



Document Process Data for Injection Moulding



Description **PS (Polystyrene)**

Application Injection Moulding

Structure	Amorphous
General Properties	Hard, stiff, brittle. Low hygroscopicity. Low chemical resistance.
Barrel Temperature	(decrease 15°C for Flame Retardant grades, V0/V2/AXR/AXB/AXE/AXF)
	Feed Zone 30 – 50 °C
	Zone 1 170 – 210 °C
	Zone 2 180 – 230 °C
	Zone 3 210 – 260 °C
	Zone 4 220 – 260 °C
	Zone 5 220 – 260 °C
	Nozzle 220 – 260 °C
Melt temperature	220 – 260 °C
Mould temperature	20 – 50 °C
Injection pressure	800 – 1400 bar
Post-pressure	Between 30 and 60% of injection pressure, low post-pressure time
Counterpressure	50 – 120 bar
Injection speed	High.
Screw speed	Equal to peripheric speed of .2 m/s
Metering	0.5 – 4.0 diameters
Cushion	2 – 8 mm, depends on metering and screw diameter
Drying	1 hour at 80°C, if necessary
Recycle	100% of regrinded material. This percentage decreases for technical and aesthetic parts. Not recommended for Flame Retardant grade
Shrinkage	0.3 – 0.6%
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.

Sirmax s.p.a.

E.A.R. N° 91334
P.IVA 00168180248
sirmax@sirmax.com

Group Headquarter:

Viale dell'Artigianato, 42
35013 Cittadella (PD) – Italy
Tel. +39 049 9441111 – Fax +39 049 9441112