

## Material Data Sheet

**Item:** Glass Epoxy Laminate, Grade NP511ES

**Description:** NP511ES is a woven glass fabric with high temperature, static dissipative epoxy resin. It has excellent mechanical strength and electrical properties at elevated temperatures with a continuous operating temperature of 165°C.

**Availability:** **Laminate Sheets:** Thickness: incremental sizes from .010" – 1.125"  
Sheet Sizes: 36" x 48", 48" x 72"

**Fabricated Parts:** The Gund Company custom fabricates insulation materials to the exact specifications and drawings of our customers.

<b>Typical Properties:</b>	<b>NP511ES</b>
Specific Gravity	1.80
Rockwell Hardness M	98
Water Absorption (.062") (%)	0.22
Tensile Strength (.125") (PSI)	
Lengthwise	60,200
Crosswise	48,000
Compressive Strength(.500") (PSI)	
Flatwise	85,000
Flexural Strength (PSI)	
Lengthwise	83,000
Crosswise	70,000
Izod Impact Strength (.500")(ft-lb/in)	
Lengthwise	13.0
Bonding Strength(.500") (lbs)	1,800
Shear Strength (PSI)	
Perp. to Lamination(.062")	26,000
Maximum Operating Temperature	190°C
Surface Resistivity (Ohms/sq)	10 <sup>5</sup>
Flammability Rating – U.L. 94 Class	HB