



Document Process Data for Injection Moulding

Description **PMMA**
(Polymethylmetacrylate)

Application Injection Moulding

Structure	Amorphous
General Properties	Hard, scratch resistant, transparent. High dimensional stability.
Barrel Temperature	
	Feed Zone 30 – 50 °C
	Zone 1 200 – 230 °C
	Zone 2 220 – 240 °C
	Zone 3 230 – 250 °C
	Zone 4 230 – 250 °C
	Zone 5 230 – 250 °C
	Nozzle 230 – 250 °C
Melt temperature	230 – 250 °C
Mould temperature	70 – 90 °C
Injection pressure	1100 – 1600 bar
Post-pressure	Between 40 and 60% of injection pressure, low post-pressure time
Counterpressure	100 – 150 bar
Injection speed	Medium-high
Screw speed	Equal to peripheric speed of 0,6-1,2 m/s
Metering	0.5 – 3.5 diameters
Cushion	2 – 8 mm, depends on metering and screw diameter
Drying	4 hours at 80°C
Recycle	Possible to use regrinded material, the ratio depends on quality requirements.
Shrinkage	0.3 – 0.5 % (typical).
Barrel equipment	Standard screw, non-return valve, free-flow nozzle
Quenching	Risk of carbonization. When the production is over, purge the barrel while decreasing the temperature. Then switch off.

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