

# LNPTM THERMOCOMPTM COMPOUND OF008A

OF-1008

REGION EUROPE

## DESCRIPTION

LNP THERMOCOMP OF008A compound is based on branched Polyphenylene Sulfide (PPS) resin containing 40% glass fiber.

| GENERAL INFORMATION   |  |
|-----------------------|--|
| Features              | High stiffness/Strength, No PFAS intentionally added |
| Fillers               | Glass Fiber  |
| Polymer Types         | Polyphenylene Sulfide, Branched (PPS, Branched)      |
| Processing Techniques | Injection Molding                                    |

  

| INDUSTRY                   | SUB INDUSTRY   |
|----------------------------|--|
| Building and Construction  | Building Component   |
| Consumer                   | Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance |
| 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, 5 mm/min                     | 182            | MPa               | ISO 527      |
| Tensile Strain, break, 5 mm/min                     | 1.7            | %                 | ISO 527      |
| Flexural Stress, break, 2 mm/min                    | 271            | MPa               | ISO 178      |
| Flexural Modulus, 2 mm/min                          | 14000          | MPa               | ISO 178      |
| <b>IMPACT <sup>(1)</sup></b>                        |                |                   |              |
| Izod Impact, unnotched 80*10*4 +23°C                | 45             | kJ/m <sup>2</sup> | ISO 180/1U   |
| Izod Impact, notched 80*10*4 +23°C                  | 9              | kJ/m <sup>2</sup> | ISO 180/1A   |
| <b>THERMAL <sup>(1)</sup></b>                       |                |                   |              |
| CTE, 23°C to 60°C, flow                             | 2.6E-05        | 1/°C              | ISO 11359-2  |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm               | 272            | °C                | ISO 75/Af    |
| Relative Temp Index, Elec <sup>(2)</sup>            | 220            | °C                | UL 746B      |
| Relative Temp Index, Mech w/impact <sup>(2)</sup>   | 200            | °C                | UL 746B      |
| Relative Temp Index, Mech w/o impact <sup>(2)</sup> | 220            | °C                | UL 746B      |
| <b>PHYSICAL <sup>(1)</sup></b>                      |                |                   |              |
| Mold Shrinkage on Tensile Bar, flow <sup>(3)</sup>  | 0.15 – 0.25    | %                 | SABIC method |
| Mold Shrinkage, flow, 24 hrs <sup>(3)</sup>         | 0.2 – 0.4      | %                 | ISO 294      |
| Mold Shrinkage, xflow, 24 hrs <sup>(3)</sup>        | 0.8 – 1.2      | %                 | ISO 294      |
| Density   | 1.65           | g/cm <sup>3</sup> | ISO 1183     |
| <b>ELECTRICAL <sup>(1) (2)</sup></b>                |                |                   |              |

| PROPERTIES                                  | TYPICAL VALUES                   | UNITS    | TEST METHODS |
|---|----------------------------------|----------|--------------|
| Comparative Tracking Index (UL) {PLC}       | 4                                | PLC Code | UL 746A      |
| High Voltage Arc Track Rate {PLC}           | 1                                | PLC Code | UL 746A      |
| Arc Resistance, Tungsten {PLC}              | 5                                | PLC Code | ASTM D495    |
| Hot-Wire Ignition (HWI), PLC 0              | ≥6                               | mm       | UL 746A      |
| Hot-Wire Ignition (HWI), PLC 1              | ≥3                               | mm       | UL 746A      |
| Hot-Wire Ignition (HWI), PLC 2              | ≥1.5                             | mm       | UL 746A      |
| High Amp Arc Ignition (HAI), PLC 4          | ≥1.5                             | mm       | UL 746A      |
| <b>FLAME CHARACTERISTICS <sup>(2)</sup></b> |                                  |          |              |
| UL Yellow Card Link                         | <a href="#">E45329-101344459</a> | -        | -            |
| UL Yellow Card Link 2                       | <a href="#">E45329-101344627</a> | -        | -            |
| UL Recognized, 94-5VA Flame Class Rating    | ≥3                               | mm       | UL 94        |
| UL Recognized, 94V-0 Flame Class Rating     | ≥0.45                            | mm       | UL 94        |
| <b>INJECTION MOLDING <sup>(4)</sup></b>     |                                  |          |              |
| Drying Temperature                          | 120 – 150                        | °C       |              |
| Drying Time                                 | 4                                | Hrs      |              |
| Melt Temperature                            | 315 – 320                        | °C       |              |
| Front - Zone 3 Temperature                  | 330 – 345                        | °C       |              |
| Middle - Zone 2 Temperature                 | 320 – 330                        | °C       |              |
| Rear - Zone 1 Temperature                   | 305 – 315                        | °C       |              |
| Mold Temperature                            | 140 – 165                        | °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) 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) 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.

(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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