

Crastin® HR5330HFS BK591

THERMOPLASTIC POLYESTER RESIN

Crastin® HR5330HFS BK591 is a 30% Glass Reinforced Polybutylene Terephthalate with high flow, moderately toughened, and hydrolysis resistant (HR) for injection molding. Crastin® HR5330HFS BK591 can also be laser marked at 355, 532 and 1064 nm.

General Information

Resin Identification ISO 1043 PBT-IGF30
 Density ISO 1183 1500 kg/m³

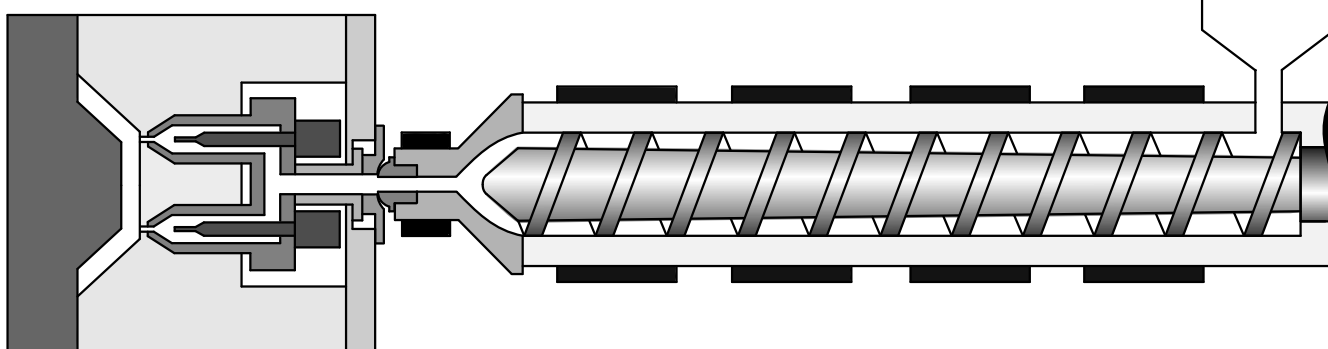
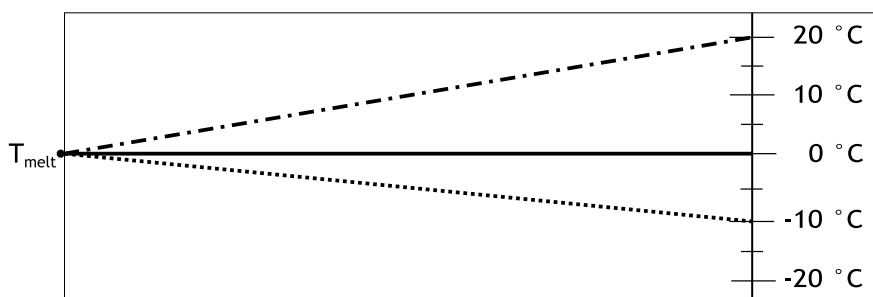
Drying

Drying Recommended yes
 Drying Temperature 120 °C
 Drying Time* 2 - 4 h
 Processing Moisture Content ≤0.04 %

Temperature settings

Melt Temperature Optimum 250 °C
 Min. melt temperature*** 240 °C
 Max. melt temperature 260 °C
 Mold Temperature Optimum 80 °C
 Min. mold temperature 30 °C
 Max. mold temperature 130 °C

3 D (< 3 min) - - - - -
 2 D (3-5 min) ————
 1 D (> 5 min) ······



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Recommended general settings

Hold pressure range	≥60 MPa
Back pressure	As low as possible

Special precautions

During molding, use proper protective equipment and adequate ventilation. Avoid fumes and limit the residence time and temperature of the resin in the machine.

$$\text{Residence time} = \frac{8 * \text{screw } \varnothing \text{ [mm]} * \text{cycle time [s]}}{60 * \text{dosing stroke [mm]}}$$

Hot runner residence time not included in calculation

Links for further information

[Trouble Shooting Guide](#)

For further information e.g. on Shrinkage, Hot runner systems, Venting, Gating, Drying and moisture measurement, Re grind, Purging, please refer to the detailed [Molding Guide](#).

Footnotes:

- * Improper storage may lead to longer drying times
- *** Using melt temperature lower than recommended could create unmelt, leading to weak parts

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