



**Additional Lubrizol Apparel Technologies:**

- Hot Melt Adhesives
- Films
- Performance Coatings

Visit [www.lubrizol.com/Engineered-Polymers](http://www.lubrizol.com/Engineered-Polymers) to learn more

**Innovation Alliance**

In an effort to deliver the most revolutionary fiber available, Lubrizol has partnered with a select group of supply chain experts to bring X4zol™-J to the global marketplace. Visit our website for a list of partner companies.

**Website:** [www.x4jfiber.com](http://www.x4jfiber.com) **Email:** [x4j@lubrizol.com](mailto:x4j@lubrizol.com)

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**PRODUCT SELECTION GUIDE**  
fiber technology



## X4zol™-J Fiber

Lubrizol X4zol™-J, a thermoplastic polyurethane (TPU), is a new elastomeric monofilament that is manufactured differently from spandex, resulting in unique qualities that provide comfort above and beyond traditional stretch fibers. X4zol™-J is produced through a process of melt extrusion, which does not require the use of solvents. The melt extrusion process is cleaner; resulting in a finer and stronger monofilament than traditional spandex, exhibiting a superior stretch.

## Benefits of X4zol™-J in Fabrics

- Thinner, stronger and more durable
- Comfortable compression
- Breathable, faster drying and cooling sensation
- Balanced 360° stretch for enhanced fit
- Sustainable benefits – solvent free, lower process temperatures and recyclable\* fiber
- Chlorine and UV resistance

X4zol™ - J PRODUCTS		KNITTING PROCESS						APPAREL APPLICATIONS										
Denier (g/9000m)	Color, Luster	Circular	Warp	Seamless	Flat-Bed	Wovens	Socks/Hosiery	Performance Wear	Baselayer	Intimates	Denim	Athleisure/Yoga	Narrow Elastics	Swimwear	Socks	Hosiery	Footwear Uppers	Military/PPE
20D UV	Bright						★			★					★	★		
40D UV	Bright	★	★	★	★	★	★	★		★		★	★	★	★			
70D UV	Bright	★	★	★	★	★		★	★	★	★	★	★	★			★	★
140D UV	Bright	★	★	★	★	★		★	★	★		★		★			★	★
360D WHT	Semi-Dull	★	★	★	★	★				★		★	★					
1080D WHT	Semi-Dull	★	★	★	★	★				★		★	★					

**Compatible Yarns with X4zol™-J:** Nylon, Cotton, Wool, Polyester\*\*

**Fabric Construction Examples:** Stretch Fleece, Single/Double Jersey, Spacer Fabrics, Lingerie Elastics, Satin Tricot

**Covered Yarn Application Examples:** Cotton-Denim, Nylon - Lingerie/Hosiery/Socks/Seamless Knits, Wool Knits

**For Custom Deniers and Colors Contact:** [x4j@lubrizol.com](mailto:x4j@lubrizol.com)

\*Recyclability is based on access to a readily available standard recycling program that supports such materials. Products may not be available in all areas.

\*\*Maximum recommended dyeing temperature is 115°C

