

Product Texts

Common features of Crastin® thermoplastic polyester resin include mechanical and physical properties such as stiffness and toughness, heat resistance, friction and wear resistance, excellent surface finishes and good colourability. Crastin® thermoplastic polyester resin has excellent electrical insulation characteristics and high arc-resistant grades are available. Many flame retardant grades have UL recognition (class V-0). Crastin® thermoplastic polyester resin typically has high chemical and heat ageing resistance.

The good melt stability of Crastin® thermoplastic polyester resin normally enables the recycling of properly handled production waste.

If recycling is not possible, we recommend, as the preferred option, incineration with energy recovery (-24 kJ/g of base polymer) in appropriately equipped installations. For disposal, local regulations have to be observed.

Crastin® thermoplastic polyester resin typically is used in demanding applications in the electronics, electrical, automotive, mechanical engineering, chemical, domestic appliances and sporting goods industry.

Crastin® HR5330HFS OR516 is a 30% glass reinforced PBT with high flow, moderately toughened, hydrolysis resistant (HR) polybutylene terephthalate for injection molding.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.2	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.9	%	ISO 294-4, 2577
^[C] Ejection temperature	170	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	8500	MPa	ISO 527
^[C] Stress at break	120	MPa	ISO 527
^[C] Strain at break	3.5	%	ISO 527
^[C] Charpy impact strength, +23°C	70	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	60	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	11	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	225	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	65	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	205	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	22	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	190	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
Yellow Card available	yes	-	-
^[C] Burning rate, FMVSS, Thickness 1 mm	34	mm/min	ISO 3795 (FMVSS 302)

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	>1E15	Ohm	IEC 62631-3-2
^[C] Electric strength	36	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Water absorption	0.35	%	Sim. to ISO 62
^[C] Humidity absorption	0.15	%	Sim. to ISO 62
^[C] Density	1530	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Special Characteristics

High impact or impact modified

Delivery form

Pellets

Chemical Resistance

Hydrolytically Stable

Additives

Release agent

Regional Availability

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