



ADVANCED POLYMER SCIENCE FOR NEW TECHNOLOGIES

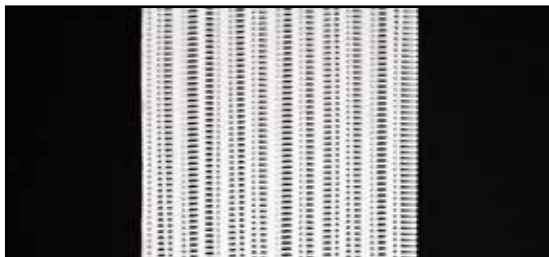
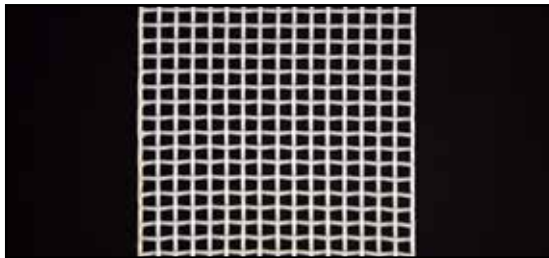


Standard and Customized Performance Fiber

Zeus offers an arsenal of fibers that have diverse properties, including tensile strength, chemical inertness, and optical clarity. These lightweight fibers also have superior friction and wear properties when used in abrasive environments. Zeus' standard fiber offering includes fibers made from PEEK, PFA, FEP, ETFE, and ECTFE, but customized fibers may be developed upon request.

Zeus' fiber allows more flexibility and options in aerospace, semiconductor, and chemical applications. Able to withstand challenging environments, PEEK Fiber performs well in extreme temperatures up to 500°F/260°C and can be used to create a braided sleeve or over-braid that is expandable and flexible. PFA Fiber is used to make meshes and filters for semiconductor applications where its purity and resistance to chemical attack ensure a long service life. With a luminous transmittance of 96%, FEP is the most optically clear performance fiber available. ETFE Fiber is radiation resistant and allows for repeated Gamma sterilization without any adverse effect on its mechanical properties. With properties that approach those of high performance materials, but without the associated costs, ECTFE Fiber is a cost-effective option.

Capitalizing on more than 40 years of polymer experience, Zeus continues to provide superior products with the highest standards of quality and control. Zeus extrudes fibers in strands with sizes ranging from .003-.040 inches. Custom monofilament and coloring for braiding identification are also available.





PERFORMANCE FIBER KEY PROPERTIES

PEEK Fiber

High tensile strength
Abrasion resistant
Lightweight material

PFA Fiber

Superior purity
Chemical resistant
Long service life

FEP Fiber

Very robust
Luminous transmittance of 96%
Optically clear

ETFE Fiber

Superior mechanical toughness
Chemical inertness
Radiation resistant

ECTFE (Halar) Fiber

Impact and temperature resistant
Superior surface smoothness
Excellent value

PVDF (Kynar) Fiber

UV stability
Mechanically tough
Abrasion resistant

PEEK FIBER SPECIFICATIONS (Natural or Black)

SPECIFICATION	0.010" Diameter	0.011" Diameter	0.016" Diameter	UNITS
MIN OD	0.0085	0.0095	0.0145	inches
MAX OD	0.0115	0.0125	0.0175	inches
AVG OD - 3 STD DEV	0.0085	0.0095	0.0145	inches
AVG OD + 3 STD DEV	0.0115	0.0125	0.0145	inches
MIN TENSILE STRENGTH	4	5.5	11	lbs
MIN TENACITY	3	3.6	3.7	GPD
MIN REL ELONGATION @ 2 GPD	4	5	5	%
MAX REL ELONGATION @ 2 GPD	9	10	11	%
MIN ELONGATION @ BREAK	18	18	20	%
MAX ELONGATION @ BREAK	30	30	35	%
MIN SHRINKAGE	3	3	2	%
MAX SHRINKAGE	5	5	6	%

Properties based on standard Zeus PEEK Fiber. Custom colors, diameters, and properties available. Contact Zeus to discuss.

► Advancing Your Ideas

Your ideas have the potential to transform the world. The right partners will help you make it happen. Talk to Zeus about how polymer science can advance your ideas. We welcome the opportunity to collaborate with you.