

Product Texts

LNP LUBRICOMP RP003 compound is based on Nylon 6/6 resin containing 15% PTFE/silicone. Added features of this grade include: Wear Resistant.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|-------------------------------------|-------|-------|-----------------|
| ISO Data | | | |
| Molding shrinkage, parallel | 2.0 | % | ISO 294-4, 2577 |
| ASTM Data | | | |
| Mold Shrinkage, TD | 2 | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 2960 | MPa | ISO 527 |
| Yield stress | 55 | MPa | ISO 527 |
| Yield strain | 4.8 | % | ISO 527 |
| Stress at break | 55 | MPa | ISO 527 |
| Strain at break | 4.7 | % | ISO 527 |
| Flexural modulus | 2580 | MPa | ISO 178 |
| Izod impact strength, +23°C, 4mm | 26 | kJ/m ² | ISO 180/1U |
| Izod notched impact strength, +23°C, 4mm | 4 | kJ/m ² | ISO 180/1A |
| ASTM Data | | | |
| Tensile Modulus | 2700 | MPa | ASTM D 638 |
| Tensile Strength at Yield | 52 | MPa | ASTM D 638 |
| Tensile Strength at Break | 49 | MPa | ASTM D 638 |
| Elongation at Yield | 4.6 | % | ASTM D 638 |
| Elongation at Break | 4.7 | % | ASTM D 638 |
| Flexural Modulus | 2260 | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | 37 | J/m | ASTM D 256 |
| Izod Impact unnotched, 1/8 in | 379 | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|--|-------|------|---------------|
| ISO Data | | | |
| Temp. of deflection under load, 1.80 MPa | 66 | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 221 | °C | ISO 75-1/-2 |
| ASTM Data | | | |
| DTUL @ 66 psi | 201 | °C | ASTM D 648 |
| DTUL @ 264 psi | 59 | °C | ASTM D 648 |

| Other properties | Value | Unit | Test Standard |
|------------------------|-------|-------------------|----------------|
| Humidity absorption | 0.97 | % | Sim. to ISO 62 |
| Density | 1270 | kg/m ³ | ISO 1183 |
| Water Absorption, 24hr | 0.6 | % | ASTM D 570 |
| Density | 1270 | kg/m ³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature | 80 | °C | - |
| Pre-drying - Time | 4 | h | - |
| Processing humidity | ≤0.25 | % | - |
| Melt temperature | 275 - 290 | °C | - |
| Mold temperature | 80 - 95 | °C | - |
| Zone 1 | 265 - 275 | °C | - |
| Zone 2 | 280 - 295 | °C | - |
| Zone 3 | 295 - 305 | °C | - |
| Screw speed | 30 - 60 | rpm | - |
| Back pressure | 0.2 - 0.3 | MPa | - |

Characteristics

Processing

Injection Molding

Regional Availability

North America