# LNP™ STAT-KON™ COMPOUND OX92182

PDX-O-92182

## DESCRIPTION

LNP STAT-KON OX92182 compound is based on Polyphenylene Sulfide (PPS) branched resin containing glass fiber, carbon fiber and mineral. Added features of this grade include: Electrically Conductive Dimensional Stability.

| GENERAL INFORMATION | |
|---|---|
| **Features** | Electrically Conductive, Carbon fiber filled, Dimensional stability, High stiffness/Strength, No PFAS intentionally added |
| **Fillers** | Carbon Fiber, Glass Fiber, Mineral |
| **Polymer Types** | Polyphenylene Sulfide, Branched (PPS, Branched) |
| **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, 5 mm/min** | 145 | MPa | ISO 527 |
| **Tensile Strain, break, 5 mm/min** | 1.3 | % | ISO 527 |
| **Tensile Modulus, 1 mm/min** | 17500 | MPa | ISO 527 |
| **Flexural Stress, yield, 2 mm/min** | 200 | MPa | ISO 178 |
| **Flexural Modulus, 2 mm/min** | 16500 | MPa | ISO 178 |
| **IMPACT** [1] | | | |
| **Izod Impact, unnotched 80*10*4 +23°C** | 15 | kJ/m² | ISO 180/1U |
| **Izod Impact, notched 80*10*4 +23°C** | 5 | kJ/m² | ISO 180/1A |
| **THERMAL** [1] | | | |
| **CTE, 23°C to 60°C, flow** | 1.5E-05 | 1/°C | ISO 11359-2 |
| **CTE, 23°C to 60°C, xflow** | 4.6E-05 | 1/°C | ISO 11359-2 |
| **HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm** | 250 | °C | ISO 75/Af |
| **PHYSICAL** [1] | | | |
| **Mold Shrinkage, flow, 24 hrs** [2] | 0.1 | % | ISO 294 |
| **Density** | 1.62 | g/cm³ | ISO 1183 |
| **Water Absorption, (23°C/24hrs)** | 0.05 | % | ISO 62-1 |
| **ELECTRICAL** [1] | | | |
| **Surface Resistivity** [3] | 1.E+03 – 1.E+06 | Ω | ASTM D257 |
| **INJECTION MOLDING** [4] | | | |
| **Drying Temperature** | 120 – 150 | °C | |
| **Drying Time** | 4 | Hrs | |

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| **Melt Temperature** | 315 – 320 | °C | |
| **Front - Zone 3 Temperature** | 330 – 345 | °C | |
| **Middle - Zone 2 Temperature** | 320 – 330 | °C | |
| **Rear - Zone 1 Temperature** | 305 – 315 | °C | |
| **Mold Temperature** | 140 – 165 | °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) 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.

## DISCLAIMER