

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® S600F20 BK851 is an unreinforced, lubricated, medium viscosity polybutylene terephthalate resin for injection molding.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|--|-------|------------------------|-----------------|
| ISO Data | | | |
| ^[C] Melt volume-flow rate, MVR | 13 | cm ³ /10min | ISO 1133 |
| Temperature | 250 | °C | - |
| Load | 2.16 | kg | - |
| ^[C] Molding shrinkage, parallel | 1.7 | % | ISO 294-4, 2577 |
| ^[C] Molding shrinkage, normal | 1.6 | % | ISO 294-4, 2577 |
| ^[C] Density of melt | 1110 | kg/m ³ | - |
| ^[C] Ejection temperature | 170 | °C | - |

[C]: CAMPUS

| Mechanical properties | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| ^[C] Tensile Modulus | 2500 | MPa | ISO 527 |
| ^[C] Yield stress | 58 | MPa | ISO 527 |
| ^[C] Yield strain | 5 | % | ISO 527 |
| ^[C] Nominal strain at break | 40 | % | ISO 527 |
| ^[C] Charpy notched impact strength, +23°C | 5 | 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 | 55 | °C | ISO 11357-1/-2 |
| ^[C] Temp. of deflection under load, 1.80 MPa | 50 | °C | ISO 75-1/-2 |
| ^[C] Temp. of deflection under load, 0.45 MPa | 135 | °C | ISO 75-1/-2 |
| ^[C] Burning Behav. at 1.5 mm nom. thickn. | HB | class | IEC 60695-11-10 |
| Thickness tested | 1.5 | mm | - |
| Yellow Card available | yes | - | - |
| ^[C] Burning Behav. at thickness h | HB | class | IEC 60695-11-10 |
| Thickness tested | 3.0 | mm | - |
| Yellow Card available | yes | - | - |
| ^[C] Burning rate, FMVSS, Thickness 1 mm | 24 | mm/min | ISO 3795 (FMVSS 302) |

[C]: CAMPUS

| Electrical properties | Value | Unit | Test Standard |
|---|-------|-------|---------------|
| ISO Data | | | |
| ^[C] Relative permittivity, 100Hz | 3.5 | - | IEC 62631-2-1 |
| ^[C] Relative permittivity, 1MHz | 3.3 | - | IEC 62631-2-1 |
| ^[C] Dissipation factor, 100Hz | 4 | E-4 | IEC 62631-2-1 |
| ^[C] Dissipation factor, 1MHz | 182 | 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 |

Crastin® S600F20 BK851

PBT

Celanese

| | | | |
|--------------------------------|------------|-------|-------------|
| [C] Electric strength | 40 | kV/mm | IEC 60243-1 |
| [C] Comparative tracking index | 375 | - | IEC 60112 |

[C]: CAMPUS

| Other properties | Value | Unit | Test Standard |
|-------------------------|--------------|-------------------|----------------------|
| [C] Density | 1310 | kg/m ³ | ISO 1183 |

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Additives

Lubricants

Delivery form

Black

Regional Availability

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