

## 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® RE5231 BK533 is a 35% glass/mica reinforced modified polyethylene terephthalate resin with excellent electrical properties.**

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	0.6	%	ISO 294-4, 2577
<sup>[C]</sup> Ejection temperature	170	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	10000	MPa	ISO 527
<sup>[C]</sup> Stress at break	90	MPa	ISO 527
<sup>[C]</sup> Strain at break	2	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	35	kJ/m <sup>2</sup>	ISO 179/1eU
<b>ASTM Data</b>			
Elongation at Break	2	%	ASTM D 638
Flexural Modulus	9584	MPa	ASTM D 790
Flexural Strength	147	MPa	ASTM D 790
Izod Impact notched, 1/8 in	56	J/m	ASTM D 256

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	250	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	216	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	29	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	79	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
<b>ASTM Data</b>			
DTUL @ 264 psi	216	°C	ASTM D 648

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	>1E15	Ohm	IEC 62631-3-2
<sup>[C]</sup> Electric strength	50	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
<sup>[C]</sup> Density	1600	kg/m <sup>3</sup>	ISO 1183
Density	1600	kg/m <sup>3</sup>	ASTM D 792

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets, Black

**Special Characteristics**

Heat stabilized or stable to heat

**Applications**

Automotive, Electrical and Electronical

**Regional Availability**

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