



** DURATRON® is the registered trademark of

QUADRANT

PRODUCT CAPABILITIES:

- Rod : 1/4" - 2"
- Heavy Gauge Sheet : 1/4" - 2"

ADVANTAGES:

- High Performance Amorphous (Non-Crystalline) Engineering Plastics
- Lowest Wear Rates And Highest PV Capability
- Lowest Wear To Mating Surfaces
- Higher Hardness Than Other Polyimides
- Lowest Thermal Expansion Than Other Polyimides
- Better Chemical Resistance
- High Purity Levels

PRODUCT COLORS:

- Yellow

APPLICATIONS INCLUDE:

- Wafer Rings
- Wand Tips
- Wafer Handling Tools

GENERAL PROPERTIES	ASTM or UL Test	DURATRON® XP Typical Values
PHYSICAL		
Specific Gravity (g/cm ³)	D792	1.4
Water Absorption, 24 hrs (%)	D570	0.4
MECHANICAL		
Tensile Strength (psi)	D638	16,000
Tensile Modulus (psi)	D638	583,000
Tensile Elongation at Break (%)	D638	4
Flexural Strength (psi)	D790	20,000
Flexural Modulus (psi)	D790	600,000
Compressive Strength (psi)	D695	24,000
Compressive Modulus (psi)	D695	450,000
Hardness, Rockwell	D785	M110
IZOD Notched Impact (ft-lb/in)	D256	1.4
THERMAL		
Coeff. of Thermal Expansion (x 10 ⁻⁵ in./in./°F)	D696	2.7
Heat Deflection Temp (°F / °C) @ 264 psi	D648	680 / 360
Glass Transition Temp (°F / °C)	D3418	613 / 323
Max Operating Temp (°F / °C)	-	580 / 304
Thermal Conductivity (BTU-in/ft ² -hr-°F)	F433	1.53
Flammability Rating	UL-94	V-0
ELECTRICAL		
Dielectric Strength (V/mil) short time, 1/8" thk	D149	700
Dielectric Constant at 1 MHz	D150	3.41
Dissipation Factor at 1 KHz	D150	0.0038
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.