



**Document** Process Data for Injection Moulding  
**Description** rPP (glass fiber reinforced recycled Polypropylene)  
**Application** Injection Moulding

Structure		Semicrystalline
General Properties		Hard, good resilience. High stiffness. Low hygroscopicity and good thermal stability.
Barrel Temperature		
	Feed Zone	30 – 50 °C
	Zone 1	160 – 200 °C
	Zone 2	190 – 220 °C
	Zone 3	195 – 220 °C
	Zone 4	195 – 220 °C
	Zone 5	195 – 220 °C
	Nozzle	200 – 230 °C
Melt temperature		
		200 – 220 °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		
		Suggested : 1 hour at 70°C.
Recycle		
		30% of regrinded material. This percentage decreases for technical and aesthetic parts.
Shrinkage		
		0.3 – 0.7 %, complete after 40 hours.
Barrel equipment		
		Standard screw, non-return valve, free-flow nozzle
Quenching		
		Not necessary to purge with other materials.
Other recommendations		
		Suggested barrel volume/shot ratio : from 1,5 to 3. Excessive residence time inside the barrel should be avoided, to decrease material degradation and odor.