Celanese
The chemistry inside innovation™

KEPITAL® F10-03HM

POM, copolymer, unfilled, stiffness-improved, high-viscosity
- A stiffness-improved (high-viscosity) grade for general injection molding.
- Features greater stiffness compared to general POM copolymer.
- Improved resistance to heat, high humidity, hot water

Product information

Part Marking Code	> POM <		ISO 11469

Rheological properties

Moulding shrinkage, parallel	2.0	%	ISO 294-4, 2577

Typical mechanical properties

Tensile Modulus	2750	MPa	ISO 527-1/-2
Yield stress, 50mm/min	67	MPa	ISO 527-1/-2
Yield strain, 50mm/min	12	%	ISO 527-1/-2
Nominal strain at break	34	%	ISO 527-1/-2
Flexural Modulus	2600	MPa	ISO 178
Flexural Strength	90	MPa	ISO 178
Charpy notched impact strength, 23°C	8.3	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	6.3	kJ/m²	ISO 179/1eA

Thermal properties

Melting temperature, 10°C/min	170	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	100	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	120	E-6/K	ISO 11359-1/-2

Electrical properties

Volume resistivity	1E12	Ohm.m	IEC 62631-3-1
Surface resistivity	1E16	Ohm	IEC 62631-3-2
Electric strength	19	kV/mm	IEC 60243-1

Other properties

Humidity absorption, 2mm	0.2	%	Sim. to ISO 62
Density	1410	kg/m³	ISO 1183

Injection

Drying Temperature	80 - 90	°C
Drying Time, Dehumidified Dryer	3 - 4	h
Processing Moisture Content	0.1	%
Max. mould temperature	60 - 80	°C
Back pressure	2	MPa

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Additional information

Injection molding	mold temperature: 60°C ~ 80°C (140°F ~ 176°F) barrel temperature: 170°C ~ 210°C (338°F ~ 410°F) screw speed: 150mm/s ~ 200mm/s back pressure: max. 20 bar

Processing Texts

Pre-drying	It is recommended to dry material at 80°C ~ 90°C (176°F ~ 194°F) for 3h ~ 4h if necessary. suggest max. moisture: 0.1%
Injection molding	mold temperature: 60°C ~ 80°C (140°F ~ 176°F) barrel temperature: 170°C ~ 210°C (338°F ~ 410°F) screw speed: 150mm/s ~ 200mm/s back pressure: max. 20 bar

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