

# CELCON® M90LF

## CELCON®

Celcon® acetal copolymer grade M90LF is a medium viscosity polymer formulated without lubricants, providing optimum performance in injection molding and extrusion of thin walled tubing and thin gauge film.

### Product information

Resin Identification	POM	ISO 1043
Part Marking Code	>POM<	ISO 11469

### Rheological properties

Melt volume-flow rate	8 cm <sup>3</sup> /10min	ISO 1133
Temperature	190 °C	
Load	2.16 kg	
Moulding shrinkage, parallel	2.0 %	ISO 294-4, 2577
Moulding shrinkage, normal	1.9 %	ISO 294-4, 2577

### Typical mechanical properties

Tensile modulus	2800 MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	66 MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	9 %	ISO 527-1/-2
Charpy notched impact strength, 23 °C	6 kJ/m <sup>2</sup>	ISO 179/1eA
Poisson's ratio	0.37 <sup>[C]</sup>	
[C]: Calculated		

### Thermal properties

Melting temperature, 10 °C/min	167 °C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	101 °C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	120 E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	120 E-6/K	ISO 11359-1/-2

### Physical/Other properties

Density	1410 kg/m <sup>3</sup>	ISO 1183
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### Injection

Drying Recommended	no
Drying Temperature	100 °C
Drying Time, Dehumidified Dryer	3 - 4 h
Processing Moisture Content	≤0.2 %
Melt Temperature Optimum	190 °C
Min. melt temperature	180 °C
Max. melt temperature	200 °C
Screw tangential speed	≤0.3 m/s
Mold Temperature Optimum	100 °C
Min. mould temperature	80 °C
Max. mould temperature	120 °C
Hold pressure range	60 - 120 MPa
Back pressure	0.5 MPa

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### Characteristics

Processing

Injection Moulding

Delivery form

Pellets

### Additional information

Processing Notes

#### Pre-Drying

Drying is not normally required. If material has come in contact with moisture through improper storage or handling or through regrind use, drying may be necessary to prevent splay and odor problems.