

# LNPT<sup>™</sup> THERMOCOMP<sup>™</sup> COMPOUND IF007

IF-1007

## DESCRIPTION

LNP THERMOCOMP<sup>™</sup> IF007 is a compound based on Nylon 6/12 resin containing 35% Glass Fiber.

| GENERAL INFORMATION   |  |
|-----------------------|--|
| Features              | High stiffness/Strength, No PFAS intentionally added |
| Fillers               | Glass Fiber  |
| Polymer Types         | Polyamide 612 (Nylon 612)                            |
| 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 |
|---|----------------|-------------------|--------------|
| <b>MECHANICAL <sup>(1)</sup></b>        |                |                   |              |
| Tensile Stress, break                   | 150            | MPa               | ASTM D638    |
| Tensile Strain, yield                   | 3              | %                 | ASTM D638    |
| Tensile Modulus, 50 mm/min              | 8890           | MPa               | ASTM D638    |
| Flexural Stress                         | 227            | MPa               | ASTM D790    |
| Flexural Modulus                        | 8270           | MPa               | ASTM D790    |
| <b>IMPACT <sup>(1)</sup></b>            |                |                   |              |
| Izod Impact, unnotched, 23°C            | 801            | J/m               | ASTM D4812   |
| Izod Impact, notched, 23°C              | 85             | J/m               | ASTM D256    |
| <b>THERMAL <sup>(1)</sup></b>           |                |                   |              |
| HDT, 1.82 MPa, 3.2mm, unannealed        | 198            | °C                | ASTM D648    |
| <b>PHYSICAL <sup>(1)</sup></b>          |                |                   |              |
| Density                                 | 1.3            | g/cm <sup>3</sup> | ASTM D792    |
| <b>INJECTION MOLDING <sup>(2)</sup></b> |                |                   |              |
| Drying Temperature                      | 80             | °C                |              |
| Drying Time                             | 4              | Hrs               |              |
| Maximum Moisture Content                | 0.12 – 0.2     | %                 |              |
| Melt Temperature                        | 270 – 275      | °C                |              |
| Front - Zone 3 Temperature              | 270 – 280      | °C                |              |
| Middle - Zone 2 Temperature             | 260 – 270      | °C                |              |
| Rear - Zone 1 Temperature               | 255 – 265      | °C                |              |

| PROPERTIES       | TYPICAL VALUES | UNITS | TEST METHODS |
|------------------|----------------|-------|--------------|
| Mold Temperature | 65 – 95        | °C    |              |
| Back Pressure    | 0.2 – 0.3      | MPa   |              |
| Screw Speed      | 30 – 60        | 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) 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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