



## LNP™ STAT-KON™ Compound KEP33

### Americas: COMMERCIAL

Also known as: LNP™ STAT-KON™ Compound KCL-4533

Product reorder name: KEP33

LNP STAT-KON™ KEP33 is a compound based on Acetal resin containing 15% Carbon Fiber, 15% PTFE/Silicone. Added features of this material include: Electrically Conductive, Wear Resistant.

| TYPICAL PROPERTIES <sup>1</sup>         | TYPICAL VALUE | Unit                | Standard    |
|-----------------------------------------|---------------|---------------------|-------------|
| <b>MECHANICAL</b>                       |               |                     |             |
| Tensile Stress, break                   | 790           | kgf/cm <sup>2</sup> | ASTM D 638  |
| Tensile Strain, break                   | 1.1           | %                   | ASTM D 638  |
| Tensile Modulus, 50 mm/min              | 104000        | kgf/cm <sup>2</sup> | ASTM D 638  |
| Flexural Stress                         | 1160          | kgf/cm <sup>2</sup> | ASTM D 790  |
| Flexural Modulus                        | 72900         | kgf/cm <sup>2</sup> | ASTM D 790  |
| Tensile Stress, break                   | 74            | MPa                 | ISO 527     |
| Tensile Strain, break                   | 1             | %                   | ISO 527     |
| Tensile Modulus, 1 mm/min               | 10170         | MPa                 | ISO 527     |
| Flexural Stress                         | 106           | MPa                 | ISO 178     |
| Flexural Modulus                        | 8270          | MPa                 | ISO 178     |
| <b>IMPACT</b>                           |               |                     |             |
| Izod Impact, unnotched, 23°C            | 13            | cm-kgf/cm           | ASTM D 4812 |
| Izod Impact, notched, 23°C              | 3             | cm-kgf/cm           | ASTM D 256  |
| Instrumented Impact Energy @ peak, 23°C | 73            | cm-kgf              | ASTM D 3763 |
| Multiaxial Impact                       | 41            | cm-kgf              | ISO 6603    |
| Izod Impact, unnotched 80*10*4 +23°C    | 17            | 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, 1.82 MPa, 3.2mm, unannealed        | 66            | °C                  | ASTM D 648  |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm   | 155           | °C                  | ISO 75/Af   |
| <b>PHYSICAL</b>                         |               |                     |             |
| Density                                 | 1.473         | g/cm <sup>3</sup>   | ASTM D 792  |
| Moisture Absorption, 50% RH, 24 hrs     | 0.21          | %                   | ASTM D 570  |
| Mold Shrinkage, flow, 24 hrs (5)        | 0.4 - 0.6     | %                   | ASTM D 955  |



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| <b>PHYSICAL</b>                     |                 |                                                 |                      |
| Mold Shrinkage, xflow, 24 hrs (5)   | 0.7 - 0.9       | %                                               | ASTM D 955           |
| Mold Shrinkage, flow, 24 hrs (5)    | 0.4 - 0.6       | %                                               | ISO 294              |
| Mold Shrinkage, xflow, 24 hrs (5)   | 0.7 - 0.9       | %                                               | ISO 294              |
| Wear Factor Washer                  | 202             | 10 <sup>-10</sup> in <sup>5</sup> -min/ft-lb-hr | ASTM D 3702 Modified |
| Dynamic COF                         | 0.36            | -                                               | ASTM D 3702 Modified |
| Static COF                          | 0.31            | -                                               | ASTM D 3702 Modified |
| Density                             | 1.46            | g/cm <sup>3</sup>                               | ISO 1183             |
| Moisture Absorption (23°C / 50% RH) | 0.32            | %                                               | ISO 62               |
| <b>ELECTRICAL</b>                   |                 |                                                 |                      |
| Volume Resistivity                  | 1.E+01 - 1.E+04 | Ohm-cm                                          | ASTM D 257           |
| Surface Resistivity                 | 1.E+01 - 1.E+04 | 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  |
| Melt Temperature            | 200 - 215     | °C   |
| Front - Zone 3 Temperature  | 210 - 220     | °C   |
| Middle - Zone 2 Temperature | 195 - 205     | °C   |
| Rear - Zone 1 Temperature   | 175 - 190     | °C   |
| Mold Temperature            | 80 - 110      | °C   |
| Back Pressure               | 0.2 - 0.3     | MPa  |
| Screw Speed                 | 30 - 60       | rpm  |