



HexTow[®] IM2A

Carbon Fiber

Product Data

HexTow[®] IM2A carbon fiber is a continuous, high performance, intermediate modulus, PAN based fiber available in 6,000 (6K) and 12,000 (12K) filament count tows. This fiber has been surface treated and can be sized to improve its interlaminar shear properties, handling characteristics, and structural properties. It is suggested for use in prepregging, filament winding, braiding, and pultrusion.

The unique properties of HexTow[®] IM2A fiber, such as higher tensile strength and modulus, as well as good shear strength, allow structural designers to achieve both higher safety margins for both stiffness and strength critical applications.

Typical Fiber Properties	U.S. Units	SI Units
Tensile Strength		
6K	740 ksi	5,100 MPa
12K	790 ksi	5,450 MPa
Tensile Modulus (Chord 6000-1000)	40 Msi	276 GPa
Ultimate Elongation at Failure		
6K	1.7%	1.7%
12K	1.8%	1.8%
Density	0.0643 lb/in ³	1.78 g/cm ³
Weight/Length		
6K	12.5 x 10 ⁻⁶ lb/in	0.223 g/m
12K	25.0 x 10 ⁻⁶ lb/in	0.446 g/m
Approximate Yield		
6K	6,674 ft/lb	4.48 m/g
12K	3,337 ft/lb	2.24 m/g
Tow Cross-Sectional Area		
6K	1.94 x 10 ⁻⁴ in ²	0.13 mm ²
12K	3.89 x 10 ⁻⁴ in ²	0.25 mm ²
Filament Diameter	0.203 mil	5.2 microns
Carbon Content	95.0%	95.0%
Twist	Never Twisted	Never Twisted

Carbon Fiber Certification

This carbon fiber is manufactured to Hexcel industrial specification HS-CP-3000. A copy of this specification is available upon request. A Certification of Conformance will be provided with each shipment.

Available Sizing

Sizing compatible with various resin systems, based on application are available to improve handling characteristics and structural properties. Please see additional information on available Sizes on our website or contact our technical team for additional information.

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**Packaging**

Standard packaging of HexTow® IM2A is as follows:

Filament Count	Nominal Weight		Nominal Length	
	(lb)	(kg)	(ft)	(m)
6K	2.0	0.9	13,350	4,070
12K	4.0	1.8	13,350	4,070

Other package sizes may be available on request. The fiber is wound on a 3-inch ID by 11-inch long cardboard tube and overwrapped with plastic film.

Safety Information

Obtain, read, and understand the Material Safety Data Sheet (MSDS) before use of this product.

Important

Hexcel Corporation believes, in good faith, that the technical data and other information provided herein is materially accurate as of the date this document is prepared. Hexcel reserves the right to modify such information at any time. The performance values in this data sheet are considered representative but do not and should not constitute specification minima. The only obligations of Hexcel, including warranties, if any, will be set forth in a contract signed by Hexcel or in Hexcel's then current standard Terms and Conditions of Sale as set forth on the back of Hexcel's Order Acknowledgement.

For more information

Hexcel is a leading worldwide supplier of composite materials to aerospace and other demanding industries. Our comprehensive product range includes:

- Carbon Fiber
- RTM Materials
- Honeycomb Cores
- Carbon, Glass, Aramid and Hybrid Prepregs
- Structural Film Adhesives
- Honeycomb Sandwich Panels
- Special Process Honeycombs
- Reinforcement Fabrics

For US quotes, orders and product information call toll-free 1-866-556-2662 and 1-800-987-0658. For other worldwide sales office telephone numbers and a full address list, please click here: <http://www.hexcel.com/contact/salesoffice>