

Genestar® Polyamide 9T

Injection Molding Guidelines

TA112

Drying Instructions

Resin should be dried before molding because excessive moisture will result in nozzle drool, reduced mechanical properties, and poor surface appearance. The target moisture level is below 0.1% and the maximum recommended drying temperature is 140°C (284F) to prevent the darkening of natural colored pellets.

- Do not open containers until ready to process.
- Genestar is packed dry (moisture content < 0.1%) but recommend require pre-drying.
- Drying is required when the material is exposed to humid air.

Drying Condition	Drying Temperature, C (F)	Time, hours
Preferred	120 (248)	5

Starting Point Molding Conditions

Parameter	Units	Value
Melt temperature (preferred)	C (F)	310-345 (590-653)
Barrel temperatures, rear zone	C (F)	300-320 (572-608)
middle zone	C (F)	300-330 (572-626)
front zone	C (F)	310-340 (590-644)
Nozzle temperature (limited by drool)	C (F)	320-340 (608-644)
Mold temperature	C (F)	>140 (284)
Injection speed (limited by burn marks)	—	High
Injection pressure (limited by flash)	MPa (kpsi)	60-150 (12-22)
Back pressure	MPa (psi)	3~5 (450~750)
Screw speed (limited by cooling time)	rpm	<150

* Hold pressure and time depend on runner design and shape of molded article.

Purging Instructions

- 5-minute cycle interruption, purge at least 3 shots.
- More than 10-minute cycle interruption and at the end of the run, purge with high-density polyethylene or polypropylene (MFR<1g/10min) until all Genestar resin has been removed.