

CELCON® F40-03 Colored

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CELCON® F40-03 Colored is a standard unfilled (extremely low-viscosity) grade for general injection molding (colored). Suitable for multi-cavity molds and thin-walled precision parts

Product information

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

Rheological properties

Melt mass-flow rate	50 g/10min	ISO 1133
Melt mass-flow rate, Temperature	190 °C	
Melt mass-flow rate, Load	2.16 kg	
Moulding shrinkage, parallel	2.0 %	ISO 294-4, 2577

Typical mechanical properties

Tensile stress at yield, 50mm/min	65 MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	7 %	ISO 527-1/-2
Nominal strain at break	20 %	ISO 527-1/-2
Flexural modulus	2750 MPa	ISO 178
Flexural strength	93 MPa	ISO 178
Charpy notched impact strength, 23 °C	3.5 kJ/m ²	ISO 179/1eA

Thermal properties

Melting temperature, 10 °C/min	165 °C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	101 °C	ISO 75-1/-2

Flammability

Burning Behav. at thickness h	HB class	IEC 60695-11-10
Thickness tested	3 mm	IEC 60695-11-10

Physical/Other properties

Humidity absorption, 2mm	0.2 %	Sim. to ISO 62
Density	1410 kg/m ³	ISO 1183

Injection

Drying Recommended	no
Drying Temperature	100 °C
Drying Time, Dehumidified Dryer	3 - 4 h
Processing Moisture Content	≤0.2 %
Melt Temperature Optimum	195 °C
Min. melt temperature	180 °C
Max. melt temperature	210 °C
Screw tangential speed	≤0.3 m/s
Mold Temperature Optimum	70 °C
Min. mould temperature	60 °C
Max. mould temperature	80 °C
Hold pressure range	60 - 120 MPa

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Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Special characteristics	High Flow

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