



## LNP™ STAT-KON™ Compound MD000ISC

### Americas: COMMERCIAL

Also known as: LNP™ STAT-KON™ Compound M-1 HI

Product reorder name: MD000ISC

LNP STAT-KON\* MD000ISC is a compound based on Polypropylene resin containing Carbon Powder. Added features of this material include: Electrically Conductive, High Impact.

| TYPICAL PROPERTIES <sup>1</sup>         | TYPICAL VALUE | Unit                | Standard    |
|-----------------------------------------|---------------|---------------------|-------------|
| <b>MECHANICAL</b>                       |               |                     |             |
| Tensile Stress, yield                   | 220           | kgf/cm <sup>2</sup> | ASTM D 638  |
| Tensile Stress, break                   | 170           | kgf/cm <sup>2</sup> | ASTM D 638  |
| Tensile Strain, yield                   | 9             | %                   | ASTM D 638  |
| Tensile Strain, break                   | 133.8         | %                   | ASTM D 638  |
| Tensile Modulus, 50 mm/min              | 4900          | kgf/cm <sup>2</sup> | ASTM D 638  |
| Flexural Stress                         | 280           | kgf/cm <sup>2</sup> | ASTM D 790  |
| Flexural Modulus                        | 11600         | kgf/cm <sup>2</sup> | ASTM D 790  |
| Tensile Stress, yield                   | 18            | MPa                 | ISO 527     |
| Tensile Stress, break                   | 17            | MPa                 | ISO 527     |
| Tensile Modulus, 1 mm/min               | 1100          | MPa                 | ISO 527     |
| Flexural Stress                         | 27            | MPa                 | ISO 178     |
| Flexural Modulus                        | 1200          | MPa                 | ISO 178     |
| <b>IMPACT</b>                           |               |                     |             |
| Izod Impact, unnotched, 23°C            | 158           | cm-kgf/cm           | ASTM D 4812 |
| Izod Impact, notched, 23°C              | 84            | cm-kgf/cm           | ASTM D 256  |
| Instrumented Impact Energy @ peak, 23°C | 248           | cm-kgf              | ASTM D 3763 |
| Multiaxial Impact                       | 316           | cm-kgf              | ISO 6603    |
| Izod Impact, unnotched 80*10*4 +23°C    | 112           | kJ/m <sup>2</sup>   | ISO 180/1U  |
| Izod Impact, notched 80*10*4 +23°C      | 65            | kJ/m <sup>2</sup>   | ISO 180/1A  |
| <b>THERMAL</b>                          |               |                     |             |
| HDT, 0.45 MPa, 3.2 mm, unannealed       | 81            | °C                  | ASTM D 648  |
| HDT, 1.82 MPa, 3.2mm, unannealed        | 52            | °C                  | ASTM D 648  |
| CTE, -40°C to 40°C, flow                | 1.01E-04      | 1/°C                | ASTM E 831  |





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|---------------------------------------|-----------------|-------------------|-------------|
| <b>THERMAL</b>                        |                 |                   |             |
| CTE, -40°C to 40°C, xflow             | 1.19E-04        | 1/°C              | ASTM E 831  |
| CTE, -40°C to 40°C, flow              | 1.01E-04        | 1/°C              | ISO 11359-2 |
| CTE, -40°C to 40°C, xflow             | 1.19E-04        | 1/°C              | ISO 11359-2 |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm | 56              | °C                | ISO 75/Af   |
| <b>PHYSICAL</b>                       |                 |                   |             |
| Density                               | 0.98            | g/cm <sup>3</sup> | ASTM D 792  |
| Moisture Absorption, 50% RH, 24 hrs   | 0.03            | %                 | ASTM D 570  |
| Mold Shrinkage, flow, 24 hrs (5)      | 1.6 - 1.8       | %                 | ASTM D 955  |
| Mold Shrinkage, xflow, 24 hrs (5)     | 1.6 - 1.8       | %                 | ASTM D 955  |
| Mold Shrinkage, flow, 24 hrs (5)      | 1.6 - 1.8       | %                 | ISO 294     |
| Mold Shrinkage, xflow, 24 hrs (5)     | 1.58 - 1.8      | %                 | ISO 294     |
| Density                               | 0.97            | g/cm <sup>3</sup> | ISO 1183    |
| <b>ELECTRICAL</b>                     |                 |                   |             |
| Surface Resistivity                   | 1.E+01 - 1.E+06 | Ohm               | ASTM D 257  |
| Static Decay, 5000V to <50V           | 0.01            | < seconds         | FTMS101B    |





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| PROCESSING PARAMETERS       | TYPICAL VALUE | Unit |
|-----------------------------|---------------|------|
| <b>Injection Molding</b>    |               |      |
| Drying Temperature          | 80            | °C   |
| Drying Time                 | 4             | hrs  |
| Melt Temperature            | 225 - 250     | °C   |
| Front - Zone 3 Temperature  | 240 - 250     | °C   |
| Middle - Zone 2 Temperature | 215 - 225     | °C   |
| Rear - Zone 1 Temperature   | 195 - 205     | °C   |
| Mold Temperature            | 30 - 50       | °C   |
| Back Pressure               | 0.2 - 0.3     | MPa  |
| Screw Speed                 | 30 - 60       | rpm  |

