Rynite® 830ER BK503

PET-GF30 Celanese

Product Texts

Rynite® 830ER BK503 is a 30% Glass Reinforced, Polyethylene Terephthalate Developed for Encapsulation Applications

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**0.1**	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**0.6**	%	ISO 294-4, 2577
[C] Ejection temperature	**170**	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**11000**	MPa	ISO 527
[C] Stress at break	**170**	MPa	ISO 527
[C] Strain at break	**2.2**	%	ISO 527
[C] Charpy impact strength, +23°C	**60.9**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**9.9**	kJ/m²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**250**	°C	ISO 11357-1/-3
[C] Temp. of deflection under load, 1.80 MPa	**225**	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**247**	°C	ISO 75-1/-2
[C] Burning Behav. at 1.5 mm nom. thickn.	**HB**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
Yellow Card available	**yes**	-	-
[C] Burning Behav. at thickness h	**HB**	class	IEC 60695-11-10
Thickness tested	**0.8**	mm	-
Yellow Card available	**yes**	-	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Relative permittivity, 100Hz	**4.3**	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	**3.9**	-	IEC 62631-2-1
[C] Dissipation factor, 100Hz	**20**	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**148**	E-4	IEC 62631-2-1
[C] Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	**1E14**	Ohm	IEC 62631-3-2
[C] Electric strength	**36**	kV/mm	IEC 60243-1
[C] Comparative tracking index	**250**	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Density	**1590**	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Processing
Injection Molding

Features
Fatigue Resistance

Delivery form
Pellets, Black

Applications
Automotive, Electrical and Electronical, Encapsulation

Special Characteristics
High impact or impact modified, Heat stabilized or stable to heat

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information

Injection molding
When lower mold temperatures are used, the initial warpage and shrinkage will be lower, but the surface appearance will be poorer and the dimensional change may be greater when parts are subsequently heated.