



## LNP™ LUBRICOMP™ Compound OCL36

### Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound OCL-4036

Product reorder name: OCL36

LNP LUBRICOMP™ OCL36 is a compound based on PPS - Linear resin containing 30% Carbon Fiber, 15% PTFE. Added features of this material include: Electrically Conductive, Wear Resistant.

| TYPICAL PROPERTIES <sup>1</sup>         | TYPICAL VALUE | Unit                | Standard    |
|-----------------------------------------|---------------|---------------------|-------------|
| <b>MECHANICAL</b>                       |               |                     |             |
| Tensile Stress, break                   | 1720          | kgf/cm <sup>2</sup> | ASTM D 638  |
| Tensile Strain, break                   | 1.4           | %                   | ASTM D 638  |
| Tensile Modulus, 50 mm/min              | 219400        | kgf/cm <sup>2</sup> | ASTM D 638  |
| Flexural Stress                         | 2640          | kgf/cm <sup>2</sup> | ASTM D 790  |
| Flexural Modulus                        | 215300        | kgf/cm <sup>2</sup> | ASTM D 790  |
| Tensile Stress, break                   | 167           | MPa                 | ISO 527     |
| Tensile Strain, break                   | 1.1           | %                   | ISO 527     |
| Tensile Modulus, 1 mm/min               | 30680         | MPa                 | ISO 527     |
| Flexural Stress                         | 262           | MPa                 | ISO 178     |
| Flexural Modulus                        | 21110         | MPa                 | ISO 178     |
| <b>IMPACT</b>                           |               |                     |             |
| Izod Impact, unnotched, 23°C            | 45            | cm-kgf/cm           | ASTM D 4812 |
| Izod Impact, notched, 23°C              | 5             | cm-kgf/cm           | ASTM D 256  |
| Instrumented Impact Energy @ peak, 23°C | 153           | cm-kgf              | ASTM D 3763 |
| Multiaxial Impact                       | 30            | cm-kgf              | ISO 6603    |
| Izod Impact, unnotched 80*10*4 +23°C    | 31            | kJ/m <sup>2</sup>   | ISO 180/1U  |
| Izod Impact, notched 80*10*4 +23°C      | 6             | kJ/m <sup>2</sup>   | ISO 180/1A  |
| <b>THERMAL</b>                          |               |                     |             |
| HDT, 1.82 MPa, 3.2mm, unannealed        | 267           | °C                  | ASTM D 648  |
| CTE, -40°C to 40°C, flow                | 1.62E-05      | 1/°C                | ASTM E 831  |
| CTE, -40°C to 40°C, xflow               | 3.42E-05      | 1/°C                | ASTM E 831  |
| CTE, -40°C to 40°C, flow                | 1.76E-05      | 1/°C                | ISO 11359-2 |
| CTE, -40°C to 40°C, xflow               | 3.44E-05      | 1/°C                | ISO 11359-2 |



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| <b>THERMAL</b>                                |               |                                                 |                      |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm         | 263           | °C                                              | ISO 75/Af            |
| <b>PHYSICAL</b>                               |               |                                                 |                      |
| Density                                       | 1.52          | g/cm <sup>3</sup>                               | ASTM D 792           |
| Mold Shrinkage, flow, 24 hrs (5)              | 0.04 - 0.1    | %                                               | ASTM D 955           |
| Mold Shrinkage, xflow, 24 hrs (5)             | 0.3 - 0.4     | %                                               | ASTM D 955           |
| Mold Shrinkage, flow, 24 hrs (5)              | 0.04 - 0.1    | %                                               | ISO 294              |
| Mold Shrinkage, xflow, 24 hrs (5)             | 0.36 - 0.4    | %                                               | ISO 294              |
| Wear Factor Washer                            | 19            | 10 <sup>-10</sup> in <sup>5</sup> -min/ft-lb-hr | ASTM D 3702 Modified |
| Dynamic COF                                   | 0.39          | -                                               | ASTM D 3702 Modified |
| Static COF                                    | 0.34          | -                                               | ASTM D 3702 Modified |
| Density                                       | 1.52          | g/cm <sup>3</sup>                               | ISO 1183             |
| Moisture Absorption (23°C / 50% RH)           | 0.03          | %                                               | ISO 62               |
| <b>FLAME CHARACTERISTICS</b>                  |               |                                                 |                      |
| UL Compliant, 94V-0 Flame Class Rating (3)(4) | 1.8           | mm                                              | UL 94 by SABIC-IP    |



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| PROCESSING PARAMETERS       | TYPICAL VALUE | Unit |
|-----------------------------|---------------|------|
| <b>Injection Molding</b>    |               |      |
| Drying Temperature          | 120 - 150     | °C   |
| Drying Time                 | 4             | hrs  |
| 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  |