

LNPT[™] THERMOCOMP[™] COMPOUND SC004

SC-1004

DESCRIPTION

LNP THERMOCOMP SC004 compound is based on Nylon 12 resin containing 20% carbon fiber. Added features of this grade include: Electrically Conductive.

TYPICAL APPLICATIONS

TBD

| GENERAL INFORMATION | |
|-----------------------|--|
| Features | Electrically Conductive, Carbon fiber filled, High stiffness/Strength, No PFAS intentionally added |
| Fillers | Carbon Fiber |
| Polymer Types | Polyamide 12 (Nylon 12) |
| Processing Techniques | Injection Molding |

| INDUSTRY | SUB INDUSTRY |
|----------------------------|--|
| Automotive | Automotive Under the Hood |
| Consumer | Home Appliances, Commercial Appliance |
| Electrical and Electronics | Electronic Components, Mobile Phone - Computer - Tablets |

TYPICAL PROPERTY VALUES

Revision 20231109

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|-----------------|-------------------|--------------|
| MECHANICAL ⁽¹⁾ | | | |
| Tensile Stress, break, 5 mm/min | 130 | MPa | ISO 527 |
| Tensile Strain, break, 5 mm/min | 2 – 4 | % | ISO 527 |
| Tensile Modulus, 1 mm/min | 10300 | MPa | ISO 527 |
| Flexural Stress, break, 2 mm/min | 171 | MPa | ISO 178 |
| Flexural Modulus, 2 mm/min | 7900 | MPa | ISO 178 |
| IMPACT ⁽¹⁾ | | | |
| Izod Impact, unnotched 80*10*4 +23°C | 50 | kJ/m ² | ISO 180/1U |
| Izod Impact, notched 80*10*4 +23°C | 14 | kJ/m ² | ISO 180/1A |
| PHYSICAL ⁽¹⁾ | | | |
| Density | 1.11 | g/cm ³ | ISO 1183 |
| ELECTRICAL ⁽¹⁾ | | | |
| Surface Resistivity | 1.E+02 – 1.E+04 | Ω | ASTM D257 |
| INJECTION MOLDING ⁽²⁾ | | | |
| Drying Temperature | 100 – 105 | °C | |
| Drying Time | 3.00 – 4.00 | Hrs | |
| Maximum Moisture Content | 0.02 | % | |
| Melt Temperature | 260 – 280 | °C | |

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|-----------------------------|----------------|-------|--------------|
| Nozzle Temperature | 250 – 270 | °C | |
| Front - Zone 3 Temperature | 260 – 280 | °C | |
| Middle - Zone 2 Temperature | 250 – 270 | °C | |
| Rear - Zone 1 Temperature | 240 – 260 | °C | |
| Hopper Temperature | 40 – 60 | °C | |
| Mold Temperature | 60 – 85 | °C | |

- (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.

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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