



## LNP\* Lubricomp\* Compound RFP36S

### Americas: COMMERCIAL

Also known as: LNP\* Lubricomp\* Compound RFL-4536 HS

Product reorder name: RFP36S

LNP\* Lubricomp\* RFP36S is a compound based on Nylon 66 resin containing Glass Fiber, PTFE, Silicone. Added features of this material include: Internally Lubricated.

| TYPICAL PROPERTIES <sup>1</sup>         | TYPICAL VALUE | UNIT                | STANDARD    |
|-----------------------------------------|---------------|---------------------|-------------|
| <b>MECHANICAL</b>                       |               |                     |             |
| Tensile Stress, break                   | 1360          | kgf/cm <sup>2</sup> | ASTM D 638  |
| Tensile Strain, break                   | 2.1           | %                   | ASTM D 638  |
| Tensile Modulus, 50 mm/min              | 106800        | kgf/cm <sup>2</sup> | ASTM D 638  |
| Flexural Stress                         | 1960          | kgf/cm <sup>2</sup> | ASTM D 790  |
| Flexural Modulus                        | 77300         | kgf/cm <sup>2</sup> | ASTM D 790  |
| Tensile Stress, break                   | 135           | MPa                 | ISO 527     |
| Tensile Strain, break                   | 2.2           | %                   | ISO 527     |
| Tensile Modulus, 1 mm/min               | 9800          | MPa                 | ISO 527     |
| Flexural Stress                         | 207           | MPa                 | ISO 178     |
| Flexural Modulus                        | 9400          | MPa                 | ISO 178     |
| <b>IMPACT</b>                           |               |                     |             |
| Izod Impact, unnotched, 23°C            | 81            | cm-kgf/cm           | ASTM D 4812 |
| Izod Impact, notched, 23°C              | 14            | cm-kgf/cm           | ASTM D 256  |
| Instrumented Impact Energy @ peak, 23°C | 81            | cm-kgf              | ASTM D 3763 |
| Multiaxial Impact                       | 50            | cm-kgf              | ISO 6603    |
| Izod Impact, unnotched 80*10*4 +23°C    | 50            | kJ/m <sup>2</sup>   | ISO 180/1U  |
| Izod Impact, notched 80*10*4 +23°C      | 9             | kJ/m <sup>2</sup>   | ISO 180/1A  |
| <b>THERMAL</b>                          |               |                     |             |
| HDT, 1.82 MPa, 3.2mm, unannealed        | 233           | °C                  | ASTM D 648  |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm   | 236           | °C                  | ISO 75/Af   |
| <b>PHYSICAL</b>                         |               |                     |             |
| Density                                 | 1.48          | g/cm <sup>3</sup>   | ASTM D 792  |
| Moisture Absorption, 50% RH, 24 hrs     | 0.7           | %                   | ASTM D 570  |
| Mold Shrinkage, flow, 24 hrs (5)        | 0.2           | %                   | ASTM D 955  |



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|----------------------------------------------|---------------|-------------------------------------------------|----------------------|
| <b>PHYSICAL</b>                              |               |                                                 |                      |
| Mold Shrinkage, xflow, 24 hrs (5)            | 1             | %                                               | ASTM D 955           |
| Mold Shrinkage, flow, 24 hrs (5)             | 0.21          | %                                               | ISO 294              |
| Mold Shrinkage, xflow, 24 hrs (5)            | 0.97          | %                                               | ISO 294              |
| Wear Factor Washer                           | 11            | 10 <sup>-10</sup> in <sup>5</sup> -min/ft-lb-hr | ASTM D 3702 Modified |
| Dynamic COF                                  | 0.56          | -                                               | ASTM D 3702 Modified |
| Static COF                                   | 0.48          | -                                               | ASTM D 3702 Modified |
| Density                                      | 1.48          | g/cm <sup>3</sup>                               | ISO 1183             |
| <b>FLAME CHARACTERISTICS</b>                 |               |                                                 |                      |
| UL Compliant, 94HB Flame Class Rating (3)(4) | 1.5           | mm                                              | UL 94 by GE          |



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| PROCESSING PARAMETERS       | TYPICAL VALUE | UNIT |
|-----------------------------|---------------|------|
| <b>Injection Molding</b>    |               |      |
| Drying Temperature          | 80            | °C   |
| Drying Time                 | 4             | hrs  |
| Maximum Moisture Content    | 0.15 - 0.25   | %    |
| Melt Temperature            | 280 - 305     | °C   |
| Front - Zone 3 Temperature  | 295 - 305     | °C   |
| Middle - Zone 2 Temperature | 280 - 295     | °C   |
| Rear - Zone 1 Temperature   | 265 - 275     | °C   |
| Mold Temperature            | 95 - 110      | °C   |
| Back Pressure               | 0.2 - 0.3     | MPa  |
| Screw Speed                 | 30 - 60       | rpm  |