



Document

Process Data for Injection
Moulding

Description

PC (Polycarbonate)

Application

Injection Moulding

Structure	Amorphous
General Properties	Hard, high resilience, transparent. High thermal and dimensional stability.
Barrel Temperature	(decrease 15°C for Flame Retardant grades, V0/V2/XA/XB/XD/XF/XG)
	Feed Zone 70 – 90 °C
	Zone 1 230 – 270 °C
	Zone 2 260 – 300 °C
	Zone 3 290 – 310 °C
	Zone 4 290 – 310 °C
	Zone 5 290 – 310 °C
	Nozzle 280 – 300 °C
Melt temperature	280 – 310 °C
Mould temperature	60 – 110 °C
Injection pressure	1300 – 1800 bar
Post-pressure	Between 40 and 60% of injection pressure, low post-pressure time
Counterpressure	100 – 150 bar
Injection speed	High.
Screw speed	Equal to peripheric speed of 0.6 m/s
Metering	0.5 – 3.5 diameters
Cushion	2 – 6 mm, depends on metering and screw diameter
Drying	Dehumidification for 3 hours at 120°C
Recycle	10% of regrinded material. This percentage decreases for technical and aesthetic parts. Not recommended for Flame Retardant grade.
Shrinkage	0.5 – 0.8% (for unfilled PC)
Barrel equipment	Three-sections screw, non-return valve, free-flow nozzle
Quenching	Turn off barrel heating and purge with PEHD down to 200°C. Purge recommended after Flame Retardant processing.

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