

Product Texts

LNP THERMOCOMP LX03447 compound is based on Polyetheretherketone (PEEK) resin containing 35% carbon fiber. Added features of this grade include: Electrically Conductive.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|-------------------------------------|-------|-------|---------------|
| ASTM Data | | | |
| Mold Shrinkage, MD | 0.2 | mm/mm | ASTM D 955 |
| Mold Shrinkage, TD | 0.7 | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 28300 | MPa | ISO 527 |
| Stress at break | 246 | MPa | ISO 527 |
| Strain at break | 1.5 | % | ISO 527 |
| Flexural modulus | 23800 | MPa | ISO 178 |
| Flexural strength | 360 | MPa | ISO 178 |
| Izod impact strength, +23°C, 4mm | 45 | kJ/m ² | ISO 180/1U |
| Izod notched impact strength, +23°C, 4mm | 6 | kJ/m ² | ISO 180/1A |
| ASTM Data | | | |
| Tensile Modulus | 28540 | MPa | ASTM D 638 |
| Tensile Strength at Break | 248 | MPa | ASTM D 638 |
| Elongation at Break | 1.6 | % | ASTM D 638 |
| Flexural Modulus | 23700 | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | 70 | J/m | ASTM D 256 |
| Izod Impact unnotched, 1/8 in | 771 | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|--|-------|-------|---------------|
| ISO Data | | | |
| Temp. of deflection under load, 1.80 MPa | 318 | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 335 | °C | ISO 75-1/-2 |
| ASTM Data | | | |
| Coefficient of Thermal Expansion, MD | 9 | E-6/K | ASTM D 696 |
| Coefficient of Thermal Expansion, TD | 39.1 | E-6/K | ASTM D 696 |
| DTUL @ 66 psi | 337 | °C | ASTM D 648 |
| DTUL @ 264 psi | 325 | °C | ASTM D 648 |

| Other properties | Value | Unit | Test Standard |
|------------------------|-------|-------------------|----------------|
| Humidity absorption | 0.07 | % | Sim. to ISO 62 |
| Water Absorption, 24hr | 0.05 | % | ASTM D 570 |
| Density | 1430 | kg/m ³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature | 150 | °C | - |
| Pre-drying - Time | 4 - 6 | h | - |
| Mold temperature | 175 - 190 | °C | - |
| Zone 1 | 370 - 380 | °C | - |
| Zone 2 | 380 - 400 | °C | - |
| Zone 3 | 380 - 400 | °C | - |
| Screw speed | 60 - 100 | rpm | - |
| Back pressure | 0.3 - 0.7 | MPa | - |

Characteristics**Processing**

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Special Characteristics

Increased electrical conductivity