

WHY PET POLYESTER?

Key Features

- Good chemical resistance
- Hydrophobic
- Good abrasion resistance
- Good tensile strength

Disadvantages

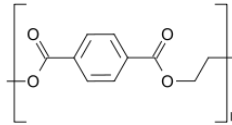
- Flammable
- Dissolves in strong alkalis
- Susceptible to creep

**FIBER-LINE® PROCESS FOR
PET POLYESTER**

- Coating
- Twisting
- Extrusion
- Precision Winding

**FIBER-LINE® PET POLYESTER
PRODUCTS**

- Swellcoat® Binder Yarn
- Swellcoat® Buffer Thread
- Swellcoat® Filler Yarn
- Ripcords
- Round Sling Core Yarn

Molecular Structure**Chemical Name**

Polyethylene terephthalate.

Manufacturer

FIBER-LINE® works with a variety of PET Polyester manufacturers.

History

PET is the most common thermoplastic polymer in the polyester family. The first US commercial polyester fiber production was completed in 1953 by DuPont™ under the name Dacron. It is the same polymer resin utilized in the plastic bottle industry.

Composition

PET is produced in a melt spun and drawing process. The three processes utilized in the production of PET fiber are polymerization, melt-spinning, and drawing or hot stretching the fibers based upon their elongation requirements.

Size

50 – 3000 denier.

Types

High Tenacity, Low Shrink, Ultra Low Shrink.



PET POLYESTER BARE FIBER PERFORMANCE

Abrasion Resistance	Yarn on Yarn Abrasion	Ultraviolet (UV) Resistance	Flame Resistance	Chemical Resistance (Acid)	Chemical Resistance (Alkali)	Chemical Resistance (Organic Solvent)
✓	✓	✓	X	✓	0	✓

PET POLYESTER DATA

High Tenacity

Low Shrink

Property	UOM	Value
Breaking Tenacity	g/d	9.3
Specific Gravity	Ratio	1.38
Elongation @ Break	%	14.6
Tensile Modulus	g/d	120
Moisture Regain*	%	0.4
Creep**	%	1.0 – 12.0
Shrinkage***	%	8.0 – 15.0
Melt Point	°C	256
Decomposition Temp.	°C	TBD

Property	UOM	Value
Breaking Tenacity	g/d	8.4
Specific Gravity	Ratio	1.38
Elongation @ Break	%	19.5
Tensile Modulus	g/d	70
Moisture Regain*	%	0.4
Creep**	%	1.0 – 12.0
Shrinkage***	%	3.0 – 8.0
Melt Point	°C	256
Decomposition Temp.	°C	TBD

* 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

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