

## PROCESS DATA FOR INJECTION MOULDING PA66 GLASS FIBER REINFORCED

### DESCRIPTION

Polyamide 66 resin glass fiber reinforced.

### PREDRYING

PA resins are hygroscopic: they absorb moisture from the air relatively quickly. The maximum moisture level absorbed is normally 3.5% (saturated in air at 23 °C, 50% R.H.).

It is recommended that resin moisture content is less to 0.15% when processing PA.

The material must be pre-dried approximately 4h 80°C. Drying PA above 80°C for longer than 2 hours will cause yellowing of the granules due to oxidation. If the molding compound contains too much moisture, you will encounter processing problems, bubble formation, and poor moldings properties.

### PROCESSING CONDITIONS<sup>1</sup>

Following parameters should be used as guideline:

<i>Mold temperature</i>	60 – 100	°C	
<i>Feed temperature</i>	20 – 50	°C	
<i>Rear zone<sup>2</sup></i>	270 - 280	°C	
<i>Middle zone<sup>2</sup></i>	280 – 290	°C	
<i>Front zone<sup>2</sup></i>	290 – 295	°C	
<i>Nozzle zone<sup>2</sup></i>	290 – 300	°C	
<i>Back pressure</i>	5 - 25	bar	Preferably low
<i>Holding pressure</i>	Due to the crystalline character of nylons, the highest possible holding pressure is applied in order to decrease the mould shrinkage.		
<i>Screw speed</i>	60 - 100	rpm	
<i>Injection speed</i>	Moderate to fast		

### STORAGE

Store in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.

### SAFETY

The product is not classified as dangerous. For further information refer to the downstream user information sheet of non-hazardous substances and mixtures in accordance with Article 32 of the EEC Regulation 1907/2006 (Reach)<sup>3</sup>.

<sup>1</sup> These conditions will depend on the type of equipment used

<sup>2</sup> The heat profile depends on many conditions: barrel size, screw design, rpm, residence time, etc.

<sup>3</sup> <http://www.mepol.com/it/material-safety-data-sheets>