

Product Texts

LNP LUBRICOMP DP001E compound is based on Polycarbonate (PC) resin containing 5% PTFE/silicone. Added features of this grade include: Easy Molding, Wear Resistant.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|-------------------------------------|-------|-------|---------------|
| ASTM Data | | | |
| Mold Shrinkage, MD | 0.4 | mm/mm | ASTM D 955 |
| Mold Shrinkage, TD | 0.6 | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 2130 | MPa | ISO 527 |
| Yield stress | 54 | MPa | ISO 527 |
| Yield strain | 6 | % | ISO 527 |
| Stress at break | 41 | MPa | ISO 527 |
| Strain at break | 48.3 | % | ISO 527 |
| Flexural modulus | 2030 | MPa | ISO 178 |
| Flexural strength | 72 | MPa | ISO 178 |
| Izod impact strength, +23°C, 4mm | 181 | kJ/m ² | ISO 180/1U |
| Izod notched impact strength, +23°C, 4mm | 36 | kJ/m ² | ISO 180/1A |

| Mechanical properties | Value | Unit | Test Standard |
|-------------------------------|-------|------|---------------|
| ASTM Data | | | |
| Tensile Modulus | 2240 | MPa | ASTM D 638 |
| Tensile Strength at Yield | 54 | MPa | ASTM D 638 |
| Tensile Strength at Break | 45 | MPa | ASTM D 638 |
| Elongation at Yield | 6 | % | ASTM D 638 |
| Elongation at Break | 38.4 | % | ASTM D 638 |
| Flexural Modulus | 2230 | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | 595 | J/m | ASTM D 256 |
| Izod Impact unnotched, 1/8 in | 1460 | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|--|-------|-------|---------------|
| ISO Data | | | |
| Temp. of deflection under load, 1.80 MPa | 126 | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 140 | °C | ISO 75-1/-2 |
| ASTM Data | | | |
| Coefficient of Thermal Expansion, MD | 68.9 | E-6/K | ASTM D 696 |
| Coefficient of Thermal Expansion, TD | 70.9 | E-6/K | ASTM D 696 |
| DTUL @ 66 psi | 141 | °C | ASTM D 648 |
| DTUL @ 264 psi | 127 | °C | ASTM D 648 |

| Other properties | Value | Unit | Test Standard |
|------------------------|-------|-------------------|----------------|
| Humidity absorption | 0.17 | % | Sim. to ISO 62 |
| Density | 1200 | kg/m ³ | ISO 1183 |
| Water Absorption, 24hr | 0.12 | % | ASTM D 570 |
| Density | 1200 | 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 | 300 - 315 | °C | - |
| Mold temperature | 80 - 110 | °C | - |
| Zone 1 | 295 - 305 | °C | - |
| Zone 2 | 305 - 315 | °C | - |
| Zone 3 | 310 - 320 | °C | - |
| Screw speed | 30 - 60 | rpm | - |
| Back pressure | 0.2 - 0.3 | MPa | - |

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific