POM | KEPITAL F10-02 | Standard grade

- A high-viscosity grade for extrusion of round bars, sheets, and tubes

- Suitable for extrusion molding of thick-walled, void-free and sink mark-reduced parts

Physical properties	Test Standard	Unit	Value
Density	ISO 1183	g/cm^3	1.41
Melt flow rate	ISO 1133	g/10min	3
Water absorption(23 ℃, 50 %RH)	ISO 62	%	0.2

Thermal properties	Test Standard	Unit	Value
Heat deflection temperature(1.8 MPa)	ISO 75	℃	96
Flammability	UL 94	–	HB
Melting point(10 ℃/min)	ISO 11357	℃	165
Coefficient of linear thermal expansion	ISO 11359	X 10^{-5}/℃	12

Mechanical properties	Test Standard	Unit	Value
Tensile modulus	ISO 527	MPa	2,600
Tensile strength	ISO 527	MPa	63
Tensile strain at yield	ISO 527	%	10
Strain at break	ISO 527	%	40
Flexural strength	ISO 178	MPa	83
Flexural modulus	ISO 178	MPa	2,400
Charpy impact strength(Notched) @ 23℃	ISO 179/1eA	KJ/m^2	7.0
Charpy impact strength(Notched) @ -30℃	ISO 179/1eA	KJ/m^2	6.5

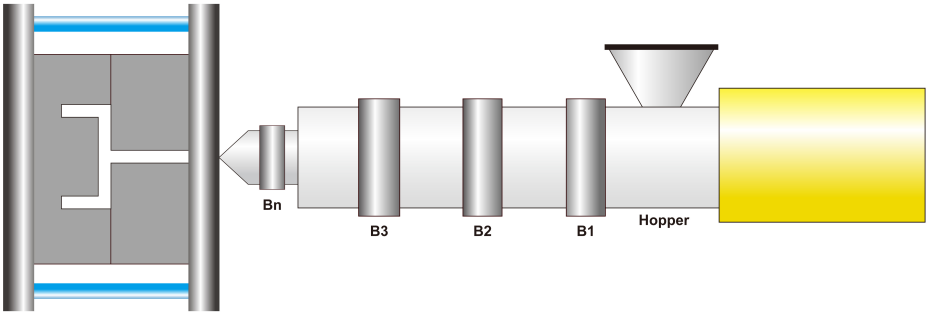
Electrical properties	Test Standard	Unit	Value
Surface resistivity	IEC 60093	Ω	1x10^{16}
Volume resistivity	IEC 60093	Ω/ cm	1x10^{14}
Dielectric strength	IEC 60243-1	kV/mm	19

Other	Test Standard	Unit	Value
Mold shrinkage(flow direction, Φ = 100 mm, t = 3 mm)	KEP Method	%	2.2

General information	Test Standard	Unit	Value
Polymer abbreviation	ISO 1043	-	POM

Revision No : 3 (2016-10-01)

Injection molding condition



Pre-drying (Suggested max. moisture : 0.1%)

It is recommend to dry material at 80℃ ~ 100℃(176℉ ~ 212℉) for 3 h ~ 4 h if necessary.

Temperature

Mold temperature : 60 ℃ ~ 80 ℃(140 ℉ ~ 176 ℉)
Barrel temperature : 170 ℃ ~ 210 ℃(338 ℉ ~ 410 ℉)

Mold	Bn(Nozzle)	B3(Metering)	B2(Compression)	B1(Feeding)	Hopper
60 ~ 80 ℃	180 ~ 210 ℃	190 ~ 200 ℃	180 ~ 190 ℃	170 ~ 180 ℃	60 ~ 80 ℃
140 ~ 176 ℉	356 ~ 410 ℉	374 ~ 392 ℉	356 ~ 374 ℉	338 ~ 356 ℉	140 ~ 176 ℉

Plastification

Screw speed : 150 mm/s ~ 200 mm/s
Back pressure : Maximum 20 bar

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