

POM | KEPITAL FG2025 LOF | Reinforced · filled grade

- A 25% glass fiber-reinforced grade for general injection molding.
- Suitable for parts requiring extremely high strength, high stiffness, high deflection temperature and excellent creep resistance.
- A low-emission grade featuring improved heat stability.

General information	Test Standard	Unit	Value
Polymer abbreviation	ISO 1043	-	POM-GF25
Physical properties	Test Standard	Unit	Value
Density	ISO 1183	g/cm ³	1.58
Melt flow rate	ISO 1133	g/10 min	8.1
Water absorption(23 ℃, 50 %RH)	ISO 62	%	0.2
Thermal properties	Test Standard	Unit	Value
Heat deflection temperature(1.8 MPa)	ISO 75	$^{\circ}$	_
Flammability	UL 94	-	НВ
Melting point(10 °C/min)	ISO 11357	°C	165
Coefficient of linear thermal expansion	ISO 11359	X 10 ⁻⁵ /℃	-
Mechanical properties	Test Standard	Unit	Value
	100 507	145	1.10
Tensile strength	ISO 527	MPa	140
Tensile strain at yield	ISO 527	%	-
Strain at break	ISO 527	%	2.0
Strain at break Flexural strength	ISO 527 ISO 178	% MPa	2.0 210
Flexural strength	ISO 178	MPa	210
Flexural strength Flexural modulus	ISO 178 ISO 178	MPa MPa	210 8,100
Flexural strength Flexural modulus Charpy impact strength(Notched)	ISO 178 ISO 178 ISO 179/1eA	MPa MPa kJ/m²	210 8,100 8.4
Flexural strength Flexural modulus Charpy impact strength(Notched) Electrical properties	ISO 178 ISO 178 ISO 179/1eA Test Standard	MPa MPa kJ/m²	210 8,100 8.4 Value
Flexural strength Flexural modulus Charpy impact strength(Notched) Electrical properties Surface resistivity	ISO 178 ISO 178 ISO 179/1eA Test Standard IEC 60093	MPa MPa kJ/m² Unit	210 8,100 8.4 Value 1x10 ¹⁶
Flexural strength Flexural modulus Charpy impact strength(Notched) Electrical properties Surface resistivity Volume resistivity	ISO 178 ISO 178 ISO 179/1eA Test Standard IEC 60093 IEC 60093	MPa MPa kJ/m² Unit Ω Ω · cm	210 8,100 8.4 Value 1x10 ¹⁶ 1x10 ¹⁴

KEP Method

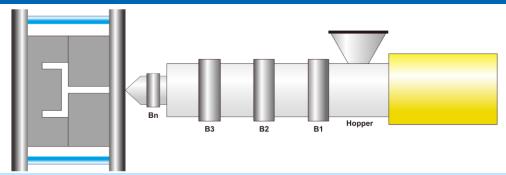
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Mold shrinkage(flow direction, $\Phi = 100 \text{ mm}$, t = 3 mm)

%



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 \sim 80 °C(140 °F \sim 176 °F) Barrel temperature : 170 °C \sim 190 °C(338 °F \sim 374 °F)

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