



Global Thermoset Composite Solutions

RT521M

TECHNICAL DATA BULLETIN

GRADE: RT521M

NEMA GRADE: --

U.L. LISTED: N

DESCRIPTION: Medium weight glass fabric with epoxy resin system. RT521M combines excellent electrical characteristics with superior physical properties. Electrical properties maintained in high humidity conditions. RT521M is not flame resistant. Material has been designed and produced for use at cryogenic temperatures (-270°C to 135°C operating temperature range).

TYPICAL PROPERTIES

| | UNITS | VALUE | | |
|---|---------|---------------------------|---------------|--|
| | | Specimen Tested (ID x OD) | | |
| | | | 0.75" x 1.00" | |
| PHYSICAL PROPERTIES | | | | |
| Specific Gravity (ASTM D792) | - | | 1.78 | |
| Rockwell Hardness (ASTM D785) | M Scale | | 110 | |
| Moisture Absorption Condition D ₁ -24/23 (ASTM D570) | % | | 0.05 | |
| Tensile Strength Condition A (ASTM D638) | psi | | 45,000 | |
| Compressive Strength Condition A (ASTM D695) | psi | | 46,500 | |
| Compressive Modulus Condition A (ASTM D695) | kpsi | | 1,100 | |



Global Thermoset Composite Solutions

RT521M - TYPICAL PROPERTIES (continued)

| | UNITS | VALUE | | |
|--|-------------------|---------------------------|---------------|--|
| | | Specimen Tested (ID x OD) | | |
| | | | 0.75" x 1.00" | |
| THERMAL PROPERTIES | | | | |
| Temperature Index ¹ Electrical / Mechanical | °C | | 130 / 135 | |
| Flammability Rating Condition A (UL Bulletin 94) | Class | | HB | |
| ELECTRICAL PROPERTIES | | | | |
| Breakdown Voltage Condition A (ASTM D149) | kVolts | | 85 | |
| Electric Strength Condition A (ASTM D149) | Volts/mil | | 500 | |
| | Condition D-48/50 | Volts/mil | 600 | |

¹ NEMA LI-6: This temperature is a recommendation only, and based upon experience in various applications. The maximum operating temperature is dependent upon the application and should be investigated prior to use.

This data, while believed to be accurate and based on reliable analytical methods, is for informational purposes only. The terms and conditions of the agreement under which it is sold will govern any sales of this product. Data supplied above are "typical values"; not to be considered "specification values".

To assure the material's performance is adequate for a specific application; customers should verify, independent of Norplex-Micarta, performance characteristics of interest.

It is the responsibility of the users of this information to make sure that they have the latest version of this TDB, and are urged to contact Customer Service, or preferably our web site, www.norplex-micarta.com, to determine if information is the most current.

Specification writers: Contact Norplex-Micarta for specification values before submission.