

Product Texts

LNP THERMOCOMP RB004 compound is based on Nylon 6/6 resin containing 20% glass bead.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|--|--------------|-------------|----------------------|
| ASTM Data | | | |
| Mold Shrinkage, MD | 2 | mm/mm | ASTM D 955 |
| Mold Shrinkage, TD | 2 | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|--|--------------|-------------------|----------------------|
| ISO Data | | | |
| Tensile Modulus | 4150 | MPa | ISO 527 |
| Yield stress | 79 | MPa | ISO 527 |
| Yield strain | 3.8 | % | ISO 527 |
| Stress at break | 75 | MPa | ISO 527 |
| Strain at break | 3.9 | % | ISO 527 |
| Flexural modulus | 3700 | MPa | ISO 178 |
| Flexural strength | 119 | MPa | ISO 178 |
| Izod impact strength, +23°C, 4mm | 16 | kJ/m ² | ISO 180/1U |
| Izod notched impact strength, +23°C, 4mm | 4 | kJ/m ² | ISO 180/1A |
| ASTM Data | | | |
| Tensile Modulus | 4100 | MPa | ASTM D 638 |
| Tensile Strength at Break | 80 | MPa | ASTM D 638 |
| Elongation at Break | 3.7 | % | ASTM D 638 |
| Flexural Modulus | 3870 | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | 28 | J/m | ASTM D 256 |
| Izod Impact unnotched, 1/8 in | 227 | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|--|--------------|-------------|----------------------|
| ISO Data | | | |
| Temp. of deflection under load, 1.80 MPa | 77 | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 219 | °C | ISO 75-1/-2 |
| ASTM Data | | | |
| Coefficient of Thermal Expansion, MD | 73.1 | E-6/K | ASTM D 696 |
| Coefficient of Thermal Expansion, TD | 70.9 | E-6/K | ASTM D 696 |
| DTUL @ 66 psi | 233 | °C | ASTM D 648 |
| DTUL @ 264 psi | 81 | °C | ASTM D 648 |

| Other properties | Value | Unit | Test Standard |
|-------------------------|--------------|-------------------|----------------------|
| Humidity absorption | 1.1 | % | Sim. to ISO 62 |
| Water Absorption, 24hr | 0.62 | % | ASTM D 570 |
| Density | 1290 | kg/m ³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|--|--------------|-------------|----------------------|
| Pre-drying - Temperature | 80 | °C | - |
| Pre-drying - Time | 4 | h | - |
| Processing humidity | ≤0.25 | % | - |
| Melt temperature | 280 - 305 | °C | - |
| Mold temperature | 95 - 110 | °C | - |
| Zone 1 | 265 - 275 | °C | - |
| Zone 2 | 280 - 295 | °C | - |
| Zone 3 | 295 - 305 | °C | - |
| Screw speed | 30 - 60 | rpm | - |
| Back pressure | 0.2 - 0.3 | MPa | - |

Characteristics

Processing

Injection Molding

Regional Availability

North America