

# Processing Guidelines

## Injection Moulding

## ROMILOY PC/PBT

### General

ROMILOY PC/PBT can be processed using all techniques convenient for thermoplastic resins. In particular it can be moulded without difficulty on usual injection moulding machines.

Based on its good processing properties and due to the thermal stability of the product, the material is easy to process and shows an excellent surface finish and gloss (fast injection speed, high tool temperature). Application of various types of gates is possible (VDI 2006).

### Storage

ROMILOY PC/PBT should be stored dry in closed rooms. PC/PBT have to be protect against direct sun shine. If the material is stored outside the packs can be easy damaged and the granulate becomes faster yellow. Thus the mechanical and optical properties can be affected.

### Drying

ROMILOY PC/PBT leaves the plant with moisture content < 0.1 % (Karl-Fischer-Titration).

ROMILOY PC/PBT absorb moisture if stored in inconvenient places. We therefore recommend to dry the material in a dehumidified air dryer at 80 °C for about 2-4 hours (circulation air drying oven, vacuum dryer, fixed hopper). If the material will not be dried properly, streaks on the surface can occur. Furthermore, we recommend to dry the material up to moisture content < 0.05 %. The pellet hopper used should be heatable.

The drying time should be limited to 2h if the material is coloured in light colour.

### Processing

Depending on the size of the injection moulding machine and the component, the processing conditions should be controlled regular and very careful. Following conditions apply for assistance whilst processing:

ROMILOY® PC/PBT-Blend	Standard
Drying temperature	80 °C
Drying time	2 - 4 h
Barrel temperature	230 - 260 °C
Melt temperature	< 260 °C
Mould temperature	60 - 90 °C
Injection speed	moderate
Peripheral screw speed	0,2 m/s max 0,3 m/s
Back pressure	<10bar hydraulic pressure
Holding pressure	moderate to high



## Recycling

Defective parts and sprues from ROMILOY PC/PBT without any contaminations can be reprocessed as a regrind. The amount of the regrind used should be chosen in dependence on the colour and degree of reinforcing. We recommend to start with 5% regrind and to control changes of the mechanical and optical properties. However, if there are specific properties requested, only prime material should be used.

The above processing guidelines should advise without commitment. The statements given are based on our experience and are correct to the best of the knowledge at the time of printing. No liability should be assumed as a result of this information.

