

LNPTM STAT-KONTM COMPOUND DD000

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DESCRIPTION

LNP STAT-KON DD000 compound is based on Polycarbonate (PC) resin containing conductive carbon powder. Added features of this grade include: Electrically Conductive.

| GENERAL INFORMATION | |
|-----------------------|--|
| Features | Electrically Conductive, No PFAS intentionally added |
| Fillers | Carbon Powder |
| Polymer Types | Polycarbonate (PC) |
| Processing Techniques | Injection Molding |

| INDUSTRY | SUB INDUSTRY |
|----------------------------|-----------------------|
| Electrical and Electronics | Electronic Components |
| Industrial | Material Handling |

TYPICAL PROPERTY VALUES

Revision 20231109

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|--|----------------|-------|--------------|
| MECHANICAL ⁽¹⁾ | | | |
| Tensile Stress, yield | 62 | MPa | ASTM D638 |
| Tensile Stress, break | 56 | MPa | ASTM D638 |
| Tensile Strain, yield | 4.9 | % | ASTM D638 |
| Tensile Strain, break | 9.5 | % | ASTM D638 |
| Tensile Modulus, 50 mm/min | 2680 | MPa | ASTM D638 |
| Flexural Stress | 102 | MPa | ASTM D790 |
| Flexural Modulus | 2890 | MPa | ASTM D790 |
| Tensile Stress, yield | 60 | MPa | ISO 527 |
| Tensile Stress, break | 53 | MPa | ISO 527 |
| Tensile Strain, yield | 4.4 | % | ISO 527 |
| Tensile Strain, break | 8.8 | % | ISO 527 |
| Tensile Modulus, 1 mm/min | 2900 | MPa | ISO 527 |
| Flexural Stress | 102 | MPa | ISO 178 |
| Flexural Modulus | 3100 | MPa | ISO 178 |
| IMPACT ⁽¹⁾ | | | |
| Izod Impact, unnotched, 23°C | 1217 | J/m | ASTM D4812 |
| Izod Impact, notched, 23°C | 64 | J/m | ASTM D256 |
| Instrumented Dart Impact Energy @ peak, 23°C | 8 | J | ASTM D3763 |
| Izod Impact, unnotched 80*10*4 +23°C | 98 | kJ/m² | ISO 180/1U |
| Izod Impact, notched 80*10*4 +23°C | 6 | kJ/m² | ISO 180/1A |
| THERMAL ⁽¹⁾ | | | |
| HDT, 0.45 MPa, 3.2 mm, unannealed | 138 | °C | ASTM D648 |

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|-----------------------------------|-------------------|--------------|
| HDT, 1.82 MPa, 3.2mm, unannealed | 127 | °C | ASTM D648 |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm | 127 | °C | ISO 75 /Af |
| Relative Temp Index, Elec ⁽²⁾ | 80 | °C | UL 746B |
| Relative Temp Index, Mech w/impact ⁽²⁾ | 80 | °C | UL 746B |
| Relative Temp Index, Mech w/o impact ⁽²⁾ | 80 | °C | UL 746B |
| PHYSICAL ⁽¹⁾ | | | |
| Density | 1.24 | g/cm ³ | ASTM D792 |
| Moisture Absorption, (23°C/50% RH/24 hrs) | 0.14 | % | ASTM D570 |
| Mold Shrinkage, flow, 24 hrs ⁽³⁾ | 0.8 | % | ASTM D955 |
| Mold Shrinkage, xflow, 24 hrs ⁽³⁾ | 0.8 | % | ASTM D955 |
| Mold Shrinkage, flow, 24 hrs ⁽³⁾ | 0.84 | % | ISO 294 |
| Mold Shrinkage, xflow, 24 hrs ⁽³⁾ | 0.82 | % | ISO 294 |
| Moisture Absorption (23°C / 50% RH) | 0.25 | % | ISO 62 |
| ELECTRICAL ⁽¹⁾ | | | |
| Surface Resistivity ⁽⁴⁾ | 1.E+02 – 1.E+06 | Ω | ASTM D257 |
| FLAME CHARACTERISTICS ⁽²⁾ | | | |
| UL Yellow Card Link | E121562-101282880 | - | - |
| UL Yellow Card Link 2 | E207780-103093669 | - | - |
| UL Yellow Card Link 3 | E45329-101344690 | - | - |
| UL Recognized, 94HB Flame Class Rating | 1.5 | mm | UL 94 |
| INJECTION MOLDING ⁽⁵⁾ | | | |
| Drying Temperature | 120 | °C | |
| Drying Time | 4 | Hrs | |
| Maximum Moisture Content | 0.02 | % | |
| Melt Temperature | 305 – 325 | °C | |
| Front - Zone 3 Temperature | 320 – 330 | °C | |
| Middle - Zone 2 Temperature | 310 – 320 | °C | |
| Rear - Zone 1 Temperature | 295 – 305 | °C | |
| Mold Temperature | 80 – 110 | °C | |
| Back Pressure | 0.2 – 0.3 | MPa | |
| Screw Speed | 30 – 60 | rpm | |

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

(3) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(4) Measurement meets requirements as specified in ASTM D4496.

(5) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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