

Product Texts

ISO 1043: PBT-HIFR(17)

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® ST830FRUV NC010 is an unreinforced, Super Tough, flame retardant polybutylene terephthalate resin for injection molding. It contains a UV light stabilizer and is recognized as UL94V-0 at 0.85mm (0.033in).

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	2.0	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.6	%	ISO 294-4, 2577
^[C] Density of melt	1170	kg/m ³	-
^[C] Ejection temperature	170	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	2200	MPa	ISO 527
^[C] Yield stress	41	MPa	ISO 527
^[C] Yield strain	9	%	ISO 527
^[C] Nominal strain at break	45	%	ISO 527
^[C] Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	350	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	30	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	10	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	55	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	55	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	125	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	190	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 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] Oxygen index	27	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	3.5	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3.4	-	IEC 62631-2-1

Crastin® ST830FRUV NC010

PBT-I FR(17)

Celanese

^[C] Dissipation factor, 100Hz	10.9	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	240	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	36	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1370	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Delivery form

Natural Color

Special Characteristics

Flame retardant, High impact or impact modified, Light stabilized or stable to light, U.V. stabilized or stable to weather

Regional Availability

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