

Product Texts

Common features of Rynite® thermoplastic polyester include mechanical and physical properties such as excellent balance of strength and stiffness, dimensional stability, creep resistance, heat resistance, high surface gloss and good inherent electrical properties at elevated temperature. It can be processed over a broad temperature range and has excellent flow properties.

Rynite® thermoplastic polyester resins are typically used in demanding applications in the automotive, electrical and electronics, appliances where they successfully replace metals and thermosets, as well as other thermoplastic polymers.

Rynite® 530 BK503 is a 30% glass reinforced modified polyethylene terephthalate resin.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.9	%	ISO 294-4, 2577
^[C] Ejection temperature	170	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	10200	MPa	ISO 527
^[C] Stress at break	150	MPa	ISO 527
^[C] Strain at break	2.1	%	ISO 527
^[C] Charpy impact strength, +23°C	52	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	9.5	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	8.5	kJ/m ²	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] Glass transition temperature, 10°C/min	90	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	221	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	244	°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	-	-
Thickness tested	0.8	mm	-
Yellow Card available	yes	-	-
^[C] Burning rate, FMVSS, Thickness 1 mm	38	mm/min	ISO 3795 (FMVSS 302)

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	4.5	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	4.2	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	310	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	152	E-4	IEC 62631-2-1
^[C] Surface resistivity	>1E15	Ohm	IEC 62631-3-2
^[C] Electric strength	32	kV/mm	IEC 60243-1
^[C] Comparative tracking index	250	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1560	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific, South and Central America

Delivery form

Black