

LNPTM STAT-KONTM COMPOUND WEF42I

WCF-1006 HI
REGION AMERICAS

DESCRIPTION

LNP STAT-KON WEF42I is a compound based on PBT resin containing 10% Carbon Fiber, 20% Glass Fiber. Added features of this grade include: High Impact, Electrically Conductive.

TYPICAL PROPERTY VALUES

Revision 20181231

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|--|-----------------|-------------------|--------------|
| MECHANICAL | | | |
| Tensile Stress, brk, Type I, 5 mm/min | 94 | MPa | ASTM D 638 |
| Tensile Strain, brk, Type I, 5 mm/min | 1.7 | % | ASTM D 638 |
| Tensile Modulus, 50 mm/min | 21840 | MPa | ASTM D 638 |
| Flexural Stress, brk, 1.3 mm/min, 50 mm span | 125 | MPa | ASTM D 790 |
| Flexural Modulus, 1.3 mm/min, 50 mm span | 9990 | MPa | ASTM D 790 |
| Tensile Stress, break, 5 mm/min | 99 | MPa | ISO 527 |
| Tensile Strain, break, 5 mm/min | 2.5 | % | ISO 527 |
| Tensile Modulus, 1 mm/min | 15830 | MPa | ISO 527 |
| Flexural Stress | 169 | MPa | ISO 178 |
| Flexural Modulus, 2 mm/min | 10520 | MPa | ISO 178 |
| IMPACT | | | |
| Izod Impact, unnotched, 23°C | 710 | J/m | ASTM D 4812 |
| Izod Impact, notched, 23°C | 125 | J/m | ASTM D 256 |
| Multiaxial Impact | 4 | J | ISO 6603 |
| Instrumented Impact Total Energy, 23°C | 16 | J | ASTM D 3763 |
| Izod Impact, unnotched 80*10*4 +23°C | 45 | kJ/m ² | ISO 180/1U |
| Izod Impact, notched 80*10*4 +23°C | 14 | kJ/m ² | ISO 180/1A |
| THERMAL | | | |
| HDT, 0.45 MPa, 3.2 mm, unannealed | 219 | °C | ASTM D 648 |
| HDT, 1.82 MPa, 3.2mm, unannealed | 205 | °C | ASTM D 648 |
| CTE, -30°C to 30°C, flow | 2.1E-05 | 1/°C | ASTM D 696 |
| CTE, -30°C to 30°C, xflow | 1.34E-04 | 1/°C | ASTM D 696 |
| HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm | 203 | °C | ISO 75/Bf |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm | 220 | °C | ISO 75/Af |
| PHYSICAL | | | |
| Density | 1.44 | g/cm ³ | ASTM D 792 |
| Mold Shrinkage, flow, 24 hrs | 0.3 – 0.5 | % | ASTM D 955 |
| Mold Shrinkage, xflow, 24 hrs | 1 – 3 | % | ASTM D 955 |
| Density | 1.44 | g/cm ³ | ISO 1183 |
| ELECTRICAL | | | |
| Volume Resistivity | 4 – 6 | Ohm-cm | ASTM D 257 |
| Surface Resistivity | 2.E+00 – 5.E+00 | Ohm | ASTM D 257 |
| INJECTION MOLDING | | | |

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|-----------------------------|----------------|-------|--------------|
| Drying Temperature | 120 | °C | |
| Drying Time | 4 | hrs | |
| Maximum Moisture Content | 0.05 | % | |
| Melt Temperature | 240 – 265 | °C | |
| Front - Zone 3 Temperature | 260 – 270 | °C | |
| Middle - Zone 2 Temperature | 245 – 255 | °C | |
| Rear - Zone 1 Temperature | 220 – 230 | °C | |
| Mold Temperature | 80 – 100 | °C | |
| Back Pressure | 0.2 – 0.3 | MPa | |
| Screw Speed | 30 – 60 | rpm | |

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