

# LNPT<sup>TM</sup> THERMOCOMP<sup>TM</sup> COMPOUND GF006

GF-1006

REGION EUROPE

## DESCRIPTION

LNP THERMOCOMP GF006 compound is based on Polysulfone (PSU) resin containing 30% glass fiber.

### GENERAL INFORMATION

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

### INDUSTRY

Building and Construction  
Consumer  
Electrical and Electronics  
Industrial

### SUB INDUSTRY

Building Component  
Personal Accessory  
Mobile Phone - Computer - Tablets  
Electrical

## TYPICAL PROPERTY VALUES

Revision 20231109

| PROPERTIES                             | TYPICAL VALUES | UNITS             | TEST METHODS |
|----------------------------------------|----------------|-------------------|--------------|
| <b>MECHANICAL <sup>(1)</sup></b>       |                |                   |              |
| Tensile Stress, yield, 5 mm/min        | 118            | MPa               | ISO 527      |
| Tensile Strain, break, 5 mm/min        | 1.6            | %                 | ISO 527      |
| Tensile Modulus, 1 mm/min              | 10000          | MPa               | ISO 527      |
| Flexural Stress, yield, 2 mm/min       | 165            | MPa               | ISO 178      |
| Flexural Strain, break, 2 mm/min       | 2.2            | %                 | ISO 178      |
| Flexural Modulus, 2 mm/min             | 8900           | MPa               | ISO 178      |
| <b>IMPACT <sup>(1)</sup></b>           |                |                   |              |
| Izod Impact, unnotched 80*10*4 +23°C   | 29             | kJ/m <sup>2</sup> | ISO 180/1U   |
| Izod Impact, notched 80*10*4 +23°C     | 8              | kJ/m <sup>2</sup> | ISO 180/1A   |
| <b>THERMAL <sup>(1)</sup></b>          |                |                   |              |
| CTE, 23°C to 60°C, flow                | 2.E-05         | 1/°C              | ISO 11359-2  |
| CTE, 23°C to 60°C, xflow               | 5.9E-05        | 1/°C              | ISO 11359-2  |
| HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm | 184            | °C                | ISO 75/Bf    |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm  | 182            | °C                | ISO 75/Af    |
| <b>PHYSICAL <sup>(1)</sup></b>         |                |                   |              |
| Mold Shrinkage, flow <sup>(2)</sup>    | 0.1 – 0.4      | %                 | SABIC method |
| Density                                | 1.47           | g/cm <sup>3</sup> | ISO 1183     |
| Water Absorption, (23°C/24hrs)         | 0.26           | %                 | ISO 62-1     |
| <b>FLAME CHARACTERISTICS</b>           |                |                   |              |

| PROPERTIES                                            | TYPICAL VALUES | UNITS | TEST METHODS      |
|-------------------------------------------------------|----------------|-------|-------------------|
| UL Compliant, 94V-0 Flame Class Rating <sup>(3)</sup> | 1.6            | mm    | UL 94 by SABIC-IP |
| INJECTION MOLDING <sup>(4)</sup>                      |                |       |                   |
| Drying Temperature                                    | 120 – 150      | °C    |                   |
| Drying Time                                           | 4              | Hrs   |                   |
| Maximum Moisture Content                              | 0.05           | %     |                   |
| Melt Temperature                                      | 360 – 370      | °C    |                   |
| Front - Zone 3 Temperature                            | 350 – 360      | °C    |                   |
| Middle - Zone 2 Temperature                           | 340 – 350      | °C    |                   |
| Rear - Zone 1 Temperature                             | 325 – 340      | °C    |                   |
| Mold Temperature                                      | 150            | °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) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(3) UL rating shown here is based on internal measurements.

(4) 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.

## ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

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