



Insight™ KBIA

Polyetheretherketone (PEEK) Alloy

Insight™ KBIA is a PEEK alloy developed specifically for Fused Granulate Fabrication(FGF) and Filament Production. Insight™ KBIA has a good balance of strength, stiffness and impact properties with excellent high temperature performance and chemical resistance. Insight™ KBIA also has process benefits with good layer to layer adhesion and low warpage (lay flat) as well as improved printability Vs. standard PEEK grades.

Insight™ KBIA PEEK Alloy

General	SI Metric	English	Test Method
Specific Gravity	1.29 g/cc	-	ASTM D 792
Filler Content	0%	0%	
Melt Point	337 °C	639 °F	ASTM D3418
Physical Properties			
Tensile Modulus	4000 Mpa	5.8 x 10 ⁵ psi	ASTM D 638
Tensile Strength	90 Mpa	13000 psi	ASTM D 638
Elongation at Break	40 Mpa	5802 psi	ASTM D 638
Flexural Modulus	3800 Mpa	5.5 x 10 ⁵ psi	ASTM D 790
Flexural Strength	145 Mpa	21000	ASTM D 790
Izod Impact (Notched)	600 J/m	11.24 ft-lb/in	ASTM D 256
Izod Impact (No-Notch)	NB	NB	ASTM D 256
Thermal Properties			
@ 0.45 Mpa (66 PSI)	230 °C	446 °F	ASTM D 648
@1.8 Mpa (264 PSI)	152 °C	306 °F	ASTM D 648

Processing Notes

These data are typical and not to be construed as a specification.

Unless otherwise stated, all data was generated from typical values of injection molded samples.

PEEK is Hygroscopic and requires drying before processing. Recommended drying time is 4 hrs. @ 130 Deg °C (266 °F).

The information in this Data Sheet are provided for reference only and are based on preliminary data. Final Data Sheet properties will be updated as soon as possible. This information is not a substitute for user testing to determine fitness for use and the user is responsible for ensuring safe and lawful use of the product. No express or implied warranties are provided. No representations are made, and no liability is assumed arising from or relating to the product.

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