# LNP™ LUBRICOMP™ COMPOUND LX91475

LTW
REGION EUROPE

## DESCRIPTION

LNP LUBRICOMP LX91475 compound is based on Polyetheretherketone (PEEK) resin containing proprietary fillers. Added features of this grade include: Easy Molding, High Temperature Bearing Grade, Wear Resistant.

| GENERAL INFORMATION | |
|---|---|
| **Features** | Good Processability, Wear resistant, Dimensional stability, High temperature resistance |
| **Fillers** | Proprietary Filler |
| **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, yield, 5 mm/min** | 148 | MPa | ISO 527 |
| **Tensile Stress, break, 5 mm/min** | 148 | MPa | ISO 527 |
| **Tensile Strain, yield, 5 mm/min** | 2.8 | % | ISO 527 |
| **Tensile Strain, break, 5 mm/min** | 2.9 | % | ISO 527 |
| **Tensile Modulus, 1 mm/min** | 11840 | MPa | ISO 527 |
| **Flexural Stress, yield, 2 mm/min** | 211 | MPa | ISO 178 |
| **Flexural Stress, break, 2 mm/min** | 210 | MPa | ISO 178 |
| **Flexural Strain, break, 2 mm/min** | 3.3 | % | ISO 178 |
| **Flexural Modulus, 2 mm/min** | 9700 | MPa | ISO 178 |
| **IMPACT** [1] | | | |
| **Izod Impact, unnotched 80*10*4 +23°C** | 40 | kJ/m² | ISO 180/1U |
| **Izod Impact, notched 80*10*4 +23°C** | 8 | kJ/m² | ISO 180/1A |
| **THERMAL** [1] | | | |
| **CTE, 23°C to 60°C, flow** | 4.4E-05 | 1/°C | ISO 11359-2 |
| **CTE, 23°C to 60°C, xflow** | 4.8E-05 | 1/°C | ISO 11359-2 |
| **HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm** | >300 | °C | ISO 75/Bf |
| **HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm** | >300 | °C | ISO 75/Af |
| **PHYSICAL** [1] | | | |
| **Mold Shrinkage, flow** [2] | 0.1 – 0.2 | % | SABIC method |

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| Wear Factor Washer | 10 | 10^-10 in^5-min/ft-lb-hr | ASTM D3702 Modified: Instr. |
| Dynamic COF | 0.28 | - | ASTM D3702 Modified: Instr. |
| Static COF | 0.56 | - | ASTM D3702 Modified: Instr. |
| Density | 1.43 | g/cm³ | ISO 1183 |
| Water Absorption, (23°C/24hrs) | 0.09 | % | ISO 62-1 |
| FLAME CHARACTERISTICS (3) | | | |
| UL Yellow Card Link | E45329-101284429 | - | - |
| UL Recognized, 94V-0 Flame Class Rating | 0.72 | mm | UL 94 |
| INJECTION MOLDING (4) | | | |
| Drying Temperature | 150 | °C | |
| Drying Time | 4 – 6 | Hrs | |
| Front - Zone 3 Temperature | 380 – 400 | °C | |
| Middle - Zone 2 Temperature | 380 – 400 | °C | |
| Rear - Zone 1 Temperature | 370 – 380 | °C | |
| Mold Temperature | 175 – 190 | °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) 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) 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.

(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