

LNPTTM LUBRICOMPTM COMPOUND LCL36E

LCL-4036 EM
REGION EUROPE

DESCRIPTION

LNP LUBRICOMP LCL36E compound is based on Polyetheretherketone (PEEK) resin containing 30% carbon fiber and 15% PTFE. Added features of this grade include: Easy Molding, Wear Resistant, Electrically Conductive.

| GENERAL INFORMATION | |
|-----------------------|--|
| Features | Electrically Conductive, Wear resistant, Carbon fiber filled, High stiffness/Strength, High temperature resistance |
| Fillers | Carbon Fiber, PTFE |
| Polymer Types | Polyetheretherketone (PEEK) |
| Processing Techniques | Injection Molding |

| INDUSTRY | SUB INDUSTRY |
|----------------------------|--|
| Building and Construction | Building Component |
| Consumer | Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance |
| Electrical and Electronics | Mobile Phone - Computer - Tablets |
| Industrial | Electrical |

TYPICAL PROPERTY VALUES

Revision 20231109

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|-----------------|-------------------|--------------|
| MECHANICAL ⁽¹⁾ | | | |
| Tensile Stress, break, 5 mm/min | 224 | MPa | ISO 527 |
| Tensile Strain, break, 5 mm/min | 2.4 | % | ISO 527 |
| Tensile Modulus, 1 mm/min | 21600 | MPa | ISO 527 |
| Flexural Stress, break, 2 mm/min | 317 | MPa | ISO 178 |
| Flexural Modulus, 2 mm/min | 19800 | MPa | ISO 178 |
| IMPACT ⁽¹⁾ | | | |
| Izod Impact, unnotched 80*10*4 +23°C | 40 | kJ/m ² | ISO 180/1U |
| Izod Impact, notched 80*10*4 +23°C | 9 | kJ/m ² | ISO 180/1A |
| THERMAL ⁽¹⁾ | | | |
| CTE, 23°C to 60°C, flow | 8.4E-06 | 1/°C | ISO 11359-2 |
| CTE, 23°C to 60°C, xflow | 4.2E-05 | 1/°C | ISO 11359-2 |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm | >300 | °C | ISO 75/Af |
| PHYSICAL ⁽¹⁾ | | | |
| Density | 1.5 | g/cm ³ | ISO 1183 |
| ELECTRICAL ⁽¹⁾ | | | |
| Surface Resistivity | 1.E+01 – 1.E+03 | Ω | ASTM D257 |
| INJECTION MOLDING ⁽²⁾ | | | |
| Drying Temperature | 120 – 150 | °C | |

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|-----------------------------|----------------|-------|--------------|
| Drying Time | 4 | Hrs | |
| Maximum Moisture Content | 0.1 | % | |
| Melt Temperature | 380 – 390 | °C | |
| Front - Zone 3 Temperature | 380 – 395 | °C | |
| Middle - Zone 2 Temperature | 365 – 375 | °C | |
| Rear - Zone 1 Temperature | 350 – 360 | °C | |
| Mold Temperature | 140 – 165 | °C | |
| Back Pressure | 0.3 – 0.7 | MPa | |
| Screw Speed | 60 – 100 | 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) 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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