

Product Texts

LNP THERMOCOMP OMC0E compound is a mineral reinforced polyphenylene sulfide. Added feature of this material include: high dielectric constant, low dissipation factor, good flame and chemical resistance, low moisture absorption.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|-------------------------------------|-------|---------|---------------|
| ASTM Data | | | |
| Melt Flow Index, MFI | 25 | g/10min | ASTM D 1238 |
| Temperature | 315 | °C | - |
| Load | 5 | kg | - |
| Mold Shrinkage, MD | 0.007 | mm/mm | ASTM D 955 |
| Mold Shrinkage, TD | 0.007 | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|---------------------------------------|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 10300 | MPa | ISO 527 |
| Stress at break | 74 | MPa | ISO 527 |
| Strain at break | 1 | % | ISO 527 |
| Flexural modulus, 23°C | 10000 | MPa | ISO 178 |
| Flexural strength | 105 | MPa | ISO 178 |
| Charpy impact strength, +23°C | 20 | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength, +23°C | 3 | kJ/m ² | ISO 179/1eA |
| Izod impact strength, +23°C | 16 | kJ/m ² | ISO 180/1U |
| Izod notched impact strength, +23°C | 3.6 | kJ/m ² | ISO 180/1A |
| Izod notched impact strength | 3.4 | kJ/m ² | ISO 180/1A |
| Temperature | -20 | °C | - |
| ASTM Data | | | |
| Tensile Modulus | 10200 | MPa | ASTM D 638 |
| Tensile Strength at Break | 73 | MPa | ASTM D 638 |
| Elongation at Break | 1 | % | ASTM D 638 |
| Flexural Modulus | 9800 | MPa | ASTM D 790 |
| Flexural Strength | 103 | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | 34 | J/m | ASTM D 256 |
| Izod Impact unnotched, 1/8 in | 270 | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|---|-------|-------|----------------|
| ISO Data | | | |
| Temp. of deflection under load, 1.80 MPa | 205 | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 220 | °C | ISO 75-1/-2 |
| Coeff. of linear therm. expansion, parallel | 33 | E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal | 33 | E-6/K | ISO 11359-1/-2 |
| ASTM Data | | | |
| Coefficient of Thermal Expansion, MD | 40 | E-6/K | ASTM D 696 |
| Coefficient of Thermal Expansion, TD | 40 | E-6/K | ASTM D 696 |
| DTUL @ 66 psi | 220 | °C | ASTM D 648 |
| DTUL @ 264 psi | 195 | °C | ASTM D 648 |

| Other properties | Value | Unit | Test Standard |
|------------------|-------|-------------------|---------------|
| Density | 2460 | kg/m ³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature | 120 - 140 | °C | - |
| Pre-drying - Time | 3 - 4 | h | - |
| Melt temperature | 310 - 330 | °C | - |
| Mold temperature | 135 - 160 | °C | - |
| Zone 1 | 290 - 310 | °C | - |
| Zone 2 | 300 - 320 | °C | - |
| Zone 3 | 310 - 330 | °C | - |
| Nozzle temperature | 310 - 330 | °C | - |
| Screw speed | 50 - 100 | rpm | - |

Back pressure

0.3 - 0.7

MPa

-

Characteristics**Processing**

Injection Molding

Special Characteristics

Flame retardant

Chemical Resistance

General Chemical Resistance

Applications

Automotive, Electrical and Electronical

Regional Availability

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