INJECTION DATASHEET

ZYTEL® 70G50 ECO-R 311 BLK1

NYLON RESIN

Zytel® 70G50 ECO-R 311 BLK1 incorporates 30% of post-industrial recycled content by weight in the finished product. It is a 50% Glass Reinforced, Heat Stabilized, Polyamide 66 designed for Automotive industry.

General Information

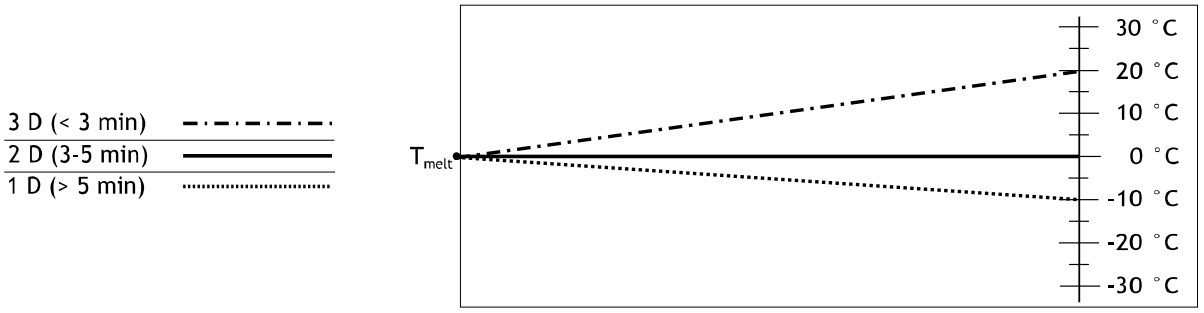
Resin Identification ISO 1043	PA66-GF50(R30)
Density ISO 1183	1590/- kg/m³

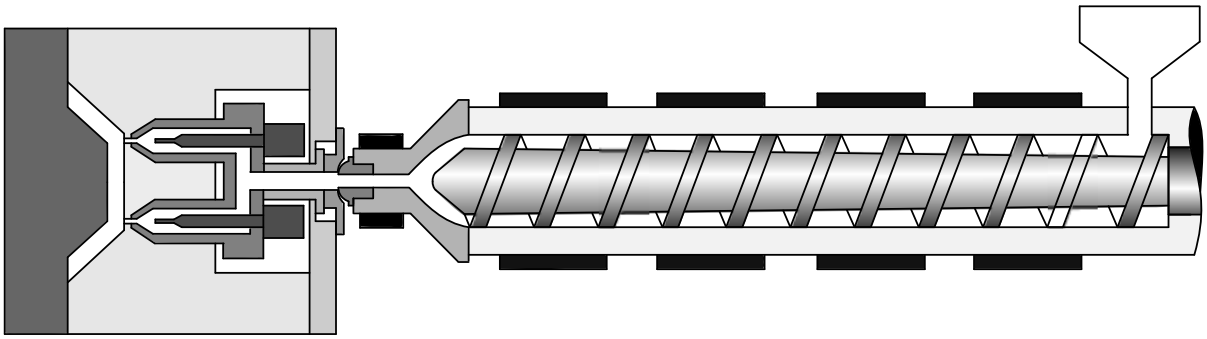
Drying

Drying Recommended	yes
Drying Temperature**	80 °C
Drying Time*	2 - 4 h
Processing Moisture Content - Optimum**	0.1 %
Processing Moisture Content	≤0.15 %

Temperature settings

Melt Temperature Optimum	285 °C
Min. melt temperature***	275 °C
Max. melt temperature	295 °C
Mold Temperature Optimum	100 °C
Min. mould temperature	70 °C
Max. mould temperature	120 °C





Revised: 2024-06-24 Source: Celanese

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Recommended general settings

Residence time - optimum range	3 - 5 min
Residence time - maximum	10 min
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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