

Product Texts

Common features of 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® LW9030FR NC010 is a 30% glass fiber reinforced, flame retardant polybutylene terephthalate blend for injection molding. It has improved surface aesthetics, excellent dimensional stability and low warpage characteristics.

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] Density of melt	1420	kg/m ³	-
^[C] Thermal conductivity of melt	0.26	W/(m K)	-
^[C] Spec. heat capacity of melt	1850	J/(kg K)	-
^[C] Ejection temperature	170	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	10500	MPa	ISO 527
^[C] Stress at break	125	MPa	ISO 527
^[C] Strain at break	1.8	%	ISO 527
^[C] Tensile creep modulus, 1h	9500	MPa	ISO 899-1
^[C] Tensile creep modulus, 1000h	7400	MPa	ISO 899-1
^[C] Charpy impact strength, +23°C	40	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	40	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	8	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	8	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	224	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	120	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	190	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	220	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	150	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	25	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	80	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] Burning Behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	3.0	mm	-
Yellow Card available	yes	-	-
^[C] Oxygen index	27	%	ISO 4589-1/-2

[C]: CAMPUS

Crastin® LW9030FR NC010

(PBT+ASA)-GF30 FR(17)

Celanese

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	3.9	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3.6	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	25.5	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	28	kV/mm	IEC 60243-1
^[C] Comparative tracking index	400	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Water absorption	0.72	%	Sim. to ISO 62
^[C] Humidity absorption	0.21	%	Sim. to ISO 62
^[C] Density	1570	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Delivery form

Pellets, Natural Color

Additives

Release agent

Special Characteristics

Flame retardant

Features

Low Warpage

Regional Availability

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