

PBT | KEPEX 4530GVS | Flame retardant grade

- KEPEX 4530GVS is a glass fiber 30%-reinforced and non-blooming-type flame-retardant PET grade.
- It has superior mechanical, thermal, and electrical properties.(UL 94 V-0 type)
- It is suitable for applications such as automotive, electrical & electronics, and industrial parts.

Physical properties	Test Standard	Unit	Value
Filler contents	ISO 1172	%	30
Specific gravity	ISO 1183	-	1.73
Water absorption(23 °C, 50 %RH)	ISO 62	%	0.04~0.08

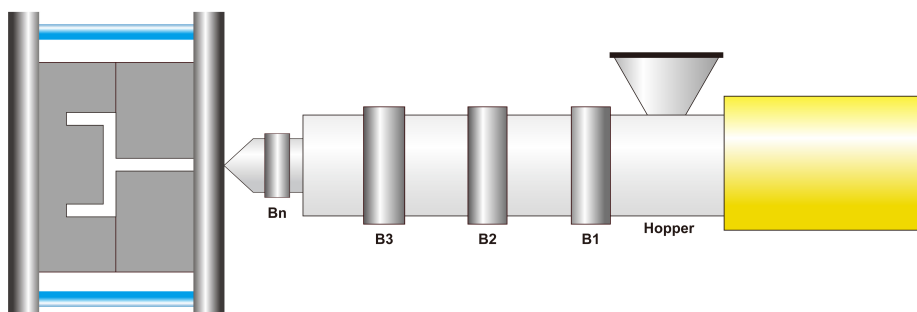
Thermal properties	Test Standard	Unit	Value
Melting point(10 °C/min)	ISO 11357	°C	250
Heat deflection temperature(0.45 MPa)	ISO 75	°C	250
Heat deflection temperature(1.8 MPa)	ISO 75	°C	230
Flammability(t = 0.8 mm)	UL 94	Class	V-0

Mechanical properties	Test Standard	Unit	Value
Tensile stress	ISO 527	MPa	160
Elongation at break	ISO 527	%	2.0
Tensile modulus	ISO 527	MPa	12500
Flexural strength	ISO 178	MPa	215
Flexural modulus	ISO 178	MPa	11600
Charpy impact strength(Notched) @ 23°C	ISO 179/1eA	kJ/m ²	10.0
Charpy impact strength(Notched) @ -30°C	ISO 179/1eA	kJ/m ²	8.0
Rockwell Hardness(R-Scale)	ISO 2039	-	120

Electrical properties	Test Standard	Unit	Value
Permittivity(60 Hz)	ASTM D150	-	3.7
Volume resistivity	IEC 60093	Ω/ cm	10 ¹⁶

Revision No :

Injection molding condition



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

It is recommend to dry material at 120 °C(248°F) ~ 130°C(266°F) for 3 ~ 5 h at dryer

Temperature

Mold temperature : 70°C ~ 90°C (158°F ~ 194°F)

Barrel temperature : 260°C ~ 290°C (500°F ~ 554°F)

Mold	Bn(Nozzle)	B3(Metering)	B2(Compression)	B1(Feeding)	Hopper
70 ~ 90 °C	290 °C	280 °C	270 °C	260 °C	60 ~ 80 °C
158 ~ 194 °F	554 °F	536 °F	518 °F	500 °F	140 ~ 176 °F

Plastification

Screw speed : 80 ~ 120 rpm

Back pressure : 5 ~ 10 kgf/cm²

Disclaimer

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