

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® HR540SUV BK544 is a 40% Glass Reinforced, Hydrolysis Resistant, UV Stabilized, Polyethylene Terephthalate Developed for Injection Molding.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.8	%	ISO 294-4, 2577
^[C] Ejection temperature	170	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	13200	MPa	ISO 527
^[C] Stress at break	140	MPa	ISO 527
^[C] Strain at break	2	%	ISO 527
^[C] Charpy impact strength, +23°C	53	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	10	kJ/m ²	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] Temp. of deflection under load, 1.80 MPa	210	°C	ISO 75-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
^[C] Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	3.0	mm	-
Yellow Card available	yes	-	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	1.3E8	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	6.5E9	Ohm	IEC 62631-3-2
^[C] Comparative tracking index	250	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1620	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Chemical Resistance

Hydrolytically Stable

Delivery form

Pellets, Black

Regional Availability

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

Special Characteristics

Light stabilized or stable to light, U.V. stabilized or stable to weather

Other text information

Injection molding

When lower mold temperatures are used, the initial warpage and shrinkage will be lower, but the surface appearance will be poorer and the dimensional change may be greater when parts are subsequently heated.