

ULTEM® (polyetherimide)

SUSTA® PEI / TECAPEI™



Ultem® is a semi-transparent high strength plastic material that can operate in high service temperature environments. Ultem® is resistant to hot water and steam and can withstand repeated cycles in a steam autoclave. Ultem® has outstanding electrical properties, with one of the highest dielectric strengths of any thermoplastic material. Ultem® is often used instead of polysulfone when superior strength, stiffness, or temperature resistance is required.

Ultem® is available in glass-filled grades with enhanced strength and stiffness.



KEY CHARACTERISTICS:

- Extremely strong and stiff
- High dielectric strength
- Resistant to hydrolysis when exposed to hot water and steam
- Can withstand repeated sterilization cycles in a steam autoclave
- Good thermoforming properties
- FDA compliant grades available
- USP Class VI compliant grades available
- Available in a wide variety of colors

APPLICATIONS:

- Medical instrument components
- Scientific equipment parts
- Manifolds
- Electrical connectors
- Electrical insulation parts
- Semiconductor equipment components
- Chip test sockets

ULTEM® TYPICAL PROPERTIES:

	UNITS	ASTM TEST	ULTEM®
Tensile strength	psi	D-638	15,200
Flexural modulus	psi	D-790	480,000
Izod impact (notched)	ft-lbs/in of notch	D-256	1.0
Heat deflection temperature @264 psi	°F	D-648	392
Maximum continuous service temperature in air	°F		338
Water absorption (immersion 24 hours)	%	D-570	0.25
Coefficient of linear thermal expansion	in/in/°F x 10 ⁻⁵	D-696	3.1

Standard Sizes: SHEET: 24"x48" (0.03"-4.0" thick) ROD: diameter 0.25"-8.0"

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



NATIONWIDE
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