

Product Texts

LNP THERMOCOMP LCF62E compound is based on Polyetheretherketone (PEEK) resin containing 10% carbon fiber and 30% glass fiber. Added features of this grade include: Easy Molding, Electrically Conductive.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|-------------------------------------|-------|-------|---------------|
| ASTM Data | | | |
| Mold Shrinkage, MD | 1.04 | mm/mm | ASTM D 955 |
| Mold Shrinkage, TD | 2 | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 41100 | MPa | ISO 527 |
| Stress at break | 196 | MPa | ISO 527 |
| Strain at break | 0.7 | % | ISO 527 |
| Flexural modulus | 36500 | MPa | ISO 178 |
| Flexural strength | 391 | MPa | ISO 178 |
| Izod impact strength, +23°C, 4mm | 47 | kJ/m ² | ISO 180/1U |
| Izod notched impact strength, +23°C, 4mm | 8 | kJ/m ² | ISO 180/1A |
| ASTM Data | | | |
| Tensile Modulus | 62980 | MPa | ASTM D 638 |
| Tensile Strength at Break | 203 | MPa | ASTM D 638 |
| Elongation at Break | 0.8 | % | ASTM D 638 |
| Flexural Modulus | 17340 | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | 80 | J/m | ASTM D 256 |
| Izod Impact unnotched, 1/8 in | 711 | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|--|-------|------|---------------|
| ISO Data | | | |
| Temp. of deflection under load, 1.80 MPa | 290 | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 290 | °C | ISO 75-1/-2 |
| ASTM Data | | | |
| DTUL @ 66 psi | 290 | °C | ASTM D 648 |
| DTUL @ 264 psi | 290 | °C | ASTM D 648 |

| Other properties | Value | Unit | Test Standard |
|------------------------|-------|-------------------|----------------|
| Humidity absorption | 0.02 | % | Sim. to ISO 62 |
| Water Absorption, 24hr | 0.02 | % | ASTM D 570 |
| Density | 1570 | kg/m ³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature | 120 - 150 | °C | - |
| Pre-drying - Time | 4 | h | - |
| Processing humidity | ≤0.1 | % | - |
| Melt temperature | 380 - 390 | °C | - |
| Mold temperature | 140 - 165 | °C | - |
| Zone 1 | 350 - 360 | °C | - |
| Zone 2 | 365 - 375 | °C | - |
| Zone 3 | 380 - 395 | °C | - |
| Screw speed | 60 - 100 | rpm | - |
| Back pressure | 0.3 - 0.7 | MPa | - |

Characteristics**Processing**

Injection Molding

Regional Availability

Asia Pacific

Special Characteristics

Increased electrical conductivity