



## LNP™ STAT-KON™ Compound RE002

### Americas: COMMERCIAL

Also known as: LNP™ STAT-KON™ Compound RC-1002

Product reorder name: RE002

LNP STAT-KON RE002 is a compound based on Nylon 66 resin containing 10% Carbon Fiber. Added features of this material include: Electrically Conductive.

| TYPICAL PROPERTIES <sup>1</sup>         | TYPICAL VALUE | Unit                | Standard    |
|-----------------------------------------|---------------|---------------------|-------------|
| <b>MECHANICAL</b>                       |               |                     |             |
| Tensile Stress, yield                   | 1370          | kgf/cm <sup>2</sup> | ASTM D 638  |
| Tensile Stress, break                   | 1290          | kgf/cm <sup>2</sup> | ASTM D 638  |
| Tensile Strain, yield                   | 2.3           | %                   | ASTM D 638  |
| Tensile Strain, break                   | 2.3           | %                   | ASTM D 638  |
| Tensile Modulus, 50 mm/min              | 84300         | kgf/cm <sup>2</sup> | ASTM D 638  |
| Flexural Stress                         | 2100          | kgf/cm <sup>2</sup> | ASTM D 790  |
| Flexural Modulus                        | 70300         | kgf/cm <sup>2</sup> | ASTM D 790  |
| Tensile Stress, yield                   | 131           | MPa                 | ISO 527     |
| Tensile Stress, break                   | 131           | MPa                 | ISO 527     |
| Tensile Strain, yield                   | 2.1           | %                   | ISO 527     |
| Tensile Strain, break                   | 2.1           | %                   | ISO 527     |
| Tensile Modulus, 1 mm/min               | 7800          | MPa                 | ISO 527     |
| Flexural Stress                         | 191           | MPa                 | ISO 178     |
| Flexural Modulus                        | 6000          | MPa                 | ISO 178     |
| <b>IMPACT</b>                           |               |                     |             |
| Izod Impact, unnotched, 23°C            | 37            | cm-kgf/cm           | ASTM D 4812 |
| Izod Impact, notched, 23°C              | 2             | cm-kgf/cm           | ASTM D 256  |
| Instrumented Impact Energy @ peak, 23°C | 60            | cm-kgf              | ASTM D 3763 |
| Multiaxial Impact                       | 18            | cm-kgf              | ISO 6603    |
| Izod Impact, unnotched 80*10*4 +23°C    | 24            | kJ/m <sup>2</sup>   | ISO 180/1U  |
| Izod Impact, notched 80*10*4 +23°C      | 3             | kJ/m <sup>2</sup>   | ISO 180/1A  |
| <b>THERMAL</b>                          |               |                     |             |
| HDT, 0.45 MPa, 3.2 mm, unannealed       | 258           | °C                  | ASTM D 648  |



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|----------------------------------------|-----------------|-------------------|-------------|
| <b>THERMAL</b>                         |                 |                   |             |
| HDT, 1.82 MPa, 3.2mm, unannealed       | 245             | °C                | ASTM D 648  |
| CTE, -40°C to 40°C, flow               | 8.28E-05        | 1/°C              | ASTM E 831  |
| CTE, -40°C to 40°C, xflow              | 2.88E-05        | 1/°C              | ASTM E 831  |
| CTE, -40°C to 40°C, flow               | 8.3E-05         | 1/°C              | ISO 11359-2 |
| CTE, -40°C to 40°C, xflow              | 2.9E-05         | 1/°C              | ISO 11359-2 |
| HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm | 254             | °C                | ISO 75/Bf   |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm  | 241             | °C                | ISO 75/Af   |
| <b>PHYSICAL</b>                        |                 |                   |             |
| Density                                | 1.18            | g/cm <sup>3</sup> | ASTM D 792  |
| Moisture Absorption, 50% RH, 24 hrs    | 0.8             | %                 | ASTM D 570  |
| Mold Shrinkage, flow, 24 hrs (5)       | 0.6 - 0.8       | %                 | ASTM D 955  |
| Mold Shrinkage, xflow, 24 hrs (5)      | 1 - 3           | %                 | ASTM D 955  |
| Mold Shrinkage, flow, 24 hrs (5)       | 0.74            | %                 | ISO 294     |
| Mold Shrinkage, xflow, 24 hrs (5)      | 1.3             | %                 | ISO 294     |
| Density                                | 1.18            | g/cm <sup>3</sup> | ISO 1183    |
| <b>ELECTRICAL</b>                      |                 |                   |             |
| Surface Resistivity                    | 1.E+01 - 1.E+03 | Ohm               | ASTM D 257  |



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| PROCESSING PARAMETERS       | TYPICAL VALUE | Unit |
|-----------------------------|---------------|------|
| <b>Injection Molding</b>    |               |      |
| Drying Temperature          | 80            | °C   |
| Drying Time                 | 4             | hrs  |
| Maximum Moisture Content    | 0.15 - 0.25   | %    |
| Melt Temperature            | 280 - 305     | °C   |
| Front - Zone 3 Temperature  | 295 - 305     | °C   |
| Middle - Zone 2 Temperature | 280 - 295     | °C   |
| Rear - Zone 1 Temperature   | 265 - 275     | °C   |
| Mold Temperature            | 95 - 110      | °C   |
| Back Pressure               | 0.2 - 0.3     | MPa  |
| Screw Speed                 | 30 - 60       | rpm  |