

**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® S650FR is an unreinforced, flame retardant polybutylene terephthalate for injection molding.**

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	1.8	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	1.6	%	ISO 294-4, 2577
<sup>[C]</sup> Ejection temperature	170	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	3000	MPa	ISO 527
<sup>[C]</sup> Yield stress	65	MPa	ISO 527
<sup>[C]</sup> Yield strain	4.6	%	ISO 527
<sup>[C]</sup> Nominal strain at break	7.2	%	ISO 527
<sup>[C]</sup> Tensile creep modulus, 1h	2500	MPa	ISO 899-1
<sup>[C]</sup> Tensile creep modulus, 1000h	1800	MPa	ISO 899-1
<sup>[C]</sup> Charpy impact strength, +23°C	70	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	65	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	4	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	3.5	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	221	°C	ISO 11357-1/-3
<sup>[C]</sup> Glass transition temperature, 10°C/min	55	°C	ISO 11357-1/-2
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	65	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	160	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	175	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	120	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	120	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
<sup>[C]</sup> Burning Behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
Yellow Card available	yes	-	-
<sup>[C]</sup> Oxygen index	30	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Relative permittivity, 100Hz	3.4	-	IEC 62631-2-1
<sup>[C]</sup> Relative permittivity, 1MHz	3.5	-	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 100Hz	7.1	E-4	IEC 62631-2-1

**Crastin® S650FR NC010**

PBT

Celanese

<sup>[C]</sup> Dissipation factor, 1MHz	<b>180</b>	E-4	IEC 62631-2-1
<sup>[C]</sup> Volume resistivity	<b>&gt;1E13</b>	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	<b>1E15</b>	Ohm	IEC 62631-3-2
<sup>[C]</sup> Electric strength	<b>25</b>	kV/mm	IEC 60243-1
<sup>[C]</sup> Comparative tracking index	<b>225</b>	-	IEC 60112

[C]: CAMPUS

<b>Other properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<sup>[C]</sup> Water absorption	<b>0.39</b>	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	<b>0.15</b>	%	Sim. to ISO 62
<sup>[C]</sup> Density	<b>1460</b>	kg/m <sup>3</sup>	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