

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 range, 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/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	6.3 kJ/m ²	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

Flammability

Burning Behav. at thickness h	HB class	UL 94
Thickness tested	0.8 mm	UL 94

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/m ³	ISO 1183

KEPITAL® F10-03HM

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

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
