

**Product Texts**

LNP THERMOTUF WF004N compound is based on Polybutylene Terephthalate (PBT) resin containing 20% glass fiber. Added features of this grade include: Impact Modified, Low Dielectric Constant (Dk), Good Metal Bonding Strength and Good Chemical Resistance suitable for Nano-Molding Technology (NMT) applications.

UL Yellow Card Link [E207780-103831978](https://www.ul.com/yellow-card-link/E207780-103831978)

| Processing/Physical Characteristics                | Value     | Unit                   | Test Standard   |
|--|-----------|------------------------|-----------------|
| <b>ISO Data</b>                                    |           |                        |                 |
| Melt volume-flow rate, MVR                         | 18        | cm <sup>3</sup> /10min | ISO 1133        |
| Temperature  | 275       | °C                     | -               |
| Load   | 5         | kg                     | -               |
| <b>ASTM Data</b>                                   |           |                        |                 |
| Melt Flow Index, MFI                               | 20        | g/10min                | ASTM D 1238     |
| Temperature  | 275       | °C                     | -               |
| Load   | 5         | kg                     | -               |
| <b>Mechanical properties</b>                       |           |                        |                 |
| <b>ISO Data</b>                                    |           |                        |                 |
| Tensile Modulus                                    | 5650      | MPa                    | ISO 527         |
| Stress at break                                    | 88        | MPa                    | ISO 527         |
| Strain at break                                    | 3.3       | %                      | ISO 527         |
| Flexural modulus                                   | 5090      | MPa                    | ISO 178         |
| Izod impact strength, +23°C, 4mm                   | 47        | kJ/m <sup>2</sup>      | ISO 180/1U      |
| Izod notched impact strength, +23°C, 4mm           | 12        | kJ/m <sup>2</sup>      | ISO 180/1A      |
| <b>ASTM Data</b>                                   |           |                        |                 |
| Tensile Modulus                                    | 5740      | MPa                    | ASTM D 638      |
| Tensile Strength at Break                          | 87        | MPa                    | ASTM D 638      |
| Elongation at Break                                | 3.2       | %                      | ASTM D 638      |
| Flexural Modulus                                   | 5300      | MPa                    | ASTM D 790      |
| Izod Impact notched, 1/8 in                        | 120       | J/m                    | ASTM D 256      |
| Izod Impact unnotched, 1/8 in                      | 795       | J/m                    | ASTM D 256      |
| <b>Thermal properties</b>                          |           |                        |                 |
| <b>ISO Data</b>                                    |           |                        |                 |
| Temp. of deflection under load, 1.80 MPa           | 194       | °C                     | ISO 75-1/-2     |
| Temp. of deflection under load, 0.45 MPa           | 219       | °C                     | ISO 75-1/-2     |
| Burning behav. at thickness h                      | HB        | class                  | IEC 60695-11-10 |
| Thickness tested                                   | 1.0       | mm                     | -               |
| <b>ASTM Data</b>                                   |           |                        |                 |
| DTUL @ 66 psi                                      | 220       | °C                     | ASTM D 648      |
| DTUL @ 264 psi                                     | 203       | °C                     | ASTM D 648      |
| <b>Other properties</b>                            |           |                        |                 |
| Density  | 1280      | kg/m <sup>3</sup>      | ISO 1183        |
| <b>Processing Recommendation Injection Molding</b> |           |                        |                 |
| Pre-drying - Temperature                           | 100 - 120 | °C                     | -               |
| Pre-drying - Time                                  | 2 - 4     | h                      | -               |
| Processing humidity                                | ≤0.02     | %                      | -               |
| Melt temperature                                   | 265 - 280 | °C                     | -               |
| Mold temperature                                   | 100 - 160 | °C                     | -               |
| Zone 1   | 250 - 270 | °C                     | -               |
| Zone 2   | 260 - 280 | °C                     | -               |
| Zone 3   | 265 - 280 | °C                     | -               |

**Characteristics**

**Processing**

Injection Molding

**Chemical Resistance**

General Chemical Resistance

**Special Characteristics**

High impact or impact modified

**Regional Availability**

North America, Europe, Asia Pacific