity @ 104 °F	1.05 BTU-in/h-ft ² -°F	ASTM C177
Electrical		
Volume Resistivity @ 23 °C (50% RH)	> 4.2 x 10 ¹⁶	ASTM D257
Dielectric Strength @ 3.2 mm thickness (73 °F)	385 V/mil	ASTM D149
Dielectric Constant		ASTM D150
@ 1 KHz	2.39	
@ 1 MHz	2.59	
Dissipation Factor		ASTM D150
@ 1 KHz	0.0018	
@ 1 MHz	0.0134	
Impact		
Notched Izod Strength (73 °F, 0.125 in)	No Break	ASTM D256
Notched Izod Strength (-40 °F, 0.125 in)	2.0 ft.lb _i /in	ASTM D256
Fire Resistance		
UL-94 Flammability Test	V-0 Class	UL-94
Limiting Oxygen Index	52 %	ASTM D2863

*Halar is a registered trademark of Solvay Solexis

**Typical values only. Actual properties of individual batches will vary within specification limits.