

## 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 NC010 is a 33% glass reinforced, modified polyethylene terephthalate resin using a non-halogenated flame retardant.**

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	<b>0.3</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	<b>0.7</b>	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	<b>13100</b>	MPa	ISO 527
<sup>[C]</sup> Stress at break	<b>85</b>	MPa	ISO 527
<sup>[C]</sup> Strain at break	<b>0.9</b>	%	ISO 527
<sup>[C]</sup> Charpy notched impact strength, +23°C	<b>11</b>	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	<b>249</b>	°C	ISO 11357-1/-3
<sup>[C]</sup> Glass transition temperature, 10°C/min	<b>90</b>	°C	ISO 11357-1/-2
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	<b>240</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	<b>18</b>	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	<b>72</b>	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	<b>V-0</b>	class	IEC 60695-11-10
Thickness tested	<b>1.5</b>	mm	-
Yellow Card available	<b>yes</b>	-	-
<sup>[C]</sup> Burning Behav. at thickness h	<b>V-0</b>	class	IEC 60695-11-10
Thickness tested	<b>0.4</b>	mm	-
Yellow Card available	<b>yes</b>	-	-
<sup>[C]</sup> Burning Behav. 5V at thickness h	<b>5VA</b>	class	IEC 60695-11-20
Thickness tested	<b>0.8</b>	mm	-
Yellow Card available	<b>yes</b>	-	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Volume resistivity	<b>1E13</b>	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Electric strength	<b>34</b>	kV/mm	IEC 60243-1
<sup>[C]</sup> Comparative tracking index	<b>350</b>	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
<sup>[C]</sup> Density	<b>1610</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

## Characteristics

## Rynite® FR533NH NC010

PET-GF33 FR(40)

Celanese

### Processing

Injection Molding

### Delivery form

Pellets, Natural Color

### Special Characteristics

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

### Regional Availability

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