

**WHY TECHNORA®?****Key Features**

- High tenacity & modulus
- Excellent abrasion & fatigue resistance
- Excellent chemical & steam resistance
- Very low creep
- High thermal stability
- Lower moisture regain than other para-aramids

**Disadvantages**

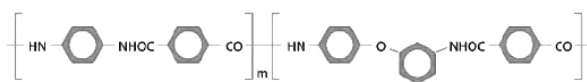
- Lower modulus compared to carbon and high modulus para-aramids
- Poor UV resistance

**FIBER-LINE® PROCESS FOR TECHNORA®**

- Coating
- Twisting
- Polymer Jacket Extrusion
- Stranding
- Overbraiding
- Precision Winding

**FIBER-LINE® TECHNORA® PRODUCTS**

- Ripcords
- Strength Members
- Industrial Fabric Yarn
- Wire Harness Yarn
- Drive Belt & Hose Reinforcement
- Synthetic Wire Rope

**Molecular Structure****Chemical Name**

Diaminodiphenylether-para-phenylenediamine-terephthaloyldichloride.

**Manufacturer**

Teijin™.

**History**

Technora® was first made commercially available in 1987.

**Composition**

Technora® is an aromatic copolyamide that has a highly oriented molecular structure, consisting of both para and meta linkages. Technora is produced by condensation polymerization of different copolymers, yielding a high modulus, low creep, and thermally stable fiber.

**Common Deniers**

200, 400, 720, 1000, 1500.

**Types**

- T-200 Rubber Reinforcement.
- T221, T220N Rope, Cable, Cord.
- T-240 Fabrics, Composites.



**TECHNORA®**

Abrasion Resistance	Ultraviolet (UV) Resistance	Flame Resistance	Chemical Resistance (Acid)	Chemical Resistance (Alkali)	Chemical Resistance (Organic Solvent)	Strength Retention (H <sup>2</sup> 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.

**TECHNORA® DATA**

**Standard Modulus**

Property	UOM	Value
Breaking Tenacity	g/d	28
Specific Gravity	Ratio	1.39
Elongation @ Break	%	4.6
Tensile Modulus	g/d	590
Moisture Regain*	%	2.0
Creep**	%	< 1.5
Shrinkage***	%	< 0.1
Melt Point	°C	N/A
Decomposition Temp.	°C	500

\* 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.



### LOCATIONS

#### Headquarters, R&D, Manufacturing

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