

ISODUR® - PBT

Structure	Semicrystalline
Density	1.17 g/cm ³ (unfilled)
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)
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 temperature	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	20% of regrinded material. This percentage decreases for technical and aesthetic parts.
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.