

Carbon Fiber Tow PRODUCT DATA SHEET

Carbon Fiber made with HexTow® AS4C - Aerospace

Carbon Fiber Tow is a continuous, high strength, high strain, PAN based fiber, that has been surface treated and is suitable as a reinforcement in small, high stregth, low weight structures.

FIBER PROPERTIES

PROPERTY	3K	6K	12K
Tensile Strength	685 ksi	660 ksi	675 ksi
Tensile Modulus	33.5 Msi	33.5 Msi	33.5 Msi
Ultimate Elongation at Failure	1.8%	1.8%	1.8%
Weight/Length	11.2 x 10 ⁻⁶ lb/in	22.4 x 10-6 lb/in	44.8 x 10-6 lb/in
Approximate Yield	7,441 ft/lb	3,721 ft/ l b	1,861 ft/lb
Tow Cross-Sectional Area	1.74 x 10 ⁻⁴ in ²	3.48 x 10-4 in2	6.97 x 10-4 in2
Filament Diameter	0.272 mi l	0.272 mi l	0.272 mi l
Carbon Content	94.0%	94.0%	94.0%
Fiber Volume	60.0%	60.0%	60.0%
Density	0.0643 lb/in ³	0.0643 l b/in³	0.0643 l b/in³
Twist	Never Twisted	Never Twisted	Never Twisted



COMPOSITE PROPERTIES

SAE/METRIC	TEST METHOD
340 ksi	ASTM D3039
19.5 Msi	ASTM D3039
1.6%	ASTM D3039
18.1 ksi	ASTM D2344
256 ksi	ASTM Mod. D695
50.6 ksi	ASTM D5766
48 ksi	ASTM D6484
	340 ksi 19.5 Msi 1.6% 18.1 ksi 256 ksi 50.6 ksi

Note: Typical HexPly 8552 Composite Properties at Room Temperature.

PRODUCT GRADE

- HS-CP-4000 Hexcel Aerospace Grade

USES INCLUDE

- Weaving
- Prepregging
- Filament Winding
- Braiding
- Pultrusion

COMPATIBILITY

- Compatible with polyester, vinyl-ester and epoxy resins



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All the information contained in these properties is believed to be reliable. It is intended for comparison purposes only as each manufactured lot will exhibit variations. The user should evaluate the suitability of each product for their application. We cannot anticipate the variations in all end use and we make no warranties and assume no liability in connection with the use of this information.

