

### DATA SHEET CARBON FABRIC

Carbon fiber, also referred to as graphite fiber, is one of the strongest and stiffest reinforcements available. When properly engineered, carbon fiber advanced composites can achieve the strength and stiffness of metal parts at significant weight savings.

In addition to the high strength-to-weight and stiffness-to-weight ratios, carbon fibers are thermally and electrically conductive, have very low thermal expansion coefficients and have excellent fatigue resistance. The impact resistance of carbon fiber laminates, however, is less than most other composite materials. When first introduced to the commercial market, carbon fiber reinforcements were referred to as HMG or "high-modulus-graphite"; this was a reference to the high modulus of carbon fiber when compared with other available materials. Today that is somewhat of a misnomer. Standard yarn supplied to the commercial market is typically 530 KSI tensile strength, 34 MSI tensile modulus carbon fiber. Several yarn suppliers offer products with near identical properties considered interchangeable for all but the most stringent applications. High performance carbon fibers with increased tensile strength and/or modulus are available.



# DATA SHEET CARBON FIBERS

FABRIC STYLE WEAVE				COUNT WARP FILL		
272*	Crowfoot	5.5	8.5	12 X 12	3K	3K
282*	Plain	5.7	9.0	12.5 X 12.5	3K	3K
433	5-HS	8.4	10.5	18 X 18	3K	3K
584*	8-HS	10 .5	13.5	24 X 24	3K	3K
613	5-HS	11.0	15.0	12 X 12	6K	6K
690	2X2 Basket	19.3	27.0	10 X 10	12K	12K

<sup>\*</sup>Certified to BMS 9-8



### DATA SHEET FIBERGLASS CLOTH

Hawkeye International, Ltd. offers a wide range of fiberglass fabrics. Hawkeye has the capabilities to supply all Mil Spec C9084 fabrics, all types and classes. Listed below is a small sampling of our fiberglass products.

STYLE	WEAVE	COUNT	WEIGHT OZ/YD2 (G/M2)	THICKNESS INCHES (mm)
120	Crowfoot	60 X 58	3.16 (107.14)	.0035" (.0889 mm)
1581	8H Sat	57 X 5	8.90 (301.75)	.0080" (.2032mm)
1527	Plain	17 X 17	12.30 (417.03)	.0150" (.3810mm)
1543	Crowfoot	49 X 30	8.50 (288.19)	.0080" (.2032mm)
1800	Plain	16 X 14	9.80 (3332.27)	.0120(3048mm)
3733	Plain	18 X 18	5.80 (196.65)	.0080" ( .2032mm)
7500	Plain	16 X 14	9.60 (325.49)	.0110" (.2794mm)
7544	Plain	28 X 14	18.00 (610.29)	.0200" (.5080mm)
7587	Mock Leno	40 X 21	20.50 (695.05)	.0300" (.7620mm)
7597	12H Satin	30 X 30	38.50 (1,305.34)	.0440" (1.1176mm)
7781	8H Satin	57 X 54	8.90 (301.75)	.0080" (.2286mm)
SCRIM	1	00 V 10	4.00 (54.05)	0040" (4007)
659	Leno	20 X 10	1.60 (54.25)	.0042" (.1067mm)
658	Plain	20 X 10	1.60 (54.25)	.0042" (.1067mm)



### DATA SHEET HK2800 FIBERGLASS TAPE

HK2800 Fiberglass Tapes are narrow width woven fabrics for use in plastic shop or metal bond areas. Tapes range from one inch to twelve inches in width. They can be used as reinforcement in production of laminates or as narrow bleeder or breather fabrics in plastics, metal bond and composite structures.

Provided in "tape" form, it eliminates the many frayed edges and loose strands that result from merely piece-cutting broader fiberglass fabrics. This will lower complaints from shop personnel who find it difficult working with glass fabrics.

#### **SPECIFICATIONS**

Thickness: .012" OZ/Sq Yard: 8.71

Roll Size: 50 Yards (3 inch core)
Finish: Greige or volan-type finish



#### **DATA SHEET**

#### **KEVLAR FABRICS**

#### **KEVLAR 49 FABRICS**

FABRIC STYLE	WEAVE	WEIG OZ/SQ. YD	HT (MILS)	THICKNESS WARP	COUNT FILL WARP	YARN FILL
120	Plain	1.8	4.5	34 x 34	195 de	195 de
281	Plain	5.0	10.0	17 x 17	1140 de	1140 de
285	Crowfoot	5.0	10.0	17 x 17	1140 de	1140 de
328	Plain	6.4	13.0	17 x 17	1420 de	1420 de
500	Plain	5.0	10.0	13 x 13	1420 de	1420 de
900	5-HS	9.0	13.0	17 x 17	2160 de	2160 de
1350	4x4 Basket	13.5	29.0	26 x 22	2160 de	2160 de
1033	8x8 Basket	16.0	31.0	40 x 40	1420 de	1420 de



## DATA SHEET KEVLAR 29 FABRICS

FABRIC STYLE	WEAVE	WEIGHT OZ/SQ. YD	THICKNESS (MILS)	COUNT WARP FIL	YARN <u>L Warp Fill</u>
7.10	D	0.0	47.0	04 04	4500   4500
710	Plain	9.6	17.0	24 x 24	1500 de 1500 de
713	Plain	8.3	15.0	31 x 31	1000 de 1000 de
728	Plain	6.7	12.0	17 x 17	1500 de 1500 de
735	2x2 Basket	14.3	25.0	35 x 35	1500 de 1500 de
K29/16DP	4x4 Basket	16.5	25.7	21 x 21	3000 de 3000 de
K39/20DP	4x4 Basket	19.7	38.0	24 x 24	3000 de 3000 de