

# 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  
 Density ISO 1183

PBT-GF25FR(40)  
 1520 kg/m<sup>3</sup>

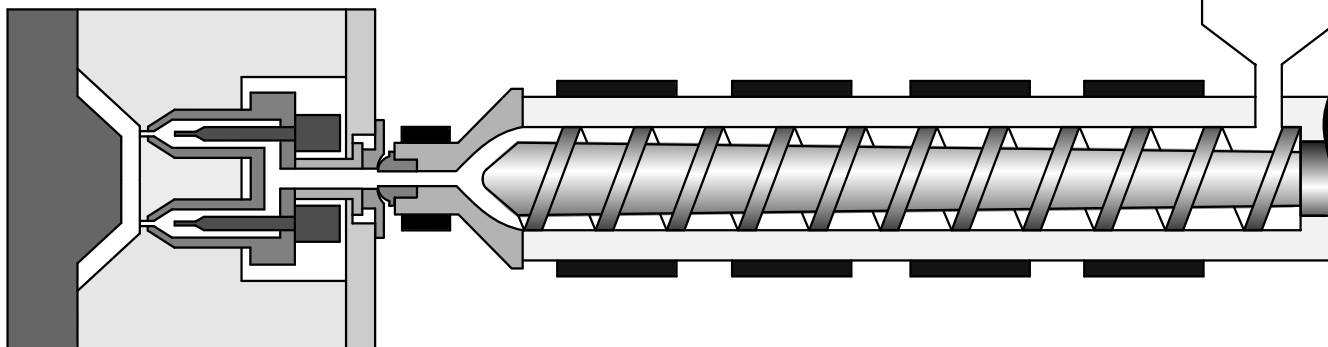
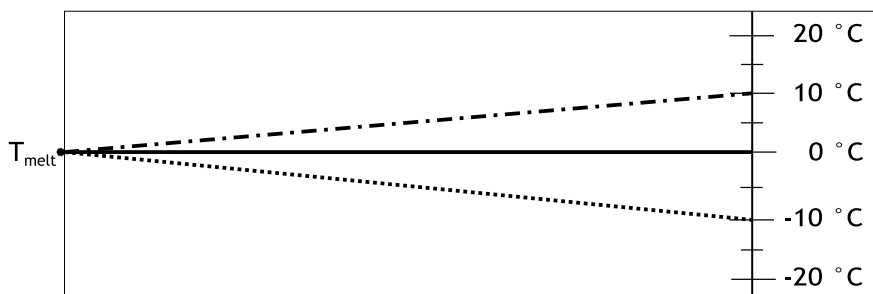
### Drying

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

3 D (< 2 min) - - - - -  
 2 D (2-4 min) ————  
 1 D (4-6 min) . . . . .



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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 <sup>2</sup> +2 s
(h is the max. wall thickness of the part in mm)	
Back pressure	As low as possible

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

*Hot runner residence time not included in calculation*

### 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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