

LNPTM STAT-KONTM COMPOUND DX96573C

PDX-D-96573 CCS

DESCRIPTION

LNP STAT-KON DX96573C compound is based on Polycarbonate (PC) resin containing conductive carbon powder. Added features of this grade include: Electrically Conductive, LNP Clean Compounding Technology.

| GENERAL INFORMATION | |
|-----------------------|---|
| Features | Electrically Conductive, Low ionics/Outgassing/Liquid particle count, No PFAS intentionally added |
| Fillers | Carbon Powder |
| Polymer Types | Polycarbonate (PC) |
| Processing Techniques | Injection Molding |

| INDUSTRY | SUB INDUSTRY |
|----------------------------|--|
| Electrical and Electronics | Electronic Components, Mobile Phone - Computer - Tablets |
| Industrial | Electrical, Material Handling |

TYPICAL PROPERTY VALUES

Revision 20231109

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|----------------|-------------------|--------------|
| MECHANICAL ⁽¹⁾ | | | |
| Tensile Modulus, 5 mm/min | 3008 | MPa | ASTM D638 |
| Tensile Stress, yld, Type I, 5 mm/min | 64 | MPa | ASTM D638 |
| Tensile Stress, brk, Type I, 5 mm/min | 54 | MPa | ASTM D638 |
| Tensile Strain, yld, Type I, 5 mm/min | 4.9 | % | ASTM D638 |
| Tensile Strain, brk, Type I, 5 mm/min | 20 | % | ASTM D638 |
| Tensile Modulus, 1 mm/min | 2913 | MPa | ISO 527 |
| Tensile Stress, yield, 5 mm/min | 63 | MPa | ISO 527 |
| Tensile Stress, break, 5 mm/min | 54 | MPa | ISO 527 |
| Tensile Strain, yield, 5 mm/min | 4.9 | % | ISO 527 |
| Tensile Strain, break, 5 mm/min | 20 | % | ISO 527 |
| Flexural modulus | 2890 | MPa | ASTM D790 |
| Flexural Modulus | 2771 | MPa | ISO 178 |
| Flexural Stress | 100 | MPa | ISO 178 |
| IMPACT ⁽¹⁾ | | | |
| Izod Impact, notched, 23°C | 65.8 | J/m | ASTM D256 |
| Izod Impact, unnotched, 23°C | NB | J/m | ASTM D4812 |
| Instrumented Dart Impact Total Energy, 23°C | 41 | J | ASTM D3763 |
| Izod Impact, notched 80*10*4 +23°C | 7.5 | kJ/m ² | ISO 180/1A |
| Izod Impact, unnotched 80*10*4 +23°C | NB | kJ/m ² | ISO 180/1U |
| Multiaxial Impact | 38 | J | ISO 6603 |
| THERMAL ⁽¹⁾ | | | |
| HDT, 1.8 MPa, 3.2mm, unannealed | 133 | °C | ASTM D648 |

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|--|-------------------|-------------------|--------------|
| HDT, 0.45 MPa, 3.2 mm, unannealed | 142 | °C | ASTM D648 |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm | 131 | °C | ISO 75/Af |
| HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm | 142 | °C | ISO 75/Bf |
| CTE, -30°C to 30°C, flow | 0.000062 | 1/°C | ASTM E831 |
| CTE, -30°C to 30°C, xflow | 0.000063 | 1/°C | ASTM E831 |
| PHYSICAL ⁽¹⁾ | | | |
| Specific Gravity | 1.25 | - | ASTM D792 |
| Density | 1.25 | g/cm ³ | ASTM D792 |
| Mold Shrinkage, flow, 24 hrs ⁽²⁾ | 0.74 | % | ASTM D955 |
| Mold Shrinkage, xflow, 24 hrs ⁽²⁾ | 0.85 | % | ASTM D955 |
| Moisture Absorption, (23°C/50% RH/24 hrs) | 0.15 | % | ASTM D570 |
| Moisture Absorption (23°C / 50% RH) | 0.23 | % | ISO 62 |
| ELECTRICAL ⁽¹⁾ | | | |
| Surface Resistivity ⁽³⁾ | 1.0E+02 – 1.0E+05 | Ω | ASTM D257 |
| INJECTION MOLDING ⁽⁴⁾ | | | |
| Drying Temperature | 121 | °C | |
| Drying Time | 4 | Hrs | |
| Melt Temperature | 304 – 326 | °C | |
| Front - Zone 3 Temperature | 321 – 332 | °C | |
| Middle - Zone 2 Temperature | 310 – 321 | °C | |
| Rear - Zone 1 Temperature | 293 – 304 | °C | |
| Mold Temperature | 82 – 110 | °C | |
| Back Pressure | 0.17 – 0.34 | MPa | |
| Screw Speed | 30 – 60 | rpm | |
| Maximum Moisture Content | 0.02 | % | |

(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) 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.

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

(4) 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.

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

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