

Saint-Gobain Performance Plastics
Sani-Pro-K Kynar®, Design Properties for Special Applications
Tables III, IV, and V

Electrical Property	ASTM	Value		Units
		Grade 460	Grades 710-760	
Minimum DC Volume Resistivity	D257	1.5x10 ¹⁴	1.5x10 ¹⁴	ohm-cm
Surface Arc Resistance	D495	50-60	50-60	sec.
Dielectric Strength ⁽¹⁾	D149	1.7	1.6	KV/10 ⁻³ -in
Short-Time 500 V/sec		67	63	kV/mm
Dielectric Constant ⁽²⁾	D150	9.54	8.15-10.46	
10 ³ cycles-Hz		9.05	7.85-9.61	
10 ⁵ cycles-Hz				
Dissipation Factor				
10 ³ cycles-Hz		0.026	0.005-0.019	
10 ⁵ cycles-Hz		0.050	0.039-0.058	

(1) In air using 1 in. electrode with a 4x0.005 in. compression molded disc.
(2) Measured in air using 0.50 in. thick, 2 in. diameter compression molded discs that were water quenched after pressing.

Table III: Electrical properties for various grades of Kynar Homopolymer resins at room temperature.

Thickness mm (in.)	UV Wavelength (nm)					
	200	240	280	320	360	400
0.038 (0.0015)	34.4	53.8	66.3	72.6	77.8	81.2
0.051 (0.002)	24.4	45.6	58.8	67.8	74.4	78.5
0.102 (0.004)	3.2	15.0	30.5	44.5	53.8	61.4
0.178 (0.007)	0.4	1.9	8.1	17.5	26.4	35.0
0.279 (0.011)	0	0.6	2.7	7.5	14.7	21.9
0.508 (0.020)	0	0	0.2	0.5	2.5	5.0

Table IV: Percentage transmission of extruded Kynar PVDF film in the ultraviolet region (200-400nm) as a function of thickness.

Property	Units	Before Exposure	After Outdoor Exposure (17 yrs.)
Tensile Strength	SI	47.5MPa	59.0 MPa
	English	6900 psi	8500 psi
Elongation at Break	%	46	10

Table V: Stress/strain properties of 0.204 mm (0.008 in.) weathered Kynar PVDF film determined by ASTM method D882.