

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® FR533NH BK507 is a 33% glass reinforced, modified polyethylene terephthalate resin using a non-halogenated flame retardant.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.4	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.7	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	12900	MPa	ISO 527
^[C] Stress at break	82	MPa	ISO 527
^[C] Strain at break	0.9	%	ISO 527
^[C] Charpy notched impact strength, +23°C	9	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	249	°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	240	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	18	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	78	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
^[C] Burning Behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.4	mm	-
Yellow Card available	yes	-	-
^[C] Burning Behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	0.8	mm	-
Yellow Card available	yes	-	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
^[C] Electric strength	31	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1600	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Rynite® FR533NH BK507

PET-GF33 FR(40)

Celanese

Processing

Injection Molding

Delivery form

Pellets, Black

Special Characteristics

Flame retardant, Halogen-free, Heat stabilized or stable to heat

Regional Availability

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