SOFT ARMOR

Barrday is a leading advanced material solutions provider. We develop products for the protective and composite markets.

We work closely with our suppliers and customers in military and law enforcement markets to design and develop innovative body armor materials using the latest manufacturing technologies. We have a manufacturing and sales presence in the Americas, Europe and Middle East/Asia.

WOVEN FABRICS

With more than 50 years of experience, we use state of the art equipment and processes to meet customer requirements including ballistic performance, flexibility and weight.

SOS

A patented, multi-layer, non-crimp product that reduces layup time while providing improved fabric stability and ballistic performance.

WATER REPELLENCY

A proprietary treatment that repels wicking of aramid fibers in wet conditions.

MICROLAM

Two woven fabrics lightly laminated together to improve ballistic performance and ease of lay up.

UNI-DIRECTIONAL PRODUCTS

Our advanced unidirectional materials are two or four layers of cross-plied product combined with our proprietary resin technology. Our products utilize various fiber grades of aramid and ultra-high molecular weight polyethylene. These products can be used in standalone designs or hybridized with other materials.

MULTI-THREAT PROTECTION

We offer a range of products designed to withstand bullets, knives, spikes and/to reduce blunt force trauma.

ARGUS/SPARTA

Woven and laminated products offering excellent knife and spike protection with enhanced ballistic protection.

LAMINADO

Woven and laminated material designed to reduce trauma.

PRIMO

A light-weight fabric with unsurpassed spike resistance.

FABRIC STYLE	PRODUCT	AREAL DENSITY		PERFORMANCE		FEATURES AND BENEFITS
		(G/M²)	(OZ/YD²)	9MM V50 (FT/S)	PACKAGE WEIGHT (PSF)	
UNIDIRECTIONAL MATERIALS						
UP750	4 ply Polyethylene UD	198	5.83	1755	0.73	High performance Polyethylene UD
U730	4 ply Polyethylene UD	177	5.22	1610	0.73	Available for Latin America region
U600	4 ply Aramid UD	238	7.00	1540	0.78	Highest performance Aramid UD
U590 / U611	4 ply Aramid UD	238	7.02	1540 / 1500	0.80	High protection levels against NIJ threats. Excellent trauma management. Option for low cost solutions
U650 / U1661	2 ply Aramid UD	114	3.36	1590 / 1560	0.80 / 0.79	Higher V50 and lower BFD in NIJ solutions. Improved flexibility. Exceptional abrasion and solvent resistance.
UA655	2 ply Aramid UD	122	3.60	1526	0.84	Water resistant Aramid UD
PROPRIETARY WEAVES						
1250	500 denier SOS™	337	9.94	1480	0.72	SOS™ multi-layer woven fabric allows for maximum fiber engagement and entanglement of the bullet or fragment causing rapid expansion and deformation of the projectile. Ideal for Military Soft Armor Applications.
1232	600 denier SOS™	390	11.50	1430	0.76	
A966	1000 denier SOS™	419	12.36			Great hand and extremely flexible.
*The SOS platform enables other deniers to reach maximum ballistic value and ease of layup.						
PLAIN WEAVES						
1187	500 denier (550 dtex)	112	3.30	1490	0.77	Superior fragmentation and bullet protection
1129	840 denier (930 dtex)	142	4.20	1470	0.78	Fragmentation and bullet protection
1028	500 denier (550 dtex)	122	3.60	1420	0.78	Fragmentation protection
1013	3000 denier (3300 dtex)	460	13.60			Cost competitive solution for fragmentation protection such as blanket applications
MICROLAM TECHNOLOGY						
1009	1500 denier (1680 dtex)	685	17.30	1320	0.75	Enhanced bullet resistance and fragmentation protection as well as offering trauma mitigation
1006	3000 denier (3300 dtex)	604	17.80	1450	1.16	Cost competitive bullet resistance designed for reduced package lay up
MULTITHREAT PROTECTION						
Sparta™	61" W x 96" L	175	5.20	Ultra light weight; knife, spike and ballistic composite sheet		
Argus®	48" W x 96" L	320	9.44	Knife and spike protection, and enhanced ballistic performance		
SPIKE PROTECTION AND TRAUMA MITIGATION						
Primo™ 1148	63" wide	158	4.70	Light weight superior spike resistance		
Laminado 1017 / 1012	63" wide	516 / 532	15.20 / 16.58	Trauma reduction, ballistic and knife protection		