

Product Texts

LNP THERMOCOMP DF004ER compound is based on Polycarbonate (PC) resin containing 20% glass fiber. Added features of this grade include: Easy Molding, Mold Release.

| Mechanical properties | Value | Unit | Test Standard |
|-------------------------------------|--------------|-------------------|----------------------|
| ISO Data | | | |
| Tensile Modulus | 5850 | MPa | ISO 527 |
| Yield stress | 97 | MPa | ISO 527 |
| Yield strain | 2.6 | % | ISO 527 |
| Stress at break | 96 | MPa | ISO 527 |
| Strain at break | 3.6 | % | ISO 527 |
| Flexural modulus, 23°C | 5600 | MPa | ISO 178 |
| Flexural strength | 172 | MPa | ISO 178 |
| Izod impact strength, +23°C | 54 | kJ/m ² | ISO 180/1U |
| Izod notched impact strength, +23°C | 14 | kJ/m ² | ISO 180/1A |
| ASTM Data | | | |
| Tensile Modulus | 5650 | MPa | ASTM D 638 |
| Tensile Strength at Break | 96 | MPa | ASTM D 638 |
| Elongation at Break | 3.7 | % | ASTM D 638 |
| Flexural Modulus | 5580 | MPa | ASTM D 790 |
| Flexural Strength | 166 | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | 144 | J/m | ASTM D 256 |
| Izod Impact unnotched, 1/8 in | 854 | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|---|--------------|-------------|----------------------|
| ISO Data | | | |
| Temp. of deflection under load, 1.80 MPa | 141 | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 144 | °C | ISO 75-1/-2 |
| Coeff. of linear therm. expansion, parallel | 41.8 | E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal | 53.7 | E-6/K | ISO 11359-1/-2 |
| Burning behav. at 1.5 mm nom. thickn. | V-2 | class | IEC 60695-11-10 |
| Thickness tested | 1.5 | mm | - |
| Yellow Card available | yes | - | - |
| Burning behav. at thickness h | V-1 | class | IEC 60695-11-10 |
| Thickness tested | 3.0 | mm | - |
| Yellow Card available | yes | - | - |
| ASTM Data | | | |
| Coefficient of Thermal Expansion, MD | 41.9 | E-6/K | ASTM D 696 |
| Coefficient of Thermal Expansion, TD | 53.6 | E-6/K | ASTM D 696 |
| DTUL @ 264 psi | 140 | °C | ASTM D 648 |

| Other properties | Value | Unit | Test Standard |
|-------------------------|--------------|-------------------|----------------------|
| Humidity absorption | 0.17 | % | Sim. to ISO 62 |
| Density | 1310 | kg/m ³ | ISO 1183 |
| Density | 1320 | kg/m ³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|--|------------------|-------------|----------------------|
| Pre-drying - Temperature | 120 | °C | - |
| Pre-drying - Time | 4 | h | - |
| Processing humidity | ≤0.02 | % | - |
| Melt temperature | 305 - 325 | °C | - |
| Mold temperature | 80 - 110 | °C | - |
| Zone 1 | 295 - 305 | °C | - |
| Zone 2 | 310 - 320 | °C | - |
| Zone 3 | 320 - 330 | °C | - |
| Back pressure | 0.2 - 0.3 | MPa | - |

Characteristics

Processing

Injection Molding

Additives

Release agent

Applications

Building Construction, Electrical and Electronical

Regional Availability

North America, Europe, Asia Pacific, South and Central America