



Document	Process Data for Injection Moulding
Description	PP mineral filled
Application	Injection Moulding

Structure	Semicrystalline	
Density	0.98-1.34 (10-50% filled)	
General Properties	Hard, good resistance. Low hygroscopicity and good thermal stability.	
Barell Temperature	(decrease 15°C for flame retardant grades)	
	Feed Zone	30 – 50 °C
	Zone 1	160 – 240 °C
	Zone 2	200 – 250 °C
	Zone 3	220 – 240 °C
	Zone 4	220 – 240 °C
	Zone 5	220 – 240 °C
	Nozzle	220 – 240 °C
Melt temperature	220 – 240 °C	
Mould temperature	20 – 70 °C	
Injection pressure	800 – 1400 bar	
Post-pressure	Between 30 and 60% of injection pressure, high post-pressure time	
Counterpressure	50 – 200 bar	
Injection speed	Medium	
Screw speed	Equal to peripheric speed of 1.3 m/s	
Metering	0.5 – 4.0 diameters	
Cushion	2 – 8 mm, depends on metering and screw diameter	
Drying	Not necessary. 1 hour at 70°C if stored in humid place or for aesthetical requirements.	
Recycle	100% of regrinded material. This percentage decreases for technical and aesthetic parts.	
Shrinkage	0.4 – 0.7% (for unfilled product)	
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.	