

Processing Guidelines

Injection Moulding



ROMILOY® ASA/PC Blends

General

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

Drying

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

ROMILOY ASA/PC can absorb moisture if stored in inconvenient places. We therefore recommend to dry the material in a dry air dryer at 60 - 100 °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 and in case of permanent antistatic.

Processing

Depending on the size of the injection moulding machine and the finished part, the processing conditions should be controlled regular and very careful. Following conditions are recommended for processing:

ROMILOY®	Standard grades	Flame retardant grades
ASA/PC-Blend	6020, 6040	8150, 8170
Drying temperature	60 - 100 °C	60 - 80 °C
Drying time	2 - 4 h	2 - 4 h
Melt temperature	240 - 260 °C	210 - 240 °C
Mould temperature	60 - 100 °C	60 - 80 °C
Injection speed	moderate	slow
Screw rotation speed	-	slow
Back pressure	< 20%	< 10 %
Holding pressure	low	low

Permanent antistatic compounds should be processed at melt temperature below 250 °C



Recycling

Defective parts and sprues from ROMILOY ASA/PC 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 use of regrind from flame retardant materials has to be limited. Trials are necessary to evaluate the maximum possible amount.

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.

