



MANUFACTURERS OF
ELECTRICAL INSULATION MATERIALS
 INSULATING COMPONENTS FOR
POWER SYSTEMS EQUIPMENT

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MATERIAL DATA SHEET

Item: HST-II, High Temperature Glass Polyester Insulation Material

Description: HST-II is a specialty grade glass mat, polyester resin insulation material that carries UL thermal recognition of 220 °C (430 °F) electrical and 210 °C (410 °F) mechanical. HST-II also qualifies as an IEEE 220 °C (430 °F) Class R material.

| | | | | |
|----------------------|------------------|--------------|--------------------|---------------------------|
| Availability: | Laminate Sheets: | Thickness: | English units | SI Units |
| | | | 0.032"–2" | 0.8mm–51mm |
| | | Sheet Sizes: | 36"x72" 48"x96" | 91cmx183cm 122cmx244cm |

Fabricated Parts: TheGundCompany custom fabricates insulation materials to the exact specifications and drawings of our customers.

| Key Characteristics: | Test Method | Units - English (SI) | Typical Values |
|---------------------------------|--------------|----------------------------|---------------------|
| Standard Color | | | Light Brown |
| Density | | lbs/in ³ (g/cc) | 0.058(1.61) |
| Specific Gravity | ASTMD-792 | | 1.62 |
| Water Absorption | ASTMD-570 | % | 0.30 |
| Barcol Hardness | | | 52 |
| Flammability | UL94 | | HB |
| Flame Resistance Ignition Time | ASTMD-229-11 | sec | 77 |
| Flame Resistance Burning Time | ASTMD-229-11 | sec | 256 |
| Tensile Strength | ASTMD-638 | psi(MPa) | 13,000(90) |
| Compressive Strength | ASTMD-695 | psi(MPa) | 33,000(228) |
| Flexural Strength | ASTMD-790 | psi(MPa) | 25,000(172) |
| Flexural Modulus of Elasticity | ASTMD-790 | | 1.7x10 ⁶ |
| Bonding Strength (1/2" thick) | ASTMD-229 | psi(MPa) | 1,400(10) |
| Shear Strength | ASTMD-732 | psi(MPa) | 14,000(97) |
| Impact Strength IZOD (Edgewise) | ASTMD-256 | ft-lbs/in | 12 |
| Temperature Class | | °C | 220 |

All of the information, suggestions, and recommendations believed to be accurate; however, the final decision contemplated, the manner of such use, and whether expressed or implied, including, without limitation, warranty of merchantability or fitness for a particular purpose. Under no circumstances shall

tions pertaining to the properties and uses of the product hereinafter based upon tests and termination regarding the suitability of any material described herein for the use of the user. There is no warranty, liability of the user. There is no warranty, liability of the user. There is no warranty, liability of the user.

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| DielectricStrength (Perp. 1/16" Short Time, oil) | ASTMD-149 | V/mil(kV/mm) | 475(17.7) |
| DielectricStrength (Para. StepbyStep) | ASTMD-149 | kV | 62 |
| DissipationFactor(60Hz) | ASTMD-150 | | .010 |
| DielectricConstant(60Hz) | ASTMD-150 | | 4.2 |
| ArcResistance | ASTMD-495 | Sec | 180 |

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