

PBT | KEPEX 3500SA | Toughened grade

- KEPEX 3500SA is a highly-toughened PBT grade.
- It has superior mechanical, thermal, and electrical properties.
- It is suitable for automotive, electrical & electronics, and industrial parts requiring high toughness and impact resistance.

Physical properties	Test Standard	Unit	Value
Filler contents	ISO 1172	%	-
Specific gravity	ISO 1183	-	1.29
Water absorption(23 °C, 50 %RH)	ISO 62	%	0.05~0.09

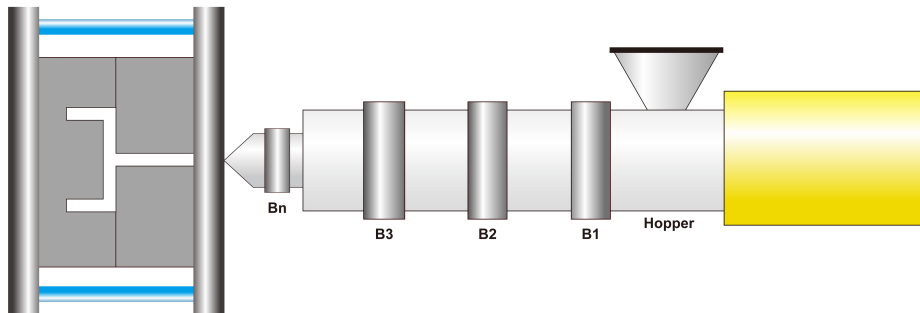
Thermal properties	Test Standard	Unit	Value
Melting point(10 °C/min)	ISO 11357	°C	220
Heat deflection temperature(0.45 MPa)	ISO 75	°C	140
Heat deflection temperature(1.8 MPa)	ISO 75	°C	60
Flammability(t = 0.8 mm)	UL 94	Class	HB

Mechanical properties	Test Standard	Unit	Value
Tensile stress	ISO 527	MPa	55
Elongation at break	ISO 527	%	30
Tensile modulus	ISO 527	MPa	2600
Flexural strength	ISO 178	MPa	85
Flexural modulus	ISO 178	MPa	2540
Charpy impact strength(Notched) @ 23°C	ISO 179/1eA	kJ/m ²	5.5
Charpy impact strength(Notched) @ -30°C	ISO 179/1eA	kJ/m ²	4.0
Rockwell Hardness(R-Scale)	ISO 2039	-	117

Electrical properties	Test Standard	Unit	Value
Permittivity(60 Hz)	ASTM D150	-	3.0
Volume resistivity	IEC 60093	Ω/ cm	10 ¹⁶

Revision No : 1 (2015-02-13)

Injection molding condition



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

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

Temperature

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

Barrel temperature : 230 °C ~ 250 °C(446 °F ~ 482 °F)

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

Plastification

Screw speed : 80 ~ 120 rpm

Back pressure : 5 ~ 10 kgf/cm²

Disclaimer

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