

IEC 60893 EP GC 308 Required Properties

Key Characteristics	Test Method	Units	IEC Required	Typical Values
Flexural Strength A E-150T-150	ISO 178	MPa	340 min 170 min	560 276
Charpy Impact Strength	ISO 179	kJ/m ²	33 min	45
Perpendicular Electric Strength (90°C in Oil, 1.5mm)	IEC 60243	kV/mm	13 min	15
Parallel Breakdown Voltage (Stepped, 90°C in Oil, 3mm)	IEC 60243	kV	35 min	>45
Insulation Resistance (after Water Immersion)	IEC 60167	Ω	5(10) ⁴ min	>10 ⁷
Thermal Endurance	IEC 60216	°C	180	HB
Water Absorption (1.5mm)	ISO 62	mg	19 max	4.2

Additional Engineering Properties

Key Characteristics	Test Method	Units - English (SI)	Typical Values
Tensile Strength (0.125") LW	ASTM D638	ksi (MPa)	41 (283)
Compressive Strength Flatwise (0.500")	ASTM D695	ksi (MPa)	70 (483)
Flexural Modulus (0.062") LW CW	ASTM 0790	ksi (GPa)	4200 (29) 4000 (27.6)
Coefficient of Thermal Expansion	-	"/°C x 10 ⁶	10
Comparative Tracking Index (.125")	ASTM D3638	V	180
Dielectric Strength (0.062") Condition A, oil	ASTM D149	V/mil	485