

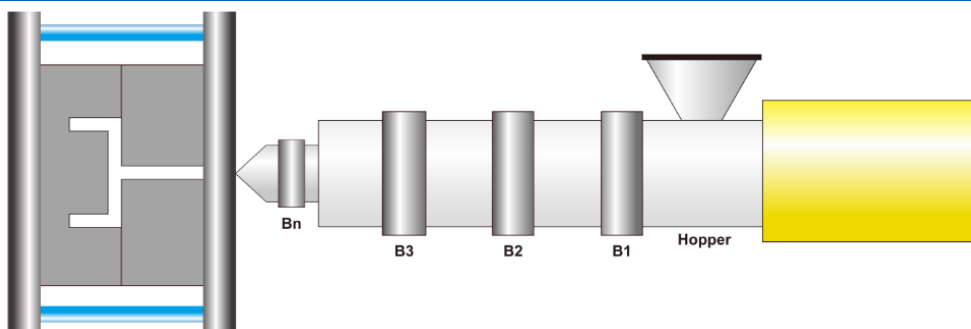
## POM | KEPITAL ST-50 | Impact modified grade

- A super-toughened impact-resistance grade for general injection molding
- Designed for highly stressed parts and suitable for applications requiring superior impact resistance and flexibility

General information	Test Standard	Unit	Value
Polymer abbreviation	ISO 1043	-	POM-HI
Physical properties	Test Standard	Unit	Value
Density	ISO 1183	g/cm <sup>3</sup>	1.28
Melt flow rate	ISO 1133	g/10 min	4.0
Water absorption(23 °C, 50 %RH)	ISO 62	%	-
Thermal properties	Test Standard	Unit	Value
Heat deflection temperature(1.8 MPa)	ISO 75	°C	58
Flammability	UL 94	-	HB
Melting point(10 °C/min)	ISO 11357	°C	165
Coefficient of linear thermal expansion	ISO 11359	X 10 <sup>-5</sup> /°C	-
Mechanical properties	Test Standard	Unit	Value
Tensile strength	ISO 527	MPa	25
Tensile strain at yield	ISO 527	%	22
Nominal strain at break	ISO 527	%	300
Flexural strength	ISO 178	MPa	26
Flexural modulus	ISO 178	MPa	800
Charpy impact strength(Notched)	ISO 179	kJ/m <sup>2</sup>	N.B
Hardness, Shore D(Maximum)	ISO 868	-	65
Electrical properties	Test Standard	Unit	Value
Surface resistivity	IEC 60093	Ω	1x10 <sup>16</sup>
Volume resistivity	IEC 60093	Ω · cm	1x10 <sup>14</sup>
Dielectric strength	IEC 60243-1	kV/mm	-
Others	Test Standard	Unit	Value
Mold shrinkage(flow direction, Φ = 100 mm, t = 3 mm)	KEP Method	%	-

Rev.0 (2015-10-01)

## Injection molding conditions



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

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

### Temperature

Mold temperature : 60 °C ~ 80 °C(140 °F ~ 176 °F)

Barrel temperature : 180 °C ~ 210 °C(356 °F ~ 410 °F)

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

### Plastification

Screw speed : 150 mm/s ~ 200 mm/s

Back pressure : maximum 20 bar

### Contact information

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