



## LNP™ STAT-KON™ Compound DE0021E

### Americas: COMMERCIAL

Also known as: LNP™ STAT-KON™ Compound DC-1002 EM FR ECO

Product reorder name: DE0021E

LNP STAT-KON™ DE0021E is a compound based on Polycarbonate resin containing 10% Carbon Fiber. Added features of this material include: Easy Molding, Flame Retardant, Electrically Conductive.

| TYPICAL PROPERTIES <sup>1</sup>         | TYPICAL VALUE | Unit                | Standard    |
|-----------------------------------------|---------------|---------------------|-------------|
| <b>MECHANICAL</b>                       |               |                     |             |
| Tensile Stress, break                   | 1160          | kgf/cm <sup>2</sup> | ASTM D 638  |
| Tensile Strain, break                   | 1.8           | %                   | ASTM D 638  |
| Tensile Modulus, 50 mm/min              | 93400         | kgf/cm <sup>2</sup> | ASTM D 638  |
| Flexural Stress                         | 1730          | kgf/cm <sup>2</sup> | ASTM D 790  |
| Flexural Modulus                        | 83800         | kgf/cm <sup>2</sup> | ASTM D 790  |
| Tensile Stress, break                   | 112           | MPa                 | ISO 527     |
| Tensile Strain, break                   | 2.1           | %                   | ISO 527     |
| Tensile Modulus, 1 mm/min               | 9360          | MPa                 | ISO 527     |
| Flexural Stress                         | 169           | MPa                 | ISO 178     |
| Flexural Modulus                        | 8500          | MPa                 | ISO 178     |
| <b>IMPACT</b>                           |               |                     |             |
| Izod Impact, unnotched, 23°C            | 35            | cm-kgf/cm           | ASTM D 4812 |
| Izod Impact, notched, 23°C              | 3             | cm-kgf/cm           | ASTM D 256  |
| Instrumented Impact Energy @ peak, 23°C | 95            | cm-kgf              | ASTM D 3763 |
| Multiaxial Impact                       | 77            | cm-kgf              | ISO 6603    |
| Izod Impact, unnotched 80*10*4 +23°C    | 31            | kJ/m <sup>2</sup>   | ISO 180/1U  |
| Izod Impact, notched 80*10*4 +23°C      | 7             | kJ/m <sup>2</sup>   | ISO 180/1A  |
| <b>THERMAL</b>                          |               |                     |             |
| HDT, 1.82 MPa, 3.2mm, unannealed        | 93            | °C                  | ASTM D 648  |
| CTE, -40°C to 40°C, flow                | 1.67E-05      | 1/°C                | ASTM E 831  |
| CTE, -40°C to 40°C, xflow               | 6.08E-05      | 1/°C                | ASTM E 831  |
| CTE, -40°C to 40°C, flow                | 1.67E-05      | 1/°C                | ISO 11359-2 |
| CTE, -40°C to 40°C, xflow               | 6.09E-05      | 1/°C                | ISO 11359-2 |



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| TYPICAL PROPERTIES <sup>1</sup>               | TYPICAL VALUE   | Unit              | Standard          |
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| <b>THERMAL</b>                                |                 |                   |                   |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm         | 96              | °C                | ISO 75/Af         |
| <b>PHYSICAL</b>                               |                 |                   |                   |
| Density                                       | 1.27            | g/cm <sup>3</sup> | ASTM D 792        |
| Mold Shrinkage, flow, 24 hrs (5)              | 0.1 - 0.3       | %                 | ASTM D 955        |
| Mold Shrinkage, xflow, 24 hrs (5)             | 0.2 - 0.4       | %                 | ASTM D 955        |
| Mold Shrinkage, flow, 24 hrs (5)              | 0.06 - 0.32     | %                 | ISO 294           |
| Mold Shrinkage, xflow, 24 hrs (5)             | 0.29 - 0.43     | %                 | ISO 294           |
| Density                                       | 1.27            | g/cm <sup>3</sup> | ISO 1183          |
| Moisture Absorption (23°C / 50% RH)           | 0.1             | %                 | ISO 62            |
| <b>ELECTRICAL</b>                             |                 |                   |                   |
| Surface Resistivity                           | 1.E+02 - 1.E+06 | Ohm               | ASTM D 257        |
| <b>FLAME CHARACTERISTICS</b>                  |                 |                   |                   |
| UL Compliant, 94V-0 Flame Class Rating (3)(4) | 1.5             | mm                | UL 94 by SABIC-IP |



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| PROCESSING PARAMETERS       | TYPICAL VALUE | Unit |
|-----------------------------|---------------|------|
| <b>Injection Molding</b>    |               |      |
| Drying Temperature          | 80            | °C   |
| Drying Time                 | 4 - 6         | hrs  |
| Maximum Moisture Content    | 0.02          | %    |
| Melt Temperature            | 255 - 290     | °C   |
| Front - Zone 3 Temperature  | 260 - 270     | °C   |
| Middle - Zone 2 Temperature | 255 - 265     | °C   |
| Rear - Zone 1 Temperature   | 250 - 260     | °C   |
| Mold Temperature            | 40 - 65       | °C   |
| Back Pressure               | 0.2 - 0.3     | MPa  |
| Screw Speed                 | 30 - 60       | rpm  |