DuPont™ Rynite® PET

thermoplastic polyester resin

Rynite® 830ER BK503

Rynite® 830ER is 30% glass reinforced with excellent high temperature dielectric properties. Class H (180C).

Property	Test Method	Units	Value
Mechanical			
Stress at Break	ISO 527	MPa (kpsi)	170 (24.6)
Strain at Break	ISO 527	%	2.2
Tensile Modulus	ISO 527	MPa (kpsi)	11000 (1595)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m^2	9.9
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m^2	60.9
Thermal			
Deflection Temperature	ISO 75-1/-2	°C (°F)	
Mold Temperature 50C, 0.45MPa			247 (477)
Mold Temperature 50C, 1.80MPa			225 (437)
Electrical			
Surface Resistivity	IEC 60093	ohm	2E16
Volume Resistivity	IEC 60093	ohm m	1E9
Electric Strength	IEC 60243-1	kV/mm (V/mil)	
2000 V/s, in oil, 2.0mm			23 (583)
Relative Permittivity	IEC 60250		
1E3 Hz, 2.0mm			4.2
1E6 Hz			4.1
Dissipation Factor	IEC 60250		
1E3 Hz, 2.0mm			0.005
1E6 Hz, 2.0mm			0.014

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc
ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm.
Test temperatures are 23°C unless otherwise stated.
Shrinkage generated per ISO 294-4 based on 60 X 60mm end-gated plagues or ASTM D 955 based on 76 X 127mm (3 X 5in) end-gated plaques

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Property	Test Method	Units	Value
Other			
Density	ISO 1183	kg/m^3 (g/cm^3)	1590 (1.59)
Mold Shrinkage		%	
Flow			0.6
Transverse			0.2
Processing			
Melt Temperature Range		°C (°F)	280-300 (545-580)
Melt Temperature Optimum		°C (°F)	285 (545)
Mold Temperature Range		°C (°F)	120-140 (250-285)
Mold Temperature Optimum		°C (°F)	130 (265)
Drying Time, Dehumidified Dryer		h	4
Drying Temperature		°C (°F)	120 (250)

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