



**Document** Process Data for Injection Moulding

**Description** ABS

**Application** Injection Moulding

Structure	Amorphous
Density	1.04 g/cm <sup>3</sup> (unfilled)
General Properties	Hard, tenacious down to -40°C. Resistant to temperature variations. Low hygroscopicity. Low chemical resistance.
Barell Temperature	(decrease 15°C for flame retardant grades)
	Feed Zone 40 – 60 °C
	Zone 1 160 – 180 °C
	Zone 2 180 – 230 °C
	Zone 3 210 – 250 °C
	Zone 4 210 – 250 °C
	Zone 5 210 – 250 °C
	Nozzle 210 – 250 °C
Melt temperature	210 – 240 °C
Mould temperature	40 – 80 °C
Injection pressure	1000 – 1500 bar
Post-pressure	Between 30 and 60% of injection pressure, low post-pressure time
Counterpressure	50 – 1500 bar
Injection speed	Suggested profile: medium-high
Screw speed	Equal to peripheric speed of 0.6 m/s
Metering	0.5 – 4.0 diameters
Cushion	2 – 8 mm, depends on metering and screw diameter
Drying	3 hours at 80°C.
Recycle	Maximum 30% of regrinded material. This percentage deceases for technical and aesthetic parts.
Shrinkage	0.4 – 0.7% unfilled; 0.3-0.8% for reinforced grades.
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.