



PRODUCT CAPABILITIES:

- Rod : 1/2" - 3"
- Sheet : 3/8" - 2"

ADVANTAGES:

- High HDT of 207°C (405°F)
- Superior Toughness and Impact Strength
- Exceptional Long-term Hydrolytic Stability
- Better Chemical Resistance Than PSU and PEI
- Withstands Over 1,000 Cycles of Steam Sterilization Without Any Significant Loss of Properties
- Inherently Flame Retardant

PRODUCT COLORS:

- Black
- Natural (White)

APPLICATIONS INCLUDE:

- Sterilization Cases and Trays
- Dental and Surgical Instruments
- Medical Devices
- Aircraft Interiors
- Airline Catering Trolleys
- Hot Water Fittings
- Plumbing Manifolds
- Food Service Trays

GENERAL PROPERTIES	ASTM or UL Test	RADEL® R5500 Typical Values
PHYSICAL		
Specific Gravity (g/cm ³)	D792	1.29
Water Absorption, 24 hrs (%)	D570	0.37
MECHANICAL		
Tensile Strength (psi)	D638	11,000
Tensile Modulus (psi)	D638	340,000
Tensile Elongation at Break (%)	D638	60 to 120
Flexural Strength (psi)	D790	13,200
Flexural Modulus (psi)	D790	350,000
Compressive Strength (psi)	D695	14,000
Compressive Modulus (psi)	D695	–
Hardness, Shore D	2240	D80
IZOD Notched Impact (ft-lb/in)	D256	13
THERMAL		
Coeff. of Thermal Expansion (x 10 ⁻⁵ in./in./°F)	D696	3.1
Heat Deflection Temp (°F) @ 264 psi	D648	405
Max Operating Temp (°F)	–	–
Thermal Conductivity (BTU-in/ft ² -hr-°F)	C177	2.42
Flammability Rating	UL-94	V-0
ELECTRICAL		
Dielectric Strength (volts / mil)	D149	370
Dielectric Constant at 1 MHz	D150	3.4
Dielectric Factor at 1 MHz	D150	0.0002
Volume Resistivity (ohm-cm)	D257	10 ¹⁶

NOTE: The information contained here in is typical values intended for reference only. They should NOT be used as a basis for design specifications or quality control.