# LNP™ THERMOCOMP™ COMPOUND JF004EXP

JF-1004 EM
REGION ASIA

## DESCRIPTION

LNP THERMOCOMP JF004EXP is a compound based on Polyethersulfone resin containing 20% Glass Fiber. Added features of this material include: Easy Molding.

## TYPICAL PROPERTY VALUES

Revision 20190805

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| MECHANICAL | | | |
| Tensile Stress, break | 114 | MPa | ASTM D 638 |
| Tensile Strain, break | 2.9 | % | ASTM D 638 |
| Tensile Modulus, 50 mm/min | 7350 | MPa | ASTM D 638 |
| Flexural Stress | 186 | MPa | ASTM D 790 |
| Flexural Modulus | 6690 | MPa | ASTM D 790 |
| Tensile Stress, break | 109 | MPa | ISO 527 |
| Tensile Strain, break | 2.9 | % | ISO 527 |
| Tensile Modulus, 1 mm/min | 7590 | MPa | ISO 527 |
| Flexural Stress | 183 | MPa | ISO 178 |
| Flexural Modulus | 7590 | MPa | ISO 178 |
| IMPACT | | | |
| Izod Impact, unnotched, 23°C | 427 | J/m | ASTM D 4812 |
| Izod Impact, notched, 23°C | 58 | J/m | ASTM D 256 |
| Instrumented Impact Energy @ peak, 23°C | 16 | J | ASTM D 3763 |
| Multiaxial Impact | 4 | J | ISO 6603 |
| Izod Impact, unnotched 80*10*4 +23°C | 73 | kJ/m² | ISO 180/1U |
| Izod Impact, notched 80*10*4 +23°C | 7 | kJ/m² | ISO 180/1A |
| THERMAL | | | |
| HDT, 1.82 MPa, 3.2mm, unannealed | 205 | °C | ASTM D 648 |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm | 205 | °C | ISO 75/Af |
| Relative Temp Index, Elec [1] | 180 | °C | UL 746B |
| Relative Temp Index, Mech w/impact [1] | 180 | °C | UL 746B |
| Relative Temp Index, Mech w/o impact [1] | 180 | °C | UL 746B |
| PHYSICAL | | | |
| Density | 1.51 | g/cm³ | ASTM D 792 |
| Moisture Absorption, 50% RH, 24 hrs | 0.4 | % | ASTM D 570 |
| Mold Shrinkage, flow, 24 hrs | 0.5 – 0.7 | % | ASTM D 955 |
| Mold Shrinkage, xflow, 24 hrs | 0.6 – 0.8 | % | ASTM D 955 |
| Mold Shrinkage, flow, 24 hrs | 0.5 – 0.7 | % | ISO 294 |
| Mold Shrinkage, xflow, 24 hrs | 0.6 – 0.8 | % | ISO 294 |
| Density | 1.51 | g/cm³ | ISO 1183 |
| FLAME CHARACTERISTICS [1] | | | |

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| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| UL Yellow Card Link | E207780-101283849 | - | - |
| UL Recognized, 94V-0 Flame Class Rating | 0.81 | mm | UL 94 |
| INJECTION MOLDING | | | |
| Drying Temperature | 120 – 150 | °C | |
| Drying Time | 4 | hrs | |
| Maximum Moisture Content | 0.05 | % | |
| Melt Temperature | 355 – 370 | °C | |
| Front - Zone 3 Temperature | 370 – 380 | °C | |
| Middle - Zone 2 Temperature | 360 – 370 | °C | |
| Rear - Zone 1 Temperature | 345 – 355 | °C | |
| Mold Temperature | 140 – 150 | °C | |
| Back Pressure | 0.3 – 0.7 | MPa | |
| Screw Speed | 60 – 100 | rpm | |

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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