INJECTION DATASHEET

Crastin® FR684NH1 NC010

THERMOPLASTIC POLYESTER RESIN

Crastin® FR684NH1 is a 25% Glass Reinforced, Flame Retardant, Non-Halogenated, Polybutylene Terephthalate

General Information

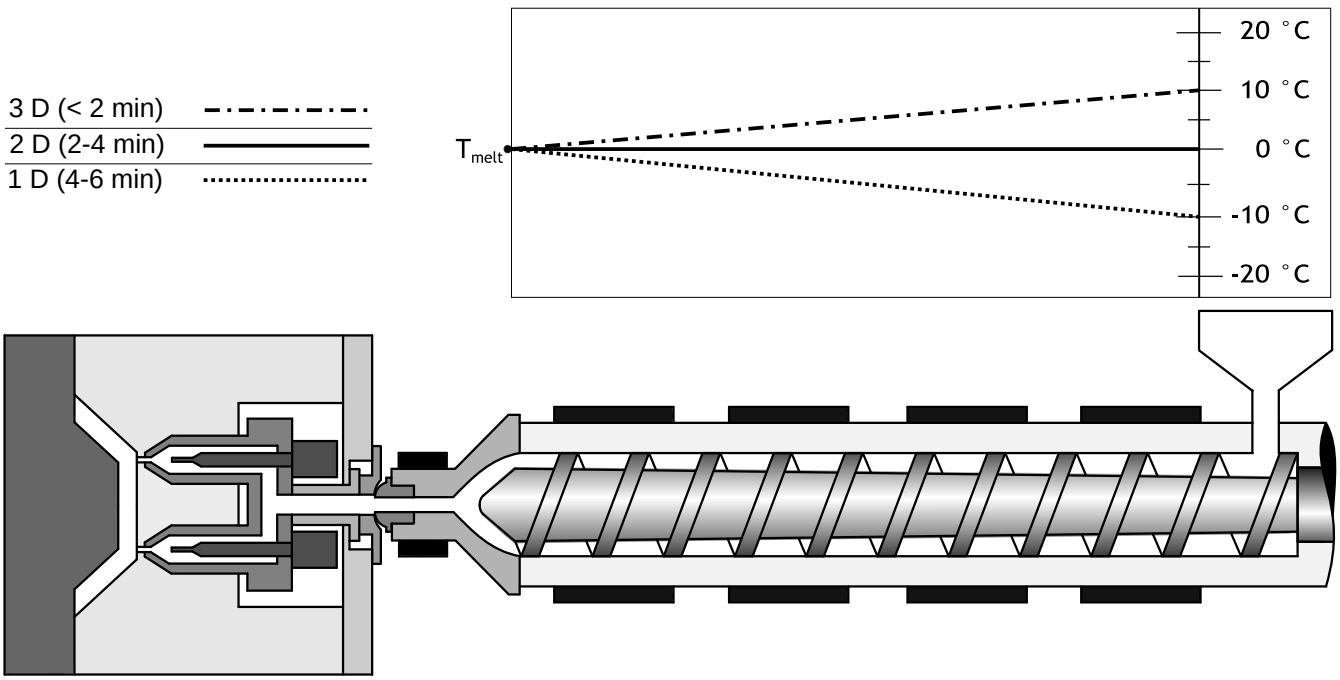
Resin Identification ISO 1043	PBT-GF25FR(40)
Density ISO 1183	1520 kg/m³

Drying

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

Temperature settings

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



Revised: 2022-11-26 Source: Celanese Materials Database

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Recommended general settings

Residence time - optimum range	2 - 4 min
Residence time - maximum	6 min
Hold pressure range	≥60 MPa
Hold Pressure Time	h^2+2 s
(h is the max. wall thickness of the part in mm)	
Back pressure	As low as possible

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

Hot runner residence time not included in calculation

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.

Links for further information

Trouble Shooting Guide
For further information e.g. on Shrinkage, Hot runner systems, Venting, Gating, Drying and moisture measurement, Regrind, 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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