

Insight™ KBIA

PEEK Alloy

Insight™ KBIA was developed specifically for Fused Granulate Fabrication and Filament Production. KBIA was developed to have excellent layer to layer adhesion, warp or lay-flat properties and a good balance of stiffness, strength and impact properties with excellent high temperature performance and chemical resistance.

Insight™ KBIA - PEEK Alloy

General	SI Metric	English	Test Method
Specific Gravity	1.29	1.29	ASTM D792
Filler Content	0%	0%	
Melt Point	337 °C	639 °F	ASTM D3418
Physical Properties			
Tensile Modulus	4000 Mpa	0.580 x 10 ⁶ psi	ASTM D638
Tensile Strength	90 Mpa	13053 psi	ASTM D638
Elongation at Break	40%	40%	ASTM D638
Flexural Modulus	3800 Mpa	0.551 x 10 ⁶ psi	ASTM D790
Flexural Strength	145 Mpa	21030	ASTM D790
Izod Impact (Notched)			
1/8 inch (3.2 mm) Section	600 J/m	11.24 ft-lb/in	ASTM D256
Izod Impact (No-Notch)	NB	NB	ASTM D256
Thermal Properties			
HDT@ 0.45 Mpa (66 PSI)	230 °C	446 °F	ASTM D648
HDT@ 1.80 Mpa (264 PSI)	152 °C	306 °F	ASTM D648

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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