

# LNPTM STAT-KONTM COMPOUND DE003E

DC1003EM

## DESCRIPTION

LNP STAT-KON DE003E compound is based on Polycarbonate (PC) resin containing 15% carbon fiber. Added features of this grade include: Easy Molding, Electrically Conductive.

| GENERAL INFORMATION        |   |
|----------------------------|---|
| Features                   | Electrically Conductive, Good Processability, Carbon fiber filled, High stiffness/Strength, No PFAS intentionally added |
| Fillers                    | Carbon Fiber  |
| Polymer Types              | Polycarbonate (PC)  |
| Processing Techniques      | Injection Molding   |
| INDUSTRY                   | SUB INDUSTRY  |
| Electrical and Electronics | Electronic Components   |
| Industrial                 | Material Handling   |

## TYPICAL PROPERTY VALUES

Revision 20231109

| PROPERTIES   | TYPICAL VALUES  | UNITS             | TEST METHODS |
|--|-----------------|-------------------|--------------|
| <b>MECHANICAL <sup>(1)</sup></b>                   |                 |                   |              |
| Tensile Stress, break, 5 mm/min                    | 134             | MPa               | ISO 527      |
| Tensile Strain, break, 5 mm/min                    | 1.6             | %                 | ISO 527      |
| Tensile Modulus, 1 mm/min                          | 12200           | MPa               | ISO 527      |
| Flexural Stress, yield, 2 mm/min                   | 184             | MPa               | ISO 178      |
| Flexural Modulus, 2 mm/min                         | 10800           | MPa               | ISO 178      |
| <b>IMPACT <sup>(1)</sup></b>                       |                 |                   |              |
| Izod Impact, unnotched 80*10*4 +23°C               | 25              | kJ/m <sup>2</sup> | ISO 180/1U   |
| Izod Impact, notched 80*10*4 +23°C                 | 6               | kJ/m <sup>2</sup> | ISO 180/1A   |
| <b>THERMAL <sup>(1)</sup></b>                      |                 |                   |              |
| CTE, 23°C to 60°C, flow                            | 1.E-05          | 1/°C              | ISO 11359-2  |
| CTE, 23°C to 60°C, xflow                           | 6.7E-05         | 1/°C              | ISO 11359-2  |
| HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm             | 143             | °C                | ISO 75/Bf    |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm              | 138             | °C                | ISO 75/Af    |
| <b>PHYSICAL <sup>(1)</sup></b>                     |                 |                   |              |
| Mold Shrinkage on Tensile Bar, flow <sup>(2)</sup> | 0.1 – 0.2       | %                 | SABIC method |
| Density  | 1.26            | g/cm <sup>3</sup> | ISO 1183     |
| <b>ELECTRICAL <sup>(1)</sup></b>                   |                 |                   |              |
| Surface Resistivity <sup>(3)</sup>                 | 1.E+02 – 1.E+04 | Ω                 | ASTM D257    |
| <b>INJECTION MOLDING <sup>(4)</sup></b>            |                 |                   |              |
| Drying Temperature                                 | 120             | °C                |              |
| Drying Time  | 4               | Hrs               |              |

| PROPERTIES                  | TYPICAL VALUES | UNITS | TEST METHODS |
|-----------------------------|----------------|-------|--------------|
| Maximum Moisture Content    | 0.02           | %     |              |
| Melt Temperature            | 305 – 325      | °C    |              |
| Front - Zone 3 Temperature  | 320 – 330      | °C    |              |
| Middle - Zone 2 Temperature | 310 – 320      | °C    |              |
| Rear - Zone 1 Temperature   | 295 – 305      | °C    |              |
| Mold Temperature            | 80 – 110       | °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) Measurement meets requirements as specified in ASTM D4496.
- (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.

## DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.