

Product Texts

LNP THERMOCOMP IX04513C compound is based on Nylon 6/12 resin containing 30% glass fiber. Added features of this grade include: LNP Clean Compounding Technology.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|-------------------------------------|-------|-------|-----------------|
| ISO Data | | | |
| Molding shrinkage, parallel | 0.3 | % | ISO 294-4, 2577 |
| Molding shrinkage, normal | 1.0 | % | ISO 294-4, 2577 |
| ASTM Data | | | |
| Mold Shrinkage, MD | 0.3 | mm/mm | ASTM D 955 |
| Mold Shrinkage, TD | 1 | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 8290 | MPa | ISO 527 |
| Stress at break | 128 | MPa | ISO 527 |
| Strain at break | 2.2 | % | ISO 527 |
| Flexural modulus | 7110 | MPa | ISO 178 |
| Flexural strength | 187 | MPa | ISO 178 |
| Izod impact strength, +23°C, 4mm | 41 | kJ/m ² | ISO 180/1U |
| Izod notched impact strength, +23°C, 4mm | 6 | kJ/m ² | ISO 180/1A |
| ASTM Data | | | |
| Tensile Modulus | 8830 | MPa | ASTM D 638 |
| Tensile Strength at Break | 130 | MPa | ASTM D 638 |
| Elongation at Break | 2.3 | % | ASTM D 638 |
| Flexural Modulus | 8080 | MPa | ASTM D 790 |
| Flexural Strength | 204 | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | 69 | J/m | ASTM D 256 |
| Izod Impact unnotched, 1/8 in | 688 | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|--|-------|------|---------------|
| ISO Data | | | |
| Temp. of deflection under load, 1.80 MPa | 192 | °C | ISO 75-1/-2 |
| ASTM Data | | | |
| DTUL @ 264 psi | 197 | °C | ASTM D 648 |

| Other properties | Value | Unit | Test Standard |
|------------------------|-------|-------------------|----------------|
| Humidity absorption | 0.21 | % | Sim. to ISO 62 |
| Density | 1290 | kg/m ³ | ISO 1183 |
| Water Absorption, 24hr | 0.15 | % | ASTM D 570 |
| Density | 1300 | 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 | ≤0.2 | % | - |
| Melt temperature | 270 - 275 | °C | - |
| Mold temperature | 65 - 95 | °C | - |
| Zone 1 | 255 - 265 | °C | - |
| Zone 2 | 260 - 270 | °C | - |
| Zone 3 | 270 - 280 | °C | - |
| Screw speed | 30 - 60 | rpm | - |
| Back pressure | 0.2 - 0.3 | MPa | - |

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific