

PEEK (polyetheretherketone)

SUSTA® PEEK / TECAPEEK™



PEEK is a strong and stiff plastic material that is often used in applications where performance at elevated temperatures is required. PEEK has outstanding chemical resistance as well as resistance to steam and hot water.

Virgin PEEK is naturally abrasion resistant. Bearing-grade PEEK has enhanced bearing and wear properties.



KEY CHARACTERISTICS:

- Strong and stiff
- Outstanding chemical resistance
- Good mechanical properties at elevated temperatures
- Excellent chemical resistance
- Bearing grade has excellent wear characteristics
- Resistant to hot water and steam
- UL 94 V-0 flammability rating (0.059" thickness)
- Very low smoke and toxic gas emissions when exposed to flame
- Glass-filled grades available
- FDA compliant grades available

APPLICATIONS:

- Semiconductor machinery components
- Aerospace parts
- Seals
- Pump and valve components
- Bearings and bushings (bearing grade)
- Electrical components
- Medical instrument parts
- Food processing machinery components

PEEK TYPICAL PROPERTIES:

	UNITS	ASTM TEST	PEEK	PEEK 30% GLASS-FILLED
Tensile strength	psi	D-638	14,000	24,620
Flexural modulus	psi	D-790	590,000	1,450,000
Izod impact (notched)	ft-lbs/in	D-256	1.6	1.84
Heat deflection temperature @264 psi	°F	D-648	306	599
Maximum continuous service temperature in air	°F		480	482
Water absorption (immersion 24 hours)	%	D-570	0.50	0.11
Coefficient of linear thermal expansion	in/in/°F x 10 ⁻⁵	D-696	2.6	1.2
Coefficient of friction (dynamic)			0.25	0.30

Standard Sizes: SHEET: 24"x48" (0.03"-2.0" thick) ROD: diameter 0.25"-6.0" TUBE: call for availability

Length, width, thickness, and diameter tolerances vary by size and by manufacturer • Custom sizes and colors available upon request • Many of our materials are available as films with thicknesses of 0.029" or less. Values may vary according to brand name. Please ask your Curbell Plastics representative for more specific information about an individual brand.

Curbell Plastics has been supplying plastic sheet, rod, tube, films, adhesives, sealants, and prototyping materials for over 65 years



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