

# Zytel® HTN52G35EF BK420

## HIGH PERFORMANCE POLYAMIDE RESIN

Zytel® HTN52G35EF BK420 is a 35% glass reinforced, heat stabilised, lubricated high performance polyamide resin that can be moulded in water heated molds, developed for electrical and electronics applications. It is also a PPA resin.

### General Information

Resin Identification ISO 1043

Density ISO 1183

PA6T/66-GF35

1450/- kg/m<sup>3</sup>

### Drying

Drying Recommended

yes

Drying Temperature\*\*

100 °C

Drying Time\*

6 - 8 h

Processing Moisture Content - Optimum\*\*

0.05 %

Processing Moisture Content

≤0.1 %

### Temperature settings

Melt Temperature Optimum Internal

325 °C

Min. melt temperature\*\*\*

320 °C

Max. melt temperature

330 °C

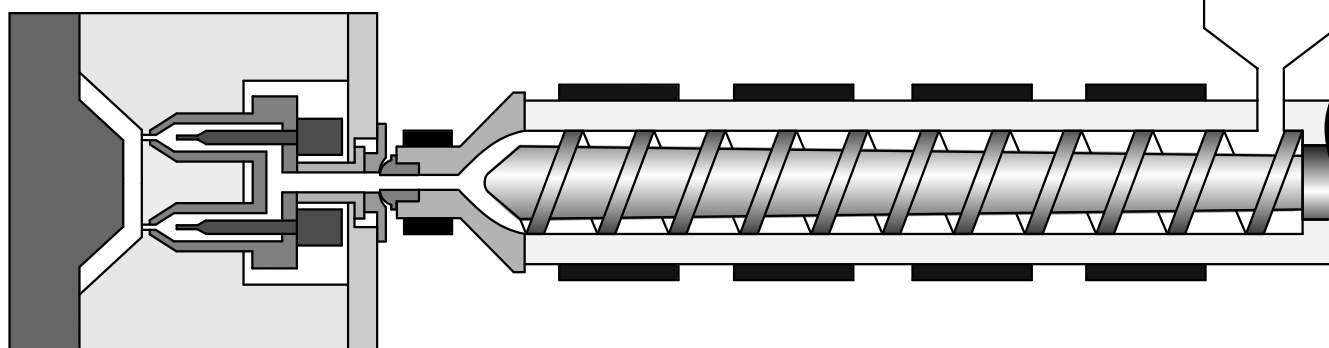
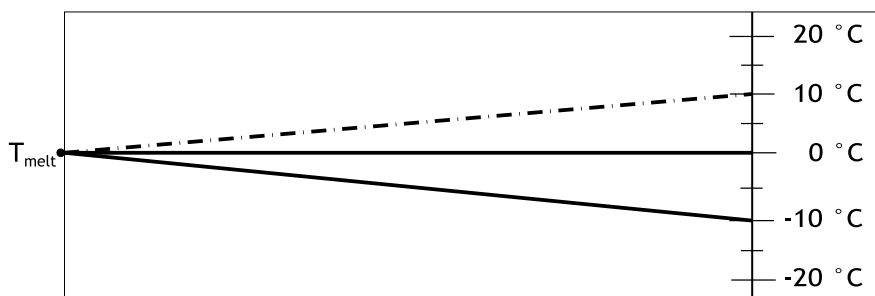
Min. mould temperature

90 °C

Max. mould temperature

110 °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 - 5 min           |
| Residence time - maximum                         | 10 min              |
| Hold Pressure Time                               | $h^2 + 2 \text{ s}$ |
| (h is the max. wall thickness of the part in mm) |                     |

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

*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