

RADEL R[®] (polyphenylsulfone)



Radel R[®] is a high temperature thermoplastic material with outstanding impact resistance. Radel R[®] is resistant to hot water and steam and can withstand repeated cycles in a steam autoclave. Radel R[®] is often used instead of polysulfone or Ultem[®] for medical applications when superior toughness or extended service life with repeated autoclave cycles is desired.



KEY CHARACTERISTICS:

- Extremely high impact resistance
- Resistant to hydrolysis when exposed to hot water and steam
- Can withstand repeated sterilization cycles in a steam autoclave
- Thermoforms well
- USP Class VI compliant grades available
- Available in a wide variety of colors

APPLICATIONS:

- Medical instrument components
- Sterilization trays
- Implant trials

RADEL R[®] TYPICAL PROPERTIES:

	UNITS	ASTM TEST	RADEL R [®]
Tensile strength	psi	D-638	10,100
Flexural modulus	psi	D-790	350,000
Izod impact (notched)	ft-lbs/in of notch	D-256	13.0
Heat deflection temperature @264 psi	°F	D-648	405
Maximum continuous service temperature in air	°F		392
Water absorption (immersion 24 hours)	%	D-570	0.37
Coefficient of linear thermal expansion	in/in/°F x 10 ⁻⁵	D-696	3.1

Standard Sizes: SHEET: 24"x48" (0.25"-4.0" thick) ROD: diameter 0.25"-6.0"

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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