

# PBT | KEPEX 3315GFS | Glass fiber reinforced grade

- KEPEX 3315GFS is a glass fiber 15%-reinforced and impact-modified PBT grade.
- It has superior mechanical, thermal, and electrical properties.
- It is suitable for automotive, electrical & electronics, and industrial parts requiring high stiffness and heat resistance.

Physical properties	Test Standard	Unit	Value
Filler contents	ISO 1172	%	15
Specific gravity	ISO 1183	-	1.38
Mold shrinkage(Flow direction, $\Phi = 100 \text{ mm}$ , $t = 3 \text{ mm}$ )	KEP Method	%	0.8~1.0

Thermal properties	Test Standard	Unit	Value
Melting point(10 °C/min)	ISO 11357	$^{\circ}$ C	220
Heat deflection temperature(0.45 MPa)	ISO 75	°C	220
Heat deflection temperature(1.8 MPa)	ISO 75	°C	205
Flammability(t = 0.8 mm)	UL 94	Class	НВ

Mechanical properties	Test Standard	Unit	Value
Tensile stress	ISO 527	MPa	85
Elongation at break	ISO 527	%	3
Flexural strength	ISO 178	MPa	135
Flexural modulus	ISO 178	MPa	4800
Charpy impact strength(Notched) @ 23°C	ISO 179/1eA	kJ/m <sup>2</sup>	8.5
Rockwell Hardness(R-Scale)	ISO 2039	-	117

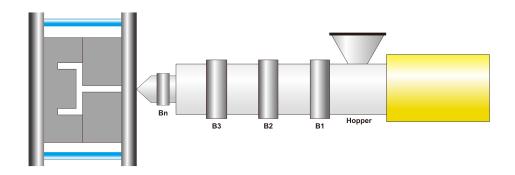
Electrical properties	Test Standard	Unit	Value
Permittivity(60 Hz)	ASTM D150	-	3.2
Dissipation factor(60 Hz)	ASTM D150	-	0.002
Volume resistivity	IEC 60093	Ω/ cm	10 <sup>16</sup>
Dielectric strength	IEC 60243	KV/mm	21

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## Injection molding condition



# Pre-drying (Suggested max. moisture: 0.05%)

It is recommend to dry material at  $120^{\circ}\text{C} \sim 130^{\circ}\text{C}(248^{\circ}\text{F} \sim 266^{\circ}\text{F})$  for 3 h ~ 5 h at dryer.

## **Temperature**

Mold temperature :  $70 \,^{\circ}\text{C} \sim 90 \,^{\circ}\text{C} (158 \,^{\circ}\text{F} \sim 194 \,^{\circ}\text{F})$ Barrel temperature :  $230 \,^{\circ}\text{C} \sim 250 \,^{\circ}\text{C} (446 \,^{\circ}\text{F} \sim 482 \,^{\circ}\text{F})$ 

Mold	Bn(Nozzle)	B3(Metering)	B2(Compression)	B1(Feeding)	Hopper
70 ~ 90 °C	250 °C	250 °C	240 °C	230 °C	60 ~ 80 °C
158 ~ 194 °F	482 °F	482 °F	464 °F	446 °F	140 ~ 176 °F

#### **Plastification**

Screw speed: 80 ~ 120 rpm Back pressure: 5 ~ 10 kgf/cm<sup>2</sup>

#### Disclaimer

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