Rynite® FR531 NC010

PET-(GF+MD)45 FR(17) Celanese

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® FR531 NC010 is a 45% glass/mineral reinforced, flame retardant, modified polyethylene terephthalate resin, with improved CTI performance.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**0.1**	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**0.7**	%	ISO 294-4, 2577
[C] Ejection temperature	**170**	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**12600**	MPa	ISO 527
[C] Stress at break	**129**	MPa	ISO 527
[C] Strain at break	**1.6**	%	ISO 527
[C] Charpy impact strength, +23°C	**36**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**10**	kJ/m²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**247**	°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	**218**	°C	ISO 75-1/-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	**0.8**	mm	-
Yellow Card available	**yes**	-	-
[C] Burning Behav. 5V at thickness h	**5VA**	class	IEC 60695-11-20
Thickness tested	**2.0**	mm	-
Yellow Card available	**yes**	-	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Relative permittivity, 100Hz	**4.6**	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	**4.3**	-	IEC 62631-2-1
[C] Dissipation factor, 100Hz	**43.7**	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**135**	E-4	IEC 62631-2-1
[C] Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	**1E13**	Ohm	IEC 62631-3-2
[C] Electric strength	**34**	kV/mm	IEC 60243-1
[C] Comparative tracking index	**325**	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Density	**1830**	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Processing
Injection Molding

Special Characteristics
Flame retardant

Delivery form
Pellets, Natural Color

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