



Document Process Data for Injection Moulding



Description ABS – ASA - SAN

Application Injection Moulding

General Properties

Structure	Amorphous
General Properties	Hard, tenacious down to – 40°C. Resistant to temperature variations. Low hygroscopicity. Low chemical resistance.

Injection Moulding Parameters

Barrel Temperature	(decrease 20°C for Flame Retardant grades, V0/V2/FXC/FXB)	
	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 – 240 °C

Processing Parameters

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 – 150 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	0.5 - 2 hours at 80°C
Recycle	30% of regrinded material. This percentage decreases for technical and aesthetic parts. Not recommended for Flame Retardant grade
Shrinkage	0.4 – 0.7% (for unfilled product)
Barrel equipment	Standard screw, non-return valve, free-flow nozzle
Quenching	Not necessary to purge with other materials. Purge with natural ABS product suggested after Flame Retardant processing.

Attention: in Flame Retardant grade, off-gas products produced during processing can be irritants to the mucous membranes, therefore adequate ventilation and aspiration is recommended