

# LNPTM STAT-KONTM COMPOUND DE0026E

DC-FR

## DESCRIPTION

LNP STAT-KON DE0026E compound is based on Polycarbonate (PC) resin containing 10% carbon fiber. Added features of this grade include Non-Chlorinated, Non-Brominated Flame Retardant, Electrically Conductive and Easy Molding.

| GENERAL INFORMATION        |  |
|----------------------------|--|
| Features                   | Flame Retardant, Electrically Conductive, Good Processability, Non Cl/Br flame retardant, Carbon fiber filled, High stiffness/Strength |
| 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 20240422

| PROPERTIES  | TYPICAL VALUES  | UNITS             | TEST METHODS |
|---|-----------------|-------------------|--------------|
| <b>MECHANICAL <sup>(1)</sup></b>                    |                 |                   |              |
| Tensile Stress, yield, 5 mm/min                     | 117             | MPa               | ISO 527      |
| Tensile Strain, yield, 5 mm/min                     | 2.7             | %                 | ISO 527      |
| Tensile Modulus, 1 mm/min                           | 8000            | MPa               | ISO 527      |
| Flexural Stress, yield, 2 mm/min                    | 182             | MPa               | ISO 178      |
| Flexural Modulus, 2 mm/min                          | 7000            | MPa               | ISO 178      |
| <b>IMPACT <sup>(1)</sup></b>                        |                 |                   |              |
| Izod Impact, notched 80*10*4 +23°C                  | 10              | kJ/m <sup>2</sup> | ISO 180/1A   |
| <b>THERMAL <sup>(1)</sup></b>                       |                 |                   |              |
| CTE, 23°C to 60°C, flow                             | 1.8E-05         | 1/°C              | ISO 11359-2  |
| CTE, 23°C to 60°C, xflow                            | 7.4E-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               | 140             | °C                | ISO 75/Af    |
| Relative Temp Index, Elec <sup>(2)</sup>            | 80              | °C                | UL 746B      |
| Relative Temp Index, Mech w/impact <sup>(2)</sup>   | 80              | °C                | UL 746B      |
| Relative Temp Index, Mech w/o impact <sup>(2)</sup> | 80              | °C                | UL 746B      |
| <b>PHYSICAL <sup>(1)</sup></b>                      |                 |                   |              |
| Density   | 1.23            | g/cm <sup>3</sup> | ISO 1183     |
| Mold Shrinkage, flow <sup>(3)</sup>                 | 0.1 – 0.3       | %                 | SABIC method |
| Mold Shrinkage, xflow <sup>(3)</sup>                | 0.2 – 0.4       | %                 | SABIC method |
| <b>ELECTRICAL <sup>(1)</sup></b>                    |                 |                   |              |
| Surface Resistivity <sup>(4)</sup>                  | 1.E+02 – 1.E+06 | Ω                 | ASTM D257    |

| PROPERTIES                                  | TYPICAL VALUES                   | UNITS | TEST METHODS |
|---|----------------------------------|-------|--------------|
| <b>FLAME CHARACTERISTICS <sup>(2)</sup></b> |                                  |       |              |
| UL Yellow Card Link                         | <a href="#">E45329-101357490</a> | -     | -            |
| UL Recognized, 94V-0 Flame Class Rating     | 2                                | mm    | UL 94        |
| <b>INJECTION MOLDING <sup>(5)</sup></b>     |                                  |       |              |
| Drying Temperature                          | 120                              | °C    |              |
| Drying Time                                 | 4                                | Hrs   |              |
| 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) 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) Measurement meets requirements as specified in ASTM D4496.
- (5) 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.

## MORE INFORMATION

For curve data and CAE cards, please visit and register at <https://materialfinder.sabic-specialties.com>

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