



Document Process Data for Injection Moulding



Description PBT (Polybutyleneterephthalate)

Application Injection Moulding

Structure	Semicrystalline
General Properties	Hard, stiff and resistant to stress cracking. Low hygroscopicity. High thermal stability. Antifriction and abrasion resistant.
Barrel Temperature	(decrease 15°C for Flame Retardant grades, V0/V2/XA/XB/XY/XL/XC)
	Feed Zone 50 – 70 °C
	Zone 1 230 – 250 °C
	Zone 2 240 – 260 °C
	Zone 3 250 – 260 °C
	Zone 4 250 – 260 °C
	Zone 5 250 – 260 °C
	Nozzle 250 – 260 °C
Melt temperature	250 – 260 °C
Mould temperature	60 – 80 °C
Injection pressure	1000 – 1400 bar
Post-pressure	Between 50 and 60% of injection pressure, medium post-pressure time
Counterpressure	50 – 100 bar
Injection speed	High.
Screw speed	Equal to peripheric speed of 0.5 m/s
Metering	0.5 – 3.0 diameters
Cushion	2 – 5 mm, depends on metering and screw diameter
Drying	4 hours at 120°C
Recycle	30% of regrinded material. This percentage decreases for technical and aesthetic parts. Not recommended for Flame Retardant grade.
Shrinkage	1.4 – 2.1 % (for unfilled PBT)
Barrel equipment	Standard screw, non-return valve, free-flow nozzle
Quenching	Turn off barrel heating and purge until the material becomes solid. When restart, purge until the melt is bubble-free. Purge with natural PBT suggested after Flame Retardant PBT 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