

INJECTION DATASHEET

ZYTEL® 73G45 ECO-R 311 BLK1 (PRELIMINARY) NYLON RESIN

Zytel® 73G45 ECO-R 311 BLK1 incorporates 30% of post-industrial recycled content by weight in the finished product. It is a 45% Glass Reinforced general purpose Polyamide grade.

General Information

Resin Identification ISO 1043
Density ISO 1183

PA6-GF45(R30)
1510/- kg/m³

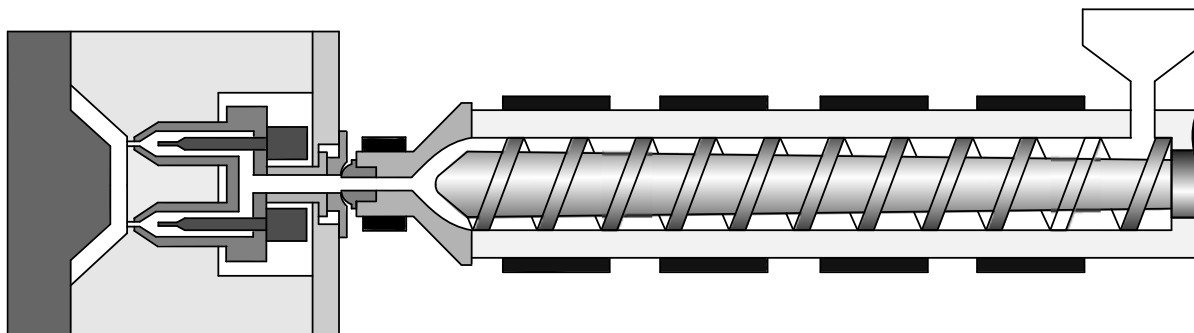
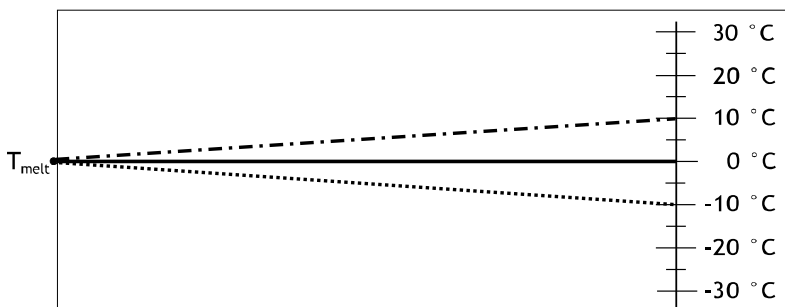
Drying

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 250 °C
Min. melt temperature*** 235 °C
Max. melt temperature 280 °C
Mold Temperature Optimum 80 °C
Min. mould temperature 60 °C
Max. mould temperature 120 °C

3 D (< 3 min) - - - - -
2 D (3-5 min) = = = = =
1 D (> 5 min)



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Recommended general settings

Residence time - optimum range	3 - 7 min
Residence time - maximum	10 min
Max. screw tangential speed	≤0.2 m/s

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

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
- ** 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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The above data are preliminary and are subject to change as additional data are developed on subsequent lots.

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