



Document Process Data for Injection Moulding

Description PPO

Application Injection Moulding

Structure	Amorphous	
Density	1.06 g/cm ³ (unfilled)	
General Properties	Hard, high resilience, high thermal and dimensional stability. Excellent electrical properties.	
Barell Temperature	(decrease 15°C for flame retardant grades)	
	Feed Zone	70 – 100 °C
	Zone 1	240 – 270 °C
	Zone 2	260 – 300 °C
	Zone 3	260 – 300 °C
	Zone 4	260 – 300 °C
	Zone 5	260 – 300 °C
	Nozzle	260 – 300 °C
Melt temperature	280 – 300 °C	
Mould temperature	100 – 120 °C	
Injection pressure	1000 – 1700 bar	
Post-pressure	Between 30 and 60% of injection pressure, medium-high post-pressure time	
Counterpressure	50 – 1500 bar	
Injection speed	high	
Screw speed	Equal to peripheric speed of 0.5 m/s	
Metering	25 - 80% of barrel volume	
Cushion	5 – 10 mm, depends on metering and screw diameter	
Drying	2 hours at 100°C.	
Recycle	Maximum 20% of regrinded material. This percentage deceases for technical and aesthetic parts.	
Shrinkage	0.5 – 0.7% (for unfilled product)	
Barrel equipment	Three-section screw, non-return valve, free-flow nozzle	
Quenching	Purge with PP or PEHD.	