



**Document** Process Data for Injection Moulding



**Description** **POM (Polyacetal)**

**Application** Injection Moulding

|                    |  |
|--------------------|--|
| Structure          | Semicrystalline  |
| General Properties | Hard, stiff, high thermal stability, antifriction and abrasion resistant. High gloss.              |
| Barrel Temperature |  |
|                    | Feed Zone 30 – 70 °C   |
|                    | Zone 1 160 – 190 °C  |
|                    | Zone 2 170 – 190 °C  |
|                    | Zone 3 180 – 200 °C  |
|                    | Zone 4 180 – 210 °C  |
|                    | Zone 5 180 – 210 °C  |
|                    | Nozzle 180 – 200 °C  |
| Melt temperature   | 180 – 200 °C   |
| Mould temperature  | 70 – 100 °C  |
| Injection pressure | 800 – 1200 bar   |
| Post-pressure      | Between 30 and 60% of injection pressure, high post-pressure time                                  |
| Counterpressure    | 50 – 100 bar   |
| Injection speed    | Medium   |
| Screw speed        | Equal to peripheric speed of 1.0 m/s   |
| Metering           | 0.5 – 4.0 diameters  |
| Cushion            | 2 – 8 mm, depends on metering and screw diameter   |
| Drying             | 3 - 4 hours at 80°C  |
| Recycle            | Maximum 20% of regrinded material. This percentage decreases for technical and aesthetic parts.    |
| Shrinkage          | 1.7 – 2.2% (for unfilled product)  |
| Barrel equipment   | Standard screw, non-return valve, free-flow nozzle   |
| Quenching          | Purge with PP or PEHD. Do not leave POM inside the barrel when the moulding machine is turned off. |

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

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