

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® 940 NC010 is a 40% mica/glass reinforced modified polyethylene terephthalate resin with low warpage, high stiffness and strength, and excellent electrical properties.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.2	%	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	12000	MPa	ISO 527
^[C] Stress at break	110	MPa	ISO 527
^[C] Strain at break	2	%	ISO 527
^[C] Charpy impact strength, +23°C	30	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	7	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] Temp. of deflection under load, 1.80 MPa	220	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	240	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	25	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	60	E-6/K	ISO 11359-1/-2
^[C] Burning rate, FMVSS, Thickness 1 mm	22	mm/min	ISO 3795 (FMVSS 302)

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	3.8	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3.7	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	70	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	150	E-4	IEC 62631-2-1
^[C] Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	1E14	Ohm	IEC 62631-3-2
^[C] Electric strength	38	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Water absorption	0.75	%	Sim. to ISO 62
^[C] Humidity absorption	0.1	%	Sim. to ISO 62
^[C] Density	1640	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Rynite® 940 NC010

PET-(GF+P)40

Celanese

Processing

Injection Molding

Features

Low Warpage

Delivery form

Natural Color

Regional Availability

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