

**G30-500 3K/6K/12K HTA-7C/W**

**Tenax®-J G30-500 HTA** is a family of high strength aerospace grade carbon fibers made in Japan for use as reinforcement in high performance composites. These fibers are produced from poly-[acrylonitrile] (PAN) precursor and are surface treated to promote adhesion to organic matrix polymers. Sizing materials are designed to aid in handling.

Typical Fiber Properties (Lot Average)		Inch-Pound	SI
Tensile strength*		570 x 10 <sup>3</sup> psi	3,930 MPa
Tensile modulus*		34.0 x 10 <sup>6</sup> psi	234 GPa
Elongation*		1.65 %	1.65 %
Density		0.064 lb/in <sup>3</sup>	1.78 g/cm <sup>3</sup>
Linear density with sizing	EP01 & EP03 3K		202 tex 0.202 g/m
	EP01 6K		405 tex 0.405 g/m
	EP01 & EP03 12K		810 tex 0.810 g/m
Yield with sizing	EP01 & EP03 3K	2,456 yd/lb	4,950 m/kg
	EP01 6K	1,225 yd/lb	2,469 m/kg
	EP01 & EP03 12K	612 yd/lb	1,235 m/kg
Sizing level w/w	EP01 & EP03	1.3 %	1.3 %
<b><u>Yarn / Tow Characteristics</u></b>			
Filament Diameter		7.0 x 10 <sup>-6</sup> m	
Twist	HTA-7C 3K & 6K & 12K HTA-7W 3K only	Never Twisted S 0.25-0.5 tpi (10-20 turns per meter in s direction)	
For Technical Assistance Contact		Toho Tenax America, Inc. 18552 MacArthur Boulevard, Suite 325 Irvine, CA 92612-1232, USA (949) 474-3278 Ext 25	

\* Toho Tenax Impregnated Strand Test Method. Based on JIS R7601.

To the best of our knowledge the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy or completeness of such information. Moreover, there is a need to reduce human exposure to many materials to the lowest practical limits in view of possible long-term adverse effects. To the extent that any hazards may have been mentioned in this publication, we neither suggest nor guarantee that such hazards are the only ones which exist. Final determination of the suitability of any information or product for the use contemplated by any user, the matter of that use and whether any infringement of patents is the sole responsibility of the user. We recommend that anyone intending to rely on any recommendation or to use any equipment or processing technique or material mentioned in this publication should satisfy himself as to such suitability and that he can meet all applicable safety and health standards. We strongly recommend that users seek and adhere to the manufacturers' or suppliers' current instructions for handling each material they use.

RECOMMENDED STORAGE AND SHELF LIFE

A HTA Carbon Fiber Properties

Filament tensile strength, modulus of elasticity, coefficient of expansion, electric and thermal conductivities and yield are inherent properties of the HTA fiber and have indefinite shelf life.

B. HTA Carbon Fiber Processing

Typically, the original processing characteristics of EP01 and EP03 sized yarn will be essentially constant for at least one year from date of delivery. The product should be stored indoors. The recommended storage conditions are 40°F-77°F (5°C-25°C) and less than 50 percent RH. Direct exposure to sunlight or rain should be avoided. The shrink wrap should not be removed until immediately prior to use.

If the roving is stored at high temperatures and/or high humidity conditions, it may become difficult to process. Roving that stiffens during storage should still be useable. However, a thorough evaluation of the processing characteristics (e.g., resin wet out, spreadability) relative to the customer's operation is strongly recommended.

STANDARD PACKAGING AND SPOOL BUILD

Spool designation	A	B	Z
Net Weight (lb)	2.2	4.41	<2.2
Tube Length (in)	11	11	11
Tube I.D. (in)	3	3	3
Tube weight (oz)	6	6	6
Stroke (in)	10	10	10
External dia. (in)	4.75 ±0.2	5 ±0.25	Varies

"A" spool is standard for 3K and "B" for 6K and 12K. "Z" spool is un-metered.

HTA-7C 3K EP01 may also be available in center pull packages. Other spool sizes may be available to special order. Please consult your sales representative.

Spool designation	A	B
Nominal length (yd)	5,400 (3K)	5,400 (6K); 2,700 (12K)
No. spools per carton	20	12
Carton weight (lb)	44.1	52.9
Carton dimensions (in)	24.8 x 20.1 x 11.6 (H)	24.8 x 20.1 x 11.6 (H)
Pallet dimensions (in)	40.6 x 50.8 x 41.5 (H)	40.6 x 50.8 x 41.5 (H)
Approx. Pallet weight (lb)	529	635

12-14 cartons per pallet. Height of pallet not included in dimensions. The pallet size may be changed without notice.

AMERICAS

Toho Tenax America, Inc.  
121 Cardiff Valley Road  
Rockwood  
TN 37854-4134  
Tel (800) 252-3001 or (865) 354-8408  
<http://www.tohotenaxamerica.com>

ASIA

Toho Tenax Co. Ltd.  
2-38-16 Hongo  
Bunkyo-ku  
Tokyo, 113-8404 Japan  
Tel +81 (3) 5842-3695  
<http://www.tohotenax.com>

EUROPE

Toho Tenax Europe GmbH  
Kasinostraße 19-21  
Wuppertal 42103  
Germany  
Tel +49 (202) 322339  
<http://www.tohotenax-eu.com>

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