



SEMITRON® ESD 520HR

Static Dissipative Reinforced PolyAmidelmide (PAI) / Static Dissipative Reinforced Torlon



** SEMITRON® is the registered trademark of

QUADRANT

PRODUCT CAPABILITIES:

- Sheet : 3/8" - 1.5"
- Rod: 3/8" - 1.25" (custom)

ADVANTAGES:

- Surface And Volume Resistivity In The Range Of 10^{10} to 10^{11} ohms/sq
- High Stiffness / Strength
- Dimensional Stability
- Thermally Stable To Temperature Of 520°F / 270°C Without Degradation

PRODUCT COLORS:

- Khaki Grey

APPLICATIONS INCLUDE:

- Nets
- Sockets
- Contractors
- Semiconductor / Electronic Components
- Handling Components

| GENERAL PROPERTIES | ASTM or UL Test | SEMITRON® ESD 520HR Typical Values |
|---|-----------------|---------------------------------------|
| PHYSICAL | | |
| Specific Gravity (g/cm ³) | D792 | 1.58 |
| Water Absorption, 24 hrs (%) | D570 | 0.6 |
| MECHANICAL | | |
| Tensile Strength (psi) | D638 | 12,000 |
| Tensile Modulus (psi) | D638 | 800,000 |
| Tensile Elongation at Yield (%) | D638 | 3 |
| Flexural Strength (psi) | D790 | 20,000 |
| Flexural Modulus (psi) | D790 | 850,000 |
| Compressive Strength (psi) | D695 | 30,000 |
| Compressive Modulus (psi) | D695 | 600,000 |
| Hardness, Rockwell | D785 | M108 |
| IZOD Notched Impact (ft-lb/in) | D256 | 0.8 |
| THERMAL | | |
| Coeff. of Thermal Expansion (x 10 ⁻⁵ in./in./°F) | E831 | 2.8 |
| Heat Deflection Temp (°F / °C) @ 264 psi | D648 | 520 / 271 |
| Max Operating Temp (°F / °C) | - | 500 / 260 |
| Thermal Conductivity (BTU-in/ft ² -hr-°F) | F433 | 2.6 |
| Flammability Rating | UL-94 | V-O |
| ELECTRICAL | | |
| Dielectric Strength (V/mil) short time, @ 1/8" thk | D149 | - |
| Surface Resistivity (ohm/sq) at 50% RH | EOS/ESD S11.11 | 10^{10} - 10^{11} |

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.