

PA6 | KEPAMID 1500ST | Impact modified grade

- KEPAMID 1500ST is a high impact-modified PA6 grade.
- It has superior toughness.
- It is suitable for automotive, electrical & electronics, and industrial parts requiring heat resistance and high impact resistance.

Physical properties	Test Standard	Unit	Value
Filler contents	ISO 1172	%	-
Specific gravity	ISO 1183	-	1.09
Water absorption(23 °C, 50 %RH)	ISO 62	%	1.2~1.6

Mechanical properties	Test Standard	Unit	Value
Tensile stress	ISO 527	MPa	55
Elongation at break	ISO 527	%	35
Tensile modulus	ISO 527	MPa	2100
Flexural strength	ISO 178	MPa	75
Flexural modulus	ISO 178	MPa	1900
Charpy impact strength(Notched) @ 23°C	ISO 179/1eA	kJ/m ²	57.0
Charpy impact strength(Notched) @ -30°C	ISO 179/1eA	kJ/m ²	11.0
Rockwell Hardness(R-Scale)	ISO 2039	-	110

Thermal properties	Test Standard	Unit	Value
Melting point(10 °C/min)	ISO 11357	°C	220
Heat deflection temperature(0.45 MPa)	ISO 75	°C	115
Heat deflection temperature(1.8 MPa)	ISO 75	°C	50
Flammability(t = 0.8 mm)	UL 94	Class	HB

Electrical properties	Test Standard	Unit	Value
Permittivity(1 MHz)	IEC 60250	-	3.4
Volume resistivity	IEC 60093	Ω/ cm	10 ¹⁵

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Injection molding condition



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

It is recommend to dry material at 80°C(176°F) for 4 h ~ 6 h at dehumidified dryer.

It is recommend to dry material at 90°C(194°F) for 6 h ~ 8 h at dryer.

Temperature

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

Barrel temperature : 240 °C ~ 250 °C(464 °F ~ 482 °F)

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

Plastification

Screw speed : 80 ~ 120 rpm

Back pressure : 5 ~ 10 kgf/cm²

Disclaimer

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