

## MATERIAL DATA SHEET

**Material:** Lamitex® Grade C Cotton/Phenolic Laminate Sheet

**Description:** Lamitex® C cotton/phenolic sheets are intended for use in mechanical applications requiring high impact strength. It has lower mechanical strength than materials with glass substrates, but has superior impact resistance when compared to paper based laminates.

**Standards:** NEMA LI-1 Grade C  
MIL-I-24768 / 16 Type FBM  
EN 60893 PF CC 203  
Din Hgw 2082

**Availability:** C is also manufactured as round tubes (convolute wound), rods, molded channel, angle, square and rectangular tubes and fabricated custom parts.

| Physical Properties                | Test Condition                       | ASTM | Typical Values                                 |
|------------------------------------|--------------------------------------|------|------------------------------------------------|
| Thickness                          |                                      |      | .125"                                          |
| Specific Gravity                   |                                      | D792 | 1.36                                           |
| Rockwell Hardness (M Scale)        |                                      | D785 | 103                                            |
| Moisture Absorption (maximum)      |                                      | D229 | 2.50%                                          |
| Flexural Strength                  | Condition A: Lengthwise<br>Crosswise | D229 | 17,000 psi<br>16,000 psi                       |
| Tensile Strength                   | Condition A: Lengthwise<br>Crosswise |      | 10,000 psi<br>8,000 psi                        |
| Compressive Strength               | Condition A: Flatwise<br>Edgewise    | D695 | 37,000 psi<br>23,500 psi                       |
| Izod Impact Strength (.500" thick) | E48/50: Lengthwise<br>Crosswise      | D229 | 1.9 ft-lb/in. (notch)<br>1.7 ft-lb/in. (notch) |
| Bond Strength (.500" thick)        | Condition A                          | D229 | 1,800 lbs                                      |

### Thermal Properties

|                                           |  |  |                                  |
|-------------------------------------------|--|--|----------------------------------|
| Temperature Index Electrical / Mechanical |  |  | 115°C / 125°C                    |
| Coefficient of Thermal Expansion          |  |  | 20.0 cm/cm/°C x 10 <sup>-6</sup> |
| U.L.® 94 Flammability Rating              |  |  | 94-HB                            |

*All information and suggestions pertaining to the properties and uses of the materials herein are based upon tests and data believed to be accurate; however, the final determination regarding the suitability of any described material herein for the use is the sole responsibility of the user. No warranty is expressed or implied, including, without limitation warrant of merchantability or fitness for a particular purpose. Under no circumstances shall Franklin Fibre - Lamitex Corp. be liable of incidental or consequential loss or damage.*