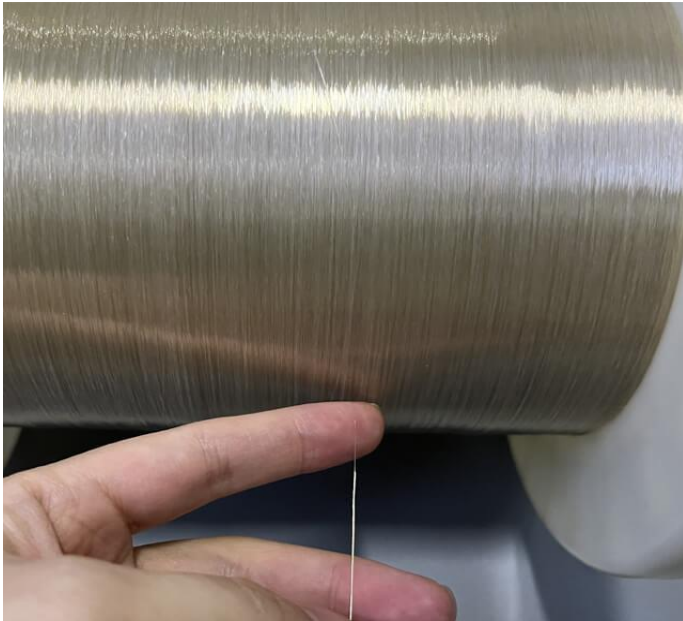


## PEEK Monofilament



ADV is a professional manufacturer of PEEK fibers. We are committed to manufacturing of precise PEEK monofilaments from 0.06mm to 1.00mm in diameter.

Our PEEK fibers are woven into fine and dense woven fabrics, used in fuel filters for airplane and automobiles, braided cable sleeving for high-performance wires and cables, and also used in manufactured conveyor belts, heat-resistant filter cloths for paper, food Process and pharmaceutical industry as well as in technically demanding applications.

### Available Diameter:

0.06; 0.07; 0.10; 0.15; 0.20; 0.28; 0.30; 0.35; 0.38; 0.40; 0.45; 0.50; 0.55; 0.60; 0.70; 0.80; 0.90; 1.00mm; Or Customized.

### Color: Natural & Black

Other colors can be customized

### Characteristics of PEEK Monofilament

#### High temperature resistance and steam resistance:

Long-term use temperature can reach 260°C, and the strength retention rate is high

#### Chemical resistance:

Except for concentrated sulfuric acid, it is insoluble in any other acid, alkali or organic solvent

#### Radiation resistance:

It can withstand the radiation dose of 1100 Mrad and keep its properties stable;

#### High-resistance combustion:

The limiting oxygen index (LOI) is 32, the release of less smoke during combustion, and the toxicity of the smoke;

#### Wear resistance:

Self-lubricating, excellent high temperature wear resistance;

#### Creep resistance, good toughness



### Applications of PEEK Monofilament:

Filter Mesh; Braided sleeving; Conveyor belt; Blended with carbon fiber into a composite material

### Physical Properties of PEEK Monofilament

Item	Unit	Data
Density	g/cm <sup>3</sup>	1.31
Melting Temperature	°C	343
Continuous Using Temperature	°C	260
Glass Transition Temperature	°C	150
Thermal Conductivity	w/m/°C	0.25
Specific Heat	kJ/kg/°C	1.30
Resistance	ohm/cm	5×10 <sup>16</sup>
Hygrosopicity	%	0.1

### Technical Properties of PEEK Monofilament

Item	Unit	Data
Diameter *	mm	Dia.±0.02
Strength	cN/Tex	35 - 45
Elongation at Break	%	20 - 40
Shrinkage(200°C)	%	< 5.0

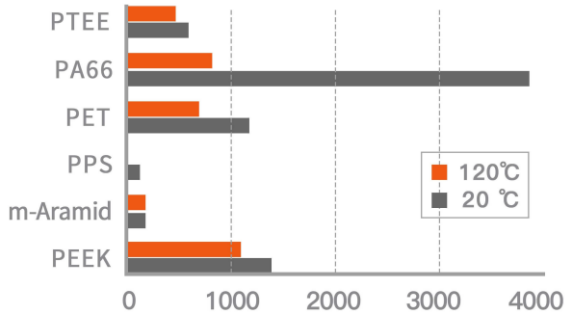
\* Ready Stock Dia.

**0.06 ± 0.003mm, 0.07 ± 0.003mm**

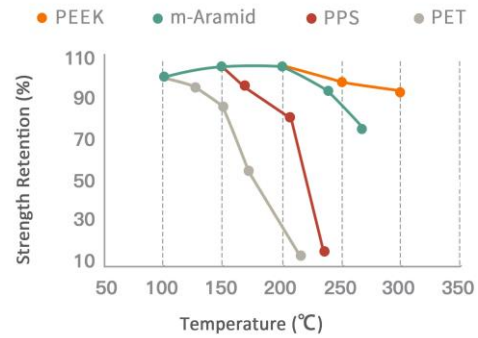
0.10, 0.15, 0.20, 0.28, 0.30, 0.35, 0.38, 0.40, 0.45, 0.50, 0.55, 0.60, 0.70, 0.80, 0.90, 1.00mm

Other customized diameters are available.

## Wear Resistance



## Strength Retentions in Different Temperature



## Chemical Resistance

Reagent	Strength Retention %					
	PEEK	PPS	m-Aramid	PET	PA66	PP
10% Sulfuric Acid	100	100	32	98	0	100
10% Sodium Hydroxide	100	100	36	0	71	100
10% Nitric Acid	100	62	0	0	0	100
Bleaching Liquid	100	36	7	94	7	63
5% Hydrogen Peroxide	100	5	9	94	0	30
Methylene Hydride	94	94	90	93	90	80