

## Product Texts

Crastin® FGS600F10 NC010 is an unreinforced lubricated, high viscosity polybutylene terephthalate resin for extrusion and injection molding. It has been developed for consideration into applications such as parts for the food industry.

## FOOD CONTACT

This product is manufactured according to Good Manufacturing Practice (GMP) principles and generally accepted in food contact applications in Europe and the USA when meeting applicable use conditions. For details, individual compliance statements are available from our representative.

| Processing/Physical Characteristics         | Value | Unit              | Test Standard   |
|---|-------|-------------------|-----------------|
| <b>ISO Data</b>                             |       |                   |                 |
| <sup>[C]</sup> Molding shrinkage, parallel  | 1.7   | %                 | ISO 294-4, 2577 |
| <sup>[C]</sup> Molding shrinkage, normal    | 1.7   | %                 | ISO 294-4, 2577 |
| <sup>[C]</sup> Density of melt              | 1110  | kg/m <sup>3</sup> | -               |
| <sup>[C]</sup> Thermal conductivity of melt | 0.21  | W/(m K)           | -               |
| <sup>[C]</sup> Spec. heat capacity of melt  | 2100  | J/(kg K)          | -               |
| <sup>[C]</sup> Ejection temperature         | 170   | °C                | -               |

[C]: CAMPUS

| Mechanical properties                                | Value | Unit              | Test Standard |
|--|-------|-------------------|---------------|
| <b>ISO Data</b>                                      |       |                   |               |
| <sup>[C]</sup> Tensile Modulus                       | 2600  | MPa               | ISO 527       |
| <sup>[C]</sup> Yield stress                          | 57    | MPa               | ISO 527       |
| <sup>[C]</sup> Yield strain                          | 4     | %                 | ISO 527       |
| <sup>[C]</sup> Nominal strain at break               | >50   | %                 | ISO 527       |
| <sup>[C]</sup> Tensile creep modulus, 1h             | 2600  | MPa               | ISO 899-1     |
| <sup>[C]</sup> Tensile creep modulus, 1000h          | 1800  | MPa               | ISO 899-1     |
| <sup>[C]</sup> Charpy impact strength, +23°C         | N     | kJ/m <sup>2</sup> | ISO 179/1eU   |
| <sup>[C]</sup> Charpy impact strength, -30°C         | N     | kJ/m <sup>2</sup> | ISO 179/1eU   |
| <sup>[C]</sup> Charpy notched impact strength, +23°C | 5     | kJ/m <sup>2</sup> | ISO 179/1eA   |
| <sup>[C]</sup> Charpy notched impact strength, -30°C | 4     | kJ/m <sup>2</sup> | ISO 179/1eA   |

[C]: CAMPUS

| Thermal properties   | Value | Unit  | Test Standard  |
|--|-------|-------|----------------|
| <b>ISO Data</b>  |       |       |                |
| <sup>[C]</sup> Melting temperature, 10°C/min               | 223   | °C    | ISO 11357-1/-3 |
| <sup>[C]</sup> Glass transition temperature, 10°C/min      | 55    | °C    | ISO 11357-1/-2 |
| <sup>[C]</sup> Temp. of deflection under load, 1.80 MPa    | 50    | °C    | ISO 75-1/-2    |
| <sup>[C]</sup> Temp. of deflection under load, 0.45 MPa    | 115   | °C    | ISO 75-1/-2    |
| <sup>[C]</sup> Vicat softening temperature, B              | 175   | °C    | ISO 306        |
| <sup>[C]</sup> Coeff. of linear therm. expansion, parallel | 110   | E-6/K | ISO 11359-1/-2 |
| <sup>[C]</sup> Coeff. of linear therm. expansion, normal   | 120   | E-6/K | ISO 11359-1/-2 |

[C]: CAMPUS

| Other properties                   | Value | Unit              | Test Standard  |
|------------------------------------|-------|-------------------|----------------|
| <sup>[C]</sup> Water absorption    | 0.5   | %                 | Sim. to ISO 62 |
| <sup>[C]</sup> Humidity absorption | 0.2   | %                 | Sim. to ISO 62 |
| <sup>[C]</sup> Density             | 1300  | kg/m <sup>3</sup> | ISO 1183       |

[C]: CAMPUS

## Characteristics

## Processing

Injection Molding, Profile Extrusion, Other Extrusion, Coating

## Certifications

Food contact

**Delivery form**

Pellets, Natural Color

**Regional Availability**

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

**Additives**

Lubricants, Release agent