



Document Process Data for Injection Moulding
Description PA6
Application Injection Moulding

Structure	Semicrystalline
Density	1.14 (unfilled)-1.35 g/cm ³ (30% glass fiber reinforced)
General Properties	Tenacious when moist (2-3% water), hard, stiff, abrasion resistant. Highly hygroscopic and good antifriction properties.
Barell Temperature	(+ 15°C to be added for glass fiber reinforced) (- 15°C to decrease for flame retardant grades)
	Feed Zone 60 – 90 °C
	Zone 1 230 – 240 °C
	Zone 2 230 – 250 °C
	Zone 3 240 – 250 °C
	Zone 4 240 – 250 °C
	Zone 5 240 – 250 °C
	Nozzle 240 – 250 °C
Melt temperature	240 – 250 °C
Mould temperature	60 – 110 °C
Injection pressure	900 – 1600 bar
Post-pressure	Between 40 and 60% of injection pressure, high post-pressure time
Counterpressure	50 – 200 bar
Injection speed	High
Screw speed	Equal to peripheric speed of 1.0 m/s
Metering	0.5 – 3.5 diameters
Cushion	2 – 6 mm, depends on metering and screw diameter
Drying	4 hours at 80°C. Store the product in sealed and waterproof bags.
Recycle	Maximum 10% of regrinded material. This percentage decreases for technical and aesthetic parts.
Shrinkage	0.7 – 2.0% unfilled; 0.3-0.8% for reinforced grades.
Barrel equipment	Standard screw, non-return valve, free-flow nozzle
Quenching	Not necessary to purge with other materials. Purge with natural

product suggested after flame retardant processing.

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