

INTAMSYS[®] PEKK

INTAMSYS[®] PEKK is a high performance thermoplastic, PolyEtherKetoneKetone (PEKK). It has highly stable chemical backbone. Its semi crystalline structure in solid state offers an outstanding combination of mechanical and thermal strength together with chemical and fire resistance.

PHYSICAL PROPERTIES	TEST METHOD	UNITS	TYPICAL VALUE
Density	ISO 1183, Crystalline	g/cm ³	1.29
Glass transition temperature	ISO 11357	°C	160
Melting Point	ISO 11357	°C	335
Heat Deflection Temperature	ISO 75-f, 1.8 MPa	°C	139

MECHANICAL PROPERTIES ¹	TEST METHOD	UNITS	TYPICAL VALUE
Tensile strength	ISO 527	MPa	100.4
Flexural strength	ISO 178	MPa	203.2
Flexural modulus	ISO 178	MPa	5220
Impact strength	ISO 179, Notched	kJ/m ²	5.2

Note:

- All testing specimens were printed using a FUNMAT HT 3D PRINTER under the following conditions:
 Printing temperature = 380 °C, printing speed = 45 mm/s, number of shells = 2, and 100% infill.
 All specimens were annealed at 200 °C for 2h prior to testing.

Disclaimer

The typical values presented in this document are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary significantly with printing conditions. End-use performance of printed parts properties can be impact by, but not limited to, part design, environmental conditions, printing conditions, etc. Product specifications are subject to change without notice.

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