



**Document** Process Data for Injection Moulding



**Description** **PP (Unfilled Polypropylene)**

**Application** Injection Moulding

Structure	Semicrystalline
General Properties	Hard, good resilience. Low hygroscopicity and good thermal stability.
Barrel Temperature	(decrease 15°C for Flame Retardant grades, V2)
	Feed Zone 30 – 50 °C
	Zone 1 160 – 200 °C
	Zone 2 200 – 240 °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 – 40 °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. Not recommended for Flame Retardant grade.
Shrinkage	1.0 – 2.0 %, complete after 40 hours.
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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