INJECTION DATASHEET

Zytel® 70G30HSLR ECO-R 312 BK099

NYLON RESIN

Zytel® 70G30HSLR ECO-R BK099 is a 30% glass fibre reinforced, heat stabilised, hydrolysis resistant polyamide 66 resin for injection molding. It has same performance and processing properties as Zytel® 70G30HSLR BK099.

General Information

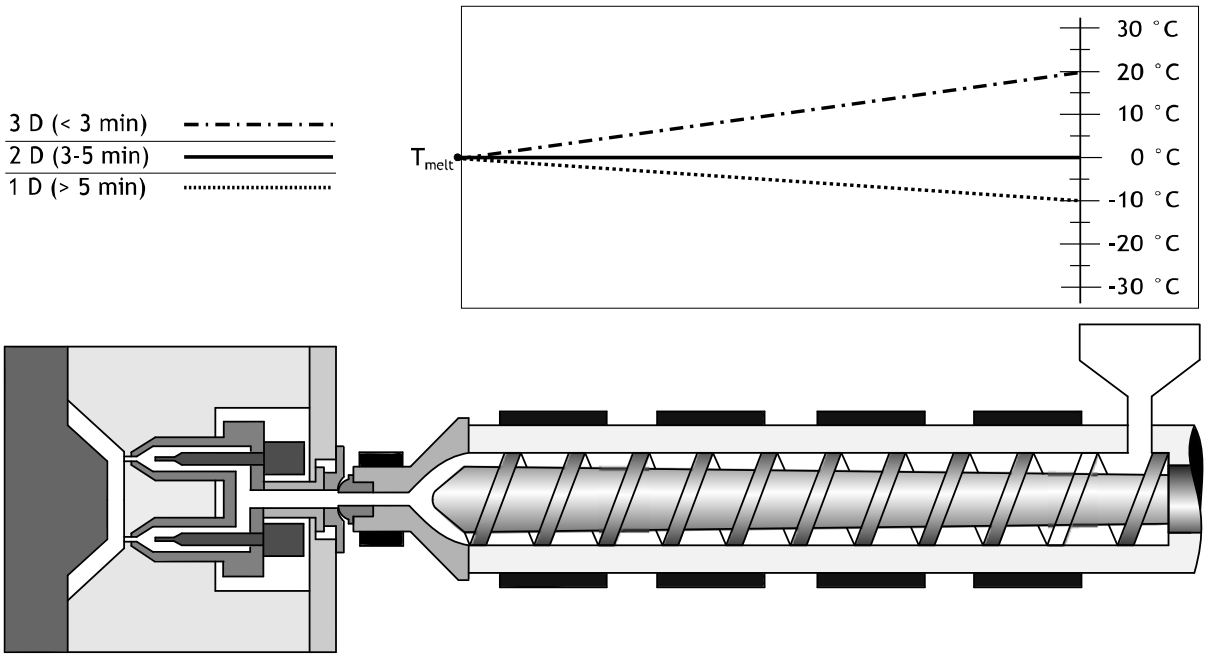
Density ISO 1183	1370/- kg/m³

Drying

Drying Recommended	yes
Drying Temperature**	80 °C
Drying Time*	2 - 4 h
Processing Moisture Content - Optimum**	0.1 %
Processing Moisture Content	≤0.2 %

Temperature settings

Melt Temperature Optimum	295 °C
Min. melt temperature***	285 °C
Max. melt temperature	305 °C
Mold Temperature Optimum	100 °C
Min. mould temperature	70 °C
Max. mould temperature	120 °C



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Recommended general settings

Residence time - optimum range	3 - 5 min
Residence time - maximum	10 min
Hold pressure range	50 - 100 MPa
Hold Pressure Time (h is the max. wall thickness of the part in mm)	h^2+2 s
Max. screw tangential speed	≤0.2 m/s

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

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

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