Crastin® BM6450XD BK560

PBT — 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® BM6450XD BK560 is an unreinforced supertough polybutylene terephthalate resin with very high viscosity for extrusion and blow molding applications.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**1.5**	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**1.7**	%	ISO 294-4, 2577
[C] Density of melt	**1030**	kg/m³	-
[C] Thermal conductivity of melt	**0.15**	W/(m K)	-
[C] Spec. heat capacity of melt	**2210**	J/(kg K)	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**1600**	MPa	ISO 527
[C] Yield stress	**34**	MPa	ISO 527
[C] Yield strain	**9**	%	ISO 527
[C] Nominal strain at break	**>50**	%	ISO 527
[C] Charpy impact strength, +23°C	**N**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**N**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**120**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**10**	kJ/m²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**220**	°C	ISO 11357-1/-3
[C] Temp. of deflection under load, 1.80 MPa	**50**	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**80**	°C	ISO 75-1/-2
[C] Burning rate, FMVSS, Thickness 1 mm	**40**	mm/min	ISO 3795 (FMVSS 302)

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Dissipation factor, 100Hz	**70**	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**200**	E-4	IEC 62631-2-1
[C] Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	**>1E15**	Ohm	IEC 62631-3-2
[C] Electric strength	**31**	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Density	**1210**	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Processing
Film Extrusion, Profile Extrusion, Sheet Extrusion, Other Extrusion, Coating, Blow Molding, Casting

Delivery form
Pellets, Black

Additives
Release agent

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