

## LNP\* Stat-kon\* Compound EE005

### Asia Pacific: COMMERCIAL

Also known as: LNP\* Stat-kon\* Compound EC-1005

Product reorder name: EE005

LNP STAT-KON\* EE005 is a compound based on Polyetherimide resin containing Carbon Fiber. Added features of this material include: Electrically Conductive.

| TYPICAL PROPERTIES <sup>1</sup>         | TYPICAL VALUE | UNIT                | STANDARD    |
|-----------------------------------------|---------------|---------------------|-------------|
| <b>MECHANICAL</b>                       |               |                     |             |
| Tensile Stress, break                   | 2040          | kgf/cm <sup>2</sup> | ASTM D 638  |
| Tensile Strain, break                   | 2.1           | %                   | ASTM D 638  |
| Tensile Modulus, 50 mm/min              | 125700        | kgf/cm <sup>2</sup> | ASTM D 638  |
| Flexural Stress                         | 2830          | kgf/cm <sup>2</sup> | ASTM D 790  |
| Flexural Modulus                        | 146000        | kgf/cm <sup>2</sup> | ASTM D 790  |
| Tensile Stress, break                   | 194           | MPa                 | ISO 527     |
| Tensile Strain, break                   | 2.1           | %                   | ISO 527     |
| Tensile Modulus, 1 mm/min               | 11700         | MPa                 | ISO 527     |
| Flexural Stress                         | 246           | MPa                 | ISO 178     |
| Flexural Modulus                        | 15010         | MPa                 | ISO 178     |
| <b>IMPACT</b>                           |               |                     |             |
| Izod Impact, unnotched, 23°C            | 45            | cm-kgf/cm           | ASTM D 4812 |
| Izod Impact, notched, 23°C              | 5             | cm-kgf/cm           | ASTM D 256  |
| Instrumented Impact Energy @ peak, 23°C | 106           | cm-kgf              | ASTM D 3763 |
| Multiaxial Impact                       | 72            | cm-kgf              | ISO 6603    |
| Izod Impact, unnotched 80*10*4 +23°C    | 29            | 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</b>                          |               |                     |             |
| HDT, 1.82 MPa, 3.2mm, unannealed        | 207           | °C                  | ASTM D 648  |
| CTE, -40°C to 40°C, flow                | 1.9E-05       | 1/°C                | ASTM E 831  |
| CTE, -40°C to 40°C, xflow               | 2.71E-05      | 1/°C                | ASTM E 831  |
| CTE, -40°C to 40°C, flow                | 1.92E-05      | 1/°C                | ISO 11359-2 |
| CTE, -40°C to 40°C, xflow               | 2.71E-05      | 1/°C                | ISO 11359-2 |

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| <b>THERMAL</b>                        |                 |                   |            |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm | 206             | °C                | ISO 75/Af  |
| <b>PHYSICAL</b>                       |                 |                   |            |
| Density                               | 1.365           | g/cm <sup>3</sup> | ASTM D 792 |
| Moisture Absorption, 50% RH, 24 hrs   | 0.16            | %                 | ASTM D 570 |
| Mold Shrinkage, flow, 24 hrs          | 0.1 - 0.3       | %                 | ASTM D 955 |
| Mold Shrinkage, xflow, 24 hrs         | 0.3 - 0.5       | %                 | ASTM D 955 |
| Mold Shrinkage, flow, 24 hrs          | 0.1 - 0.3       | %                 | ISO 294    |
| Mold Shrinkage, xflow, 24 hrs         | 0.3 - 0.5       | %                 | ISO 294    |
| Density                               | 1.36            | g/cm <sup>3</sup> | ISO 1183   |
| Moisture Absorption (23°C / 50% RH)   | 0.23            | %                 | ISO 62     |
| <b>ELECTRICAL</b>                     |                 |                   |            |
| Volume Resistivity                    | 1.E+02 - 1.E+06 | Ohm-cm            | ASTM D 257 |
| Surface Resistivity                   | 1.E+02 - 1.E+05 | Ohm               | ASTM D 257 |

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| PROCESSING PARAMETERS       | TYPICAL VALUE | UNIT |
|-----------------------------|---------------|------|
| <b>Injection Molding</b>    |               |      |
| Drying Temperature          | 120 - 150     | °C   |
| Drying Time                 | 4             | hrs  |
| Maximum Moisture Content    | 0.05          | %    |
| Melt Temperature            | 360 - 365     | °C   |
| Front - Zone 3 Temperature  | 365 - 375     | °C   |
| Middle - Zone 2 Temperature | 355 - 365     | °C   |
| Rear - Zone 1 Temperature   | 345 - 355     | °C   |
| Mold Temperature            | 120 - 150     | °C   |
| Back Pressure               | 0.3 - 0.7     | MPa  |
| Screw Speed                 | 60 - 100      | rpm  |