insight Polymers & Compounding PRODUCT DATA SHEET

Insight™ NBFC02

Nylon 6 Copolymer W/Carbon Fiber

Insight™ NBFC02 Nylon 6 Copolymer with Carbon Fiber reinforcement, developed for 3D Printing via Fused Granulate Fabrication(FGF) and filament production. Insight™ NBFC02 exhibits an excellent balance of strength and stiffness as well as excellent chemical resistance typical of PA6 copolymers. Processing benefits include excellent lay flat (low warp), layer to layer adhesion and printability.

Insight™ NBFC02 - Carbon Fiber Reinforced Nylon 6 Copolymer

General	SI Metric	English	Test Method
Specific Gravity	1.18	1.18	ASTM D792
Filler Content	10%	10%	
Melt Point	195 °C	283 °F	ASTM D3418
Physical Properties			
Tensile Modulus	3000 Mpa	4.4 x 10^5 psi	ASTM D638
Tensile Strength	76 Mpa	11000	ASTM D638
Elongation at Break	4%	4%	ASTM D638
Flexural Modulus	3600 Mpa	5.2 x 10^5 psi	ASTM D790
Flexural Strength	110 Mpa	16000 psi	ASTM D790
Izod Impact (Notched)	86 J/m	1.6 ft-lb/in	ASTM D256
Izod Impact (Unnotched)	NB	NB	ASTM D256

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.

PA 6 is Hygroscopic and requires drying before processing. Recommended drying time is 2 hrs. @ 82 Deg °C (180 °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.

MT 2025-07 V3

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