

## LNPTM THERMOCOMPTM COMPOUND JF004

JF-1004 REGION EUROPE

## **DESCRIPTION**

LNP THERMOCOMP JF004 compound is based on Polyethersulfone (PES) resin containing 20% glass fiber.

| GENERAL INFORMATION   |   |
|-----------------------|---|
| Features              | High stiffness/Strength, High temperature resistance, No PFAS intentionally added |
| Fillers               | Glass Fiber   |
| Polymer Types         | Polyethersulfone (PESU)   |
| Processing Techniques | Injection Molding   |

| INDUSTRY                   | SUB INDUSTRY                      |
|----------------------------|-----------------------------------|
| Building and Construction  | Building Component                |
| Consumer                   | Personal Accessory                |
| Electrical and Electronics | Mobile Phone - Computer - Tablets |
| Industrial                 | Electrical                        |

## **TYPICAL PROPERTY VALUES**

Revision 20231109

| PROPERTIES                              | TYPICAL VALUES   | UNITS | TEST METHODS |
|---|------------------|-------|--------------|
| MECHANICAL (1)                          |                  |       |              |
| Tensile Stress, break, 5 mm/min         | 118              | MPa   | ISO 527      |
| Tensile Strain, break, 5 mm/min         | 2.5              | %     | ISO 527      |
| Tensile Modulus, 1 mm/min               | 6700             | MPa   | ISO 527      |
| Flexural Stress, break, 2 mm/min        | 175              | MPa   | ISO 178      |
| Flexural Modulus, 2 mm/min              | 5900             | MPa   | ISO 178      |
| IMPACT (1)                              |                  |       |              |
| Izod Impact, unnotched 80*10*4 +23°C    | 35               | kJ/m² | ISO 180/1U   |
| Izod Impact, notched 80*10*4 +23°C      | 5                | kJ/m² | ISO 180/1A   |
| THERMAL (1)                             |                  |       |              |
| CTE, 23°C to 60°C, flow                 | 2.2E-05          | 1/°C  | ISO 11359-2  |
| CTE, 23°C to 60°C, xflow                | 5.1E-05          | 1/°C  | ISO 11359-2  |
| HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm  | 218              | °C    | ISO 75/Bf    |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm   | 218              | °C    | ISO 75/Af    |
| PHYSICAL (1)                            |                  |       |              |
| Density                                 | 1.51             | g/cm³ | ISO 1183     |
| FLAME CHARACTERISTICS (2)               |                  |       |              |
| UL Yellow Card Link                     | E45329-101282591 | -     |              |
| UL Recognized, 94V-0 Flame Class Rating | 0.5              | mm    | UL 94        |
| INJECTION MOLDING (3)                   |                  |       |              |



| PROPERTIES                  | TYPICAL VALUES | UNITS | TEST METHODS |
|-----------------------------|----------------|-------|--------------|
| 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) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) 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.
- (3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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