Benefits of X4zol™-J in Denim Fabrics

- Comfortable compression for the perfect fit
- Breathable, faster drying and cooling sensation
- Stronger and more durable
- Sustainable benefits – solvent free, lower process temperatures and recyclable fiber

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

Lubrizol's Innovation Alliance Partner for Denim
www.x4jol.com

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A Revolution in Comfort

Lubrizol’s innovative new fiber takes apparel fit to the next generation as it provides balanced comfortable stretch and support, cooling sensation, breathability and sustainable benefits.

The Technology

Lubrizol X4zol™-J, a thermoplastic polyurethane (TPU) fiber, 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 created through solvent-free melt extrusion, which is a cleaner process that produces a finer and stronger elastomeric fiber than traditional spandex.

Performance: X4zol™-J vs. spandex

Most spandex fibers exhibit a steeper stress/strain curve, illustrating low initial resistance to stretch, or elongation; and then a rapid increase in resistance to the point of full elongation, or breakage. The stress/strain curve of the fabrics containing X4zol™-J illustrate a softer, more consistent stretch up to the point of full elongation — tracing a J-shape that translates into comfortable compression for the wearer.

X4zol™-J: Size, Shape and Softness

X4zol™-J is a monofilament compared to multi-filament spandex. X4zol™-J also has a higher molecular weight. The combination of these two properties translates to a thinner, stronger/durable and softer fiber.

X4zol™-J: Comfort and Enhanced Fit

Body scans of denim fabrics (The Hohenstein Institute®) — improved sculpting, contouring and shaping with X4zol™-J.

X4zol™-J: Moisture Management and Cooling

Fabrics containing X4zol™-J can provide improved body temperature control vs. those containing spandex.