

Crastin® ST820 NC010

THERMOPLASTIC POLYESTER RESIN

Crastin® ST820 NC010 is an unreinforced, Super Tough polybutylene terephthalate resin for injection molding.

General Information

Resin Identification ISO 1043
Density ISO 1183

PBT-HI
1220 kg/m³

Drying

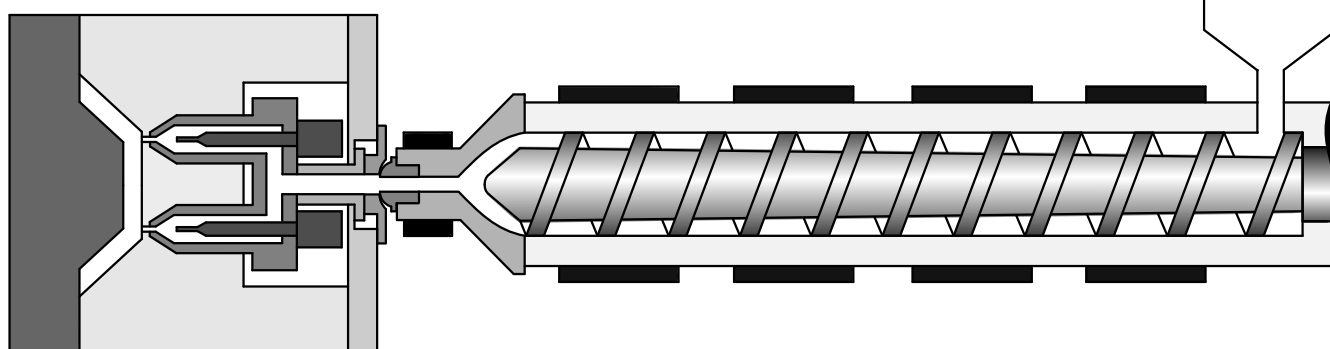
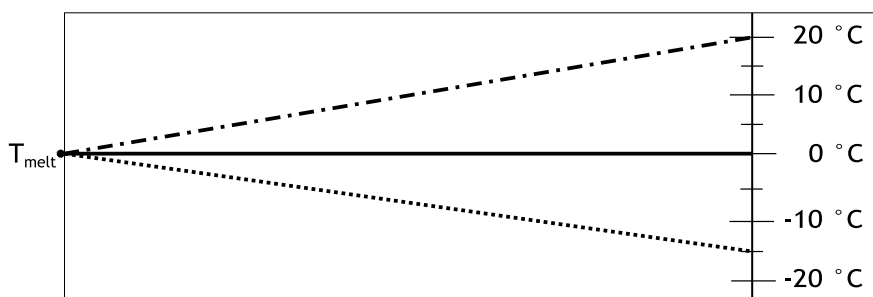
Drying Recommended
Drying Temperature
Drying Time*
Processing Moisture Content

yes
120 °C
2 - 4 h
≤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.

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

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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