POM | KEPITAL TE-23 (FU2015) | Impact modified grade

- A toughened, medium-high viscosity grade for general injection molding

- Suitable for applications requiring higher impact resistance, impact noise, and quality surface

Physical properties	Test Standard	Unit	Value
Density	ISO 1183	g/cm^3	1.36
Melt flow rate	ISO 1133	g/10min	8
Water absorption(23 ℃, 50 %RH)	ISO 62	%	0.24

Thermal properties	Test Standard	Unit	Value
Heat deflection temperature(1.8 MPa)	ISO 75	℃	76
Flammability	UL 94	–	HB
Melting point(10 ℃/min)	ISO 11357	℃	165
Coefficient of linear thermal expansion	ISO 11359	$X\ 10^{-5}/℃$	13

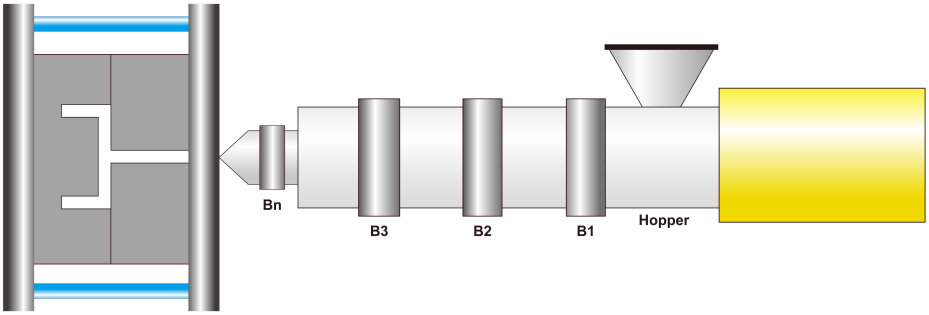
Mechanical properties	Test Standard	Unit	Value
Tensile stress	ISO 527	MPa	45
Tensile strain at yield	ISO 527	%	12.0
Nominal strain at break	ISO 527	%	> 50
Flexural strength	ISO 178	MPa	60
Flexural modulus	ISO 178	MPa	1,650
Charpy impact strength(Notched) @ 23℃	ISO 179/1eA	kJ/m^2	13.0

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	-

Other	Test Standard	Unit	Value
Mold shrinkage(flow direction, Φ = 100 mm, t = 3 mm)	KEP Method	%	1.8

Revision No : 4 (2016-11-09)

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 : 40 ℃ ~ 60 ℃(104 ℉ ~ 140 ℉)
Barrel temperature : 170 ℃ ~ 210 ℃(338 ℉ ~ 410 ℉)

Mold	Bn(Nozzle)	B3(Metering)	B2(Compression)	B1(Feeding)	Hopper
40 ~ 60 ℃	180 ~ 210 ℃	190 ~ 200 ℃	180 ~ 190 ℃	170 ~ 180 ℃	60 ~ 80 ℃
104 ~ 140 ℉	356 ~ 410 ℉	374 ~ 392 ℉	356 ~ 374 ℉	338 ~ 356 ℉	140 ~ 176 ℉

Plastification

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

Disclaimer