# LNP™ LUBRICOMP™ COMPOUND LFL36E

LFL-4036 EM

## DESCRIPTION

LNP LUBRICOMP LFL36E is a compound based on Polyetheretherketone containing 30% Glass Fiber, 15% PTFE. Added features of this material are: Wear Resistant, Easy Molding.

## TYPICAL PROPERTY VALUES

Revision 20191216

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| MECHANICAL | | | |
| Tensile Stress, yld, Type I, 5 mm/min | 176 | MPa | ASTM D 638 |
| Tensile Stress, brk, Type I, 5 mm/min | 170 | MPa | ASTM D 638 |
| Tensile Strain, yld, Type I, 5 mm/min | 2 | % | ASTM D 638 |
| Tensile Strain, brk, Type I, 5 mm/min | 2 | % | ASTM D 638 |
| Flexural Stress, brk, 1.3 mm/min, 50 mm span | 263 | MPa | ASTM D 790 |
| Flexural Modulus, 1.3 mm/min, 50 mm span | 11700 | MPa | ASTM D 790 |
| Tensile Stress, break, 5 mm/min | 177 | MPa | ISO 527 |
| Tensile Strain, break, 5 mm/min | 2 | % | ISO 527 |
| Tensile Modulus, 1 mm/min | 12240 | MPa | ISO 527 |
| Flexural Modulus, 2 mm/min | 11360 | MPa | ISO 178 |
| IMPACT | | | |
| Izod Impact, unnotched, 23°C | 861 | J/m | ASTM D 4812 |
| Izod Impact, notched, 23°C | 103 | J/m | ASTM D 256 |
| Instrumented Impact Total Energy, 23°C | 13 | J | ASTM D 3763 |
| THERMAL | | | |
| HDT, 0.45 MPa, 3.2 mm, unannealed | 339 | °C | ASTM D 648 |
| HDT, 1.82 MPa, 3.2mm, unannealed | 327 | °C | ASTM D 648 |
| CTE, -30°C to 30°C, flow | 1.8E-05 | 1/°C | ASTM D 696 |
| CTE, -30°C to 30°C, xflow | 3.6E-05 | 1/°C | ASTM D 696 |
| HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm | 337 | °C | ISO 75/Bf |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm | 322 | °C | ISO 75/Af |
| PHYSICAL | | | |
| Density | 1.64 | g/cm³ | ASTM D 792 |
| Wear Factor Washer | 64 | 10^-10 in^5-min/ft-lb-hr | ASTM D 3702 Modified: Manual |
| Wear Factor Ring | 9 | 10^-10 in^5-min/ft-lb-hr | ASTM D 3702 Modified: Manual |
| Dynamic COF | 0.49 | - | ASTM D 3702 Modified: Manual |
| Static COF | 0.73 | - | ASTM D 3702 Modified: Manual |
| FLAME CHARACTERISTICS [1] | | | |
| UL Yellow Card Link | E121562-101283797 | - | - |
| UL Recognized, 94V-0 Flame Class Rating | 0.8 | mm | UL 94 |
| INJECTION MOLDING | | | |
| Drying Temperature | 120 – 150 | °C | |
| Drying Time | 4 | hrs | |

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| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| 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) 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.

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