INJECTION DATASHEET

Zytel® HTNFR52G30NH NC010

HIGH PERFORMANCE POLYAMIDE RESIN

Zytel® HTNFR52G30NH NC010 is a 30% glass reinforced, flame retardant high performance polyamide resin. It is also a PPA resin and it uses a non-halogenated flame retardant.

General Information

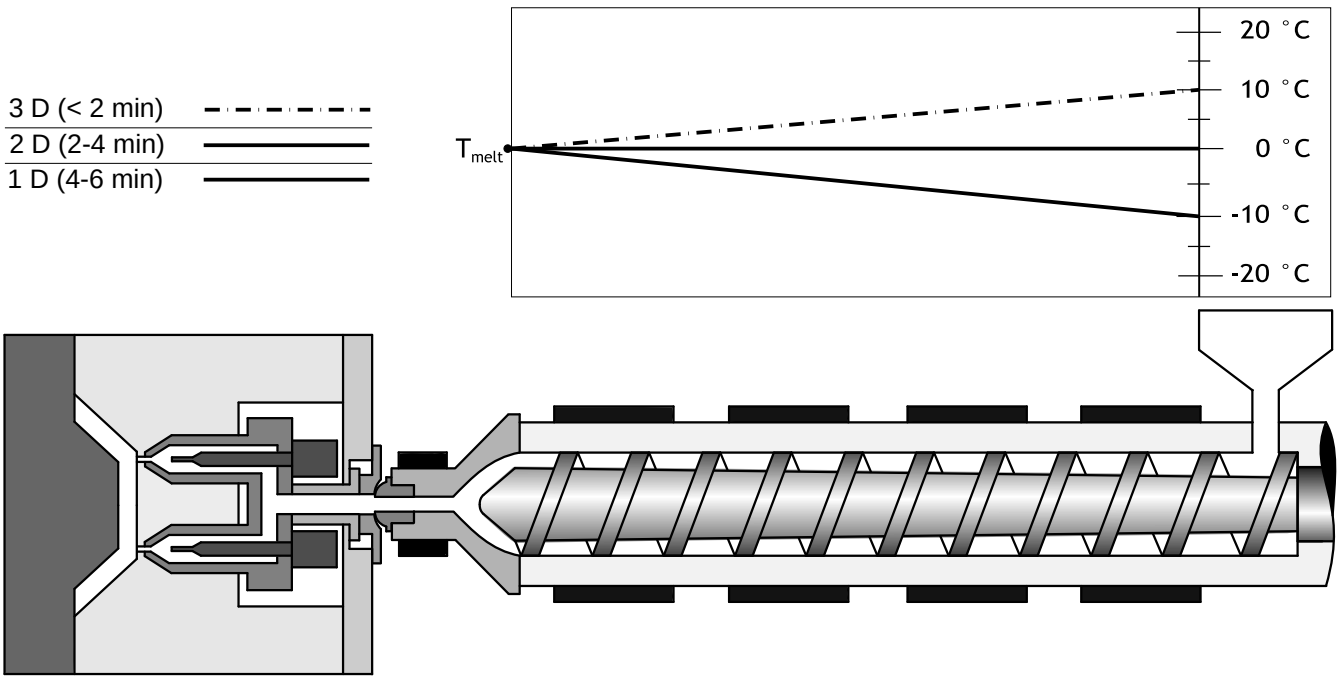
Resin Identification ISO 1043	PA6T/66-GF30FR(40)
Density ISO 1183	1440/- kg/m³

Drying

Drying Recommended	yes
Drying Temperature**	100 °C
Drying Time*	6 - 8 h
Type of Dryer	Dehumidified dryer
Recommended Dew Point	-40 °C
Processing Moisture Content - Optimum**	0.05 %
Processing Moisture Content	≤0.1 %

Temperature settings

Min. melt temperature***	320 °C
Max. melt temperature	325 °C
Min. mould temperature	90 °C
Max. mould temperature	130 °C



INJECTION DATASHEET

Zytel® HTNFR52G30NH NC010

HIGH PERFORMANCE POLYAMIDE RESIN

Recommended Temperature profile settings

Hopper	≥80 °C
Barrel settings	Dependent on stroke (residence time)
Nozzle	T_{melt}-10 °C
Hot Runner	T_{melt}

Recommended general settings

Residence time - optimum range	2 - 4 min
Residence time - maximum	6 min
Hold Pressure Time (h is the max. wall thickness of the part in mm)	h^2+2 s
Stroke vs screw diameter (D)	1-2D

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

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
** Excessive drying may lead to viscosity increase during processing. A discoloration of natural colored materials is possible.
*** Using melt temperature lower than recommended could create unmelt, leading to weak parts