Crastin® LW9020FR BK851

(PBT+ASA)-GF20 FR(17) Celanese

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® LW9020FR BK851 is a 20% 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	**0.4**	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**0.8**	%	ISO 294-4, 2577
[C] Density of melt	**1360**	kg/m³	-
[C] Ejection temperature	**170**	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**7800**	MPa	ISO 527
[C] Stress at break	**100**	MPa	ISO 527
[C] Strain at break	**2**	%	ISO 527
[C] Charpy impact strength, +23°C	**35**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**35**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**6.5**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**6.5**	kJ/m²	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	**120**	°C	ISO 11357-1/-2
[C] Temp. of deflection under load, 1.80 MPa	**170**	°C	ISO 75-1/-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	**3.0**	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	**4.3**	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	**4**	-	IEC 62631-2-1
[C] Dissipation factor, 100Hz	**54**	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**196**	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

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[C] Electric strength	**31**	kV/mm	IEC 60243-1
[C] Comparative tracking index	**250**	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Water absorption	**0.78**	%	Sim. to ISO 62
[C] Humidity absorption	**0.23**	%	Sim. to ISO 62
[C] Density	**1500**	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Processing
Injection Molding

Delivery form
Black

Special Characteristics
Flame retardant

Features
Low Warpage

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

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