

# LNPTM STAT-KONTM COMPOUND FX98501

PDX-F-98501

REGION AMERICAS

## DESCRIPTION

LNP STAT-KON FX98501 compound is based on Polyethylene (PE) resin containing conductive carbon powder and glass fiber. Added features of this grade include: Electrically Conductive.

### GENERAL INFORMATION

|                       |                                                      |
|-----------------------|------------------------------------------------------|
| Features              | Electrically Conductive, No PFAS intentionally added |
| Fillers               | Glass Fiber, Carbon Powder                           |
| Polymer Types         | Polyethylene, Unspecified (PE, Unspecified)          |
| Processing Techniques | Injection Molding                                    |

### INDUSTRY

Automotive  
Electrical and Electronics  
Industrial

### SUB INDUSTRY

Automotive Under the Hood  
Electronic Components  
Material Handling

## TYPICAL PROPERTY VALUES

Revision 20231109

| PROPERTIES                                  | TYPICAL VALUES | UNITS             | TEST METHODS |
|---------------------------------------------|----------------|-------------------|--------------|
| <strong>MECHANICAL <sup>(1)</sup></strong>  |                |                   |              |
| Tensile Stress, yld, Type I, 5 mm/min       | 39             | MPa               | ASTM D638    |
| Tensile Stress, brk, Type I, 5 mm/min       | 29             | MPa               | ASTM D638    |
| Tensile Strain, yld, Type I, 5 mm/min       | 5.8            | %                 | ASTM D638    |
| Tensile Strain, brk, Type I, 5 mm/min       | 8.5            | %                 | ASTM D638    |
| Tensile Modulus, 50 mm/min                  | 3340           | MPa               | ASTM D638    |
| Flexural Modulus, 1.3 mm/min, 50 mm span    | 2230           | MPa               | ASTM D790    |
| Tensile Stress, yield, 5 mm/min             | 36             | MPa               | ISO 527      |
| Tensile Stress, break, 5 mm/min             | 32             | MPa               | ISO 527      |
| Tensile Strain, yield, 5 mm/min             | 5.6            | %                 | ISO 527      |
| Tensile Strain, break, 5 mm/min             | 7.7            | %                 | ISO 527      |
| Tensile Modulus, 1 mm/min                   | 2820           | MPa               | ISO 527      |
| Flexural Stress                             | 45             | MPa               | ISO 178      |
| Flexural Modulus, 2 mm/min                  | 2350           | MPa               | ISO 178      |
| <strong>IMPACT <sup>(1)</sup></strong>      |                |                   |              |
| Izod Impact, unnotched, 23°C                | 541            | J/m               | ASTM D4812   |
| Izod Impact, notched, 23°C                  | 151            | J/m               | ASTM D256    |
| Multiaxial Impact                           | 4              | J                 | ISO 6603     |
| Instrumented Dart Impact Total Energy, 23°C | 11             | J                 | ASTM D3763   |
| Izod Impact, unnotched 80°10°4 +23°C        | 31             | kJ/m <sup>2</sup> | ISO 180/1U   |
| Izod Impact, notched 80°10°4 +23°C          | 12             | kJ/m <sup>2</sup> | ISO 180/1A   |

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CHEMISTRY THAT MATTERS™

| PROPERTIES                                | TYPICAL VALUES  | UNITS               | TEST METHODS |
|-------------------------------------------|-----------------|---------------------|--------------|
| <b>THERMAL <sup>(1)</sup></b>             |                 |                     |              |
| HDT, 0.45 MPa, 3.2 mm, unannealed         | 118             | °C                  | ASTM D648    |
| HDT, 1.82 MPa, 3.2mm, unannealed          | 88              | °C                  | ASTM D648    |
| CTE, -30°C to 30°C, flow                  | 9.1E-05         | 1 / °C              | ASTM D696    |
| CTE, -30°C to 30°C, xflow                 | 1.29E-04        | 1 / °C              | ASTM D696    |
| HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm    | 114             | °C                  | ISO 75 /Bf   |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm     | 85              | °C                  | ISO 75 /Af   |
| <b>PHYSICAL <sup>(1)</sup></b>            |                 |                     |              |
| Density                                   | 1.09            | g / cm <sup>3</sup> | ASTM D792    |
| Moisture Absorption, (23°C/50% RH/24 hrs) | 0.01            | %                   | ASTM D570    |
| Density                                   | 1.08            | g / cm <sup>3</sup> | ISO 1183     |
| Moisture Absorption (23°C / 50% RH)       | 0.02            | %                   | ISO 62       |
| <b>ELECTRICAL <sup>(1)</sup></b>          |                 |                     |              |
| Surface Resistivity <sup>(2)</sup>        | 1.E+02 – 1.E+05 | Ω                   | ASTM D257    |
| <b>INJECTION MOLDING <sup>(3)</sup></b>   |                 |                     |              |
| Drying Temperature                        | 80              | °C                  |              |
| Drying Time                               | 4               | Hrs                 |              |
| Melt Temperature                          | 230             | °C                  |              |
| Front - Zone 3 Temperature                | 220 – 230       | °C                  |              |
| Middle - Zone 2 Temperature               | 210 – 220       | °C                  |              |
| Rear - Zone 1 Temperature                 | 195 – 205       | °C                  |              |
| Mold Temperature                          | 40 – 55         | °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) Measurement meets requirements as specified in ASTM D4496.

(3) 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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