

LNPTM STAT-KONTM COMPOUND ZEL34XXC

DESCRIPTION

LNP STAT-KON ZEL34XXC compound is based on Polyphenylene Ether / Polystyrene (PPE/PS) blend containing 20% carbon fiber, 15% PTFE. Added features of this grade include: Electrically Conductive, Internally Lubricated, Wear Resistant.

| GENERAL INFORMATION | |
|-----------------------|---|
| Features | Electrically Conductive, Wear resistant, Carbon fiber filled, High stiffness/Strength |
| Fillers | Carbon Fiber, PTFE |
| Polymer Types | Polyphenylene Ether + PS (PPE+PS) |
| Processing Techniques | Injection Molding |
| | |

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

TYPICAL PROPERTY VALUES

Revision 20241028

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|--|-------------------------|-------|--------------|
| MECHANICAL ⁽¹⁾ | | | |
| Tensile Stress, break, 5 mm/min | 83 | MPa | ISO 527 |
| Tensile Strain, break, 5 mm/min | 1.4 | % | ISO 527 |
| Tensile Modulus, 1 mm/min | 10600 | MPa | ISO 527 |
| Flexural Stress, yield, 2 mm/min | 120 | MPa | ISO 178 |
| Flexural Modulus, 2 mm/min | 8100 | 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 | 1.8E-05 | 1/°C | ISO 11359-2 |
| CTE, 23°C to 60°C, xflow | 6.6E-05 | 1/°C | ISO 11359-2 |
| HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm | 127 | °C | ISO 75/Bf |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm | 121 | °C | ISO 75/Af |
| PHYSICAL ⁽¹⁾ | | | |
| Mold Shrinkage, flow ⁽²⁾ | 0.09 | % | SABIC method |
| Density | 1.23 | g/cm³ | ISO 1183 |
| ELECTRICAL ⁽¹⁾ | | | |
| Surface Resistivity ⁽³⁾ | 1.E+02 – 1.E+04 | Ω | ASTM D257 |
| FLAME CHARACTERISTICS (4) | | | |
| UL Yellow Card Link | <u>E45329-101343842</u> | - | |
| UL Recognized, 94HB Flame Class Rating | 1.5 | mm | UL 94 |
| INJECTION MOLDING (5) | | | |

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CHEMISTRY THAT MATTERS



| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|-----------------------------|----------------|-------|--------------|
| Drying Temperature | 120 | °C | |
| Drying Time | 4 | Hrs | |
| Melt Temperature | 300 – 305 | °C | |
| Front - Zone 3 Temperature | 300 – 310 | °C | |
| Middle - Zone 2 Temperature | 290 – 300 | °C | |
| Rear - Zone 1 Temperature | 275 – 290 | °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) 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) 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.

(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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