



** DURATRON® is the registered trademark of

QUADRANT

PRODUCT CAPABILITIES:

- Rod : 3/8" – 1.25"
- Heavy Gauge Sheet : 3/8" - 2"

ADVANTAGES:

- Easily Machined From A Broad Range Of Shapes - Rod, Sheet, Tubular Forms
- High Strength, Tough And Dimensionally Stable
- Lightweight, Lubrication-Free
- Good Performance At Elevated Temperature (>600 F)
- Better Chemical Resistance

PRODUCT COLORS:

- Natural (Chestnut)

APPLICATIONS INCLUDE:

- Structural And Wear Parts For Semiconductor And Electronics Manufacturing
- Valve & Pump Seats, Seals And Wear Surfaces
- Fixtures And Handling Parts For Glass & Plastics Manufacturing
- Metal Replacement For Aerospace Components
- Wafer Handling Tools

GENERAL PROPERTIES	ASTM or UL Test	DURATRON 7000 Typical Values
PHYSICAL		
Specific Gravity (g/cm ³)	D792	1.40
Water Absorption, 24 hrs (%)	D570	0.70
MECHANICAL		
Tensile Strength (psi)	D638	17,500
Tensile Modulus (psi)	D638	583,000
Tensile Elongation at Break (%)	D638	6.0
Flexural Strength (psi)	D790	20,000
Flexural Modulus (psi)	D790	550,000
Compressive Strength (psi)	D695	27,000
Compressive Modulus (psi)	D695	380,000
Hardness, Rockwell	D785	R128
IZOD Notched Impact (ft-lb/in)	D256	1.0
THERMAL		
Coeff. of Thermal Expansion(x 10 ⁻⁵ in./in./°F)	E831	2.25
Heat Deflection Temp (°F / °C) @ 264 psi	D648	670 / 354
Glass Transition Temp (°F / °C)	D3418	690 / 366
Max Operating Temp (°F / °C)	-	500 / 260
Thermal Conductivity (BTU-in/ft ² -hr-°F)	E1530	1.5
Flammability Rating	UL94	V-0
ELECTRICAL		
Dielectric Strength (kV/in) short time, 1/8" thk	D149	395
Dielectric Constant at 1 MHz	D150	3.2
Dissipation Factor at 1 MHz	D150	0.005
Surface Resistivity (ohm/sq)at 50% RH	EOS/ESD S11.11	> 10 ¹³

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.