

ISOSTYR® – PS

Structure	Amorphous
Density	1.05 g/cm ³ (unfilled)
General properties	Hard, stiff, brittle. Low hygroscopicity. Low chemical resistance.
Barrel temperature	(decrease 15°C for flame retardant grades)
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 – 55 °C
Injection temperature	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 1.2 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.
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.