

**KEVLAR® DISTRIBUTION PROGRAM**

FIBERS PROCESSES PRODUCTS

**WHY FIBER-LINE® DUPONT™ DISTRIBUTION PROGRAM?****Key Features**

- Purchase small quantities of Kevlar® Para-Aramid
- Many deniers & types available
- Customize your Kevlar® solution with FIBER-LINE® performance adding processes

FIBER-LINE® values its relationships with both its customers and suppliers. Over the past several years, FIBER-LINE® and DuPont™ have formed a strong partnership based upon the synergies between both organizations.

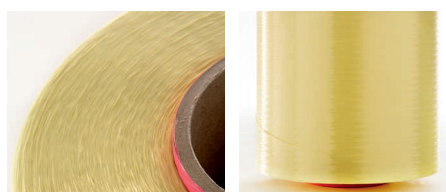
FIBER-LINE®'s ability to add value to the already attractive properties of both Kevlar® Para-Aramid & Nomex® Meta-Aramid creates more opportunity in the market place to provide solution driven products to a diverse range of markets.

Because FIBER-LINE® already processes so many different types and deniers of both Kevlar® & Nomex®, FIBER-LINE® have been authorized by DuPont™ to distribute small quantities of these fibers to an ever-growing customer base.

Through this program, we hope to introduce businesses of all sizes to the benefit of aramid fibers. Contact us today for small order quantity orders.

**Available Deniers**

200, 380, 400, 750AP, 800AP, 1000, 1000AP, 1420, 1500, 1500AP, 1500BK(Black), 2160, 2250, 2840, 3000, 7100.



**KEVLAR® PARA-ARAMID (HM) BARE FIBER PERFORMANCE**

Abrasion Resistance	Yarn on Yarn Abrasion	Ultraviolet (UV) Resistance	Flame Resistance	Chemical Resistance (Acid)	Chemical Resistance (Alkali)	Chemical Resistance (Organic Solvent)
✓	O	X	✓	✓	✓	✓

**CHEMICAL COMPATIBILITY**

**Chemical Resistance to Acid:** Degrades in Formic, Hydrochloric, and Sodium Hydroxide acid.

**Chemical Resistance to Alkali:** Strong alkalis will attack at high temperature or concentration.

**Chemical Resistance to Organic Solvent:** Degrades moderately in Carbon Tetrachloride and Ethylene Glycol/Water.

**KEVLAR® PARA-ARAMID DATA****Standard Modulus**

Property	UOM	Value
Breaking Tenacity	g/d	23.0
Specific Gravity	Ratio	1.44
Elongation @ Break	%	3.5
Tensile Modulus	g/d	555
Moisture Regain*	%	5.0
Creep**	%	<0.03
Shrinkage***	%	<0.02
Melt Point	°C	None
Decomposition Temp.	°C	425-480

**High Modulus**

Property	UOM	Value
Breaking Tenacity	g/d	23.6
Specific Gravity	Ratio	1.44
Elongation @ Break	%	2.5
Tensile Modulus	g/d	885
Moisture Regain*	%	5.0
Creep**	%	<0.03
Shrinkage***	%	<0.02
Melt Point	°C	None
Decomposition Temp.	°C	425-480

\* Equilibrium moisture regain @ 55% RH    \*\* Creep @ 40%-58% ultimate tensile strength    \*\*\* Shrinkage in dry air @ 177 C for 30 minutes

This data is provided for informational purposes only, and does not constitute a specification. FIBER-LINE® makes no warranty, express or implied, that the product conforms to these values. Contact your FIBER-LINE® representative for exact product details which conform to your specific requirements.

## ABOUT FIBER-LINE®

For over 25 years, FIBER-LINE® has provided science-driven expertise that improves the performance and the end-use processing of high performance fibers. Our products enable the search for new energy reserves and extend the life of fiber optic telecommunication cables. They also add important characteristics, such as SWELLCOAT® water-blocking, water repellence, adhesion, color, and wear and UV-resistance to these and many other applications. We believe that our ongoing commitment to protect the environment, to remain at the forefront of fiber and coating technology, and to 'treat others as we want to be treated' will continue to drive the success of our customers, shareholders, and employees.

### DUPONT™ PARTNERSHIP

- FIBER-LINE® values its relationships with both its customers and suppliers. Over the last several years, FIBER-LINE® and DuPont™ have formed a strong partnership based upon the synergies between both organizations.
- FIBER-LINE®'s ability to add value to the already attractive properties of both Kevlar® Para-Aramid & Nomex® Meta-Aramid creates more opportunity in the market place to provide solution driven products to a diverse range of markets.
- Because FIBER-LINE® already processes so many different types and deniers of both Kevlar® & Nomex®, we have been authorized by DuPont™ to distribute small quantities of these fibers to an ever-growing customer base.
- Through this program, we hope to introduce businesses of all sizes to the benefit of Aramid fibers. Contact us today for small order quantity orders.



### LOCATIONS

#### Headquarters, R&D, Manufacturing

FIBER-LINE® LLC  
3050 Campus Drive  
Hatfield, PA 19440  
+1 215.997.9181  
fiber@fiber-line.com

#### Manufacturing Operations

FIBER-LINE® LLC  
280 Performance Drive SE  
Hickory, NC 28602  
+1 828.326.8700  
fiber@fiber-line.com

#### EMEA & Asia Pacific Operations

FIBER-LINE® INTERNATIONAL B.V.  
Uranusweg 3  
8938 AJ Leeuwarden  
The Netherlands  
+31(0) 58 216 75 99  
info@fiber-line.com