

**Product Texts**

LNP LUBRICOMP RN001S compound is based on Nylon 6/6 resin containing Molybdenum diSulfide (MoS<sub>2</sub>). Added features of this grade include: Wear Resistant, Heat Stabilized.

| <b>Mechanical properties</b>             | <b>Value</b> | <b>Unit</b>       | <b>Test Standard</b> |
|--|--------------|-------------------|----------------------|
| <b>ISO Data</b>                          |              |                   |                      |
| Tensile Modulus                          | <b>3900</b>  | MPa               | ISO 527              |
| Yield stress                             | <b>69</b>    | MPa               | ISO 527              |
| Yield strain                             | <b>2</b>     | %                 | ISO 527              |
| Stress at break                          | <b>69</b>    | MPa               | ISO 527              |
| Strain at break                          | <b>42.2</b>  | %                 | ISO 527              |
| Flexural modulus                         | <b>3400</b>  | MPa               | ISO 178              |
| Flexural strength                        | <b>107</b>   | MPa               | ISO 178              |
| Izod impact strength, +23°C, 4mm         | <b>53</b>    | kJ/m <sup>2</sup> | ISO 180/1U           |
| Izod notched impact strength, +23°C, 4mm | <b>4</b>     | kJ/m <sup>2</sup> | ISO 180/1A           |
| <b>ASTM Data</b>                         |              |                   |                      |
| Tensile Modulus                          | <b>4130</b>  | MPa               | ASTM D 638           |
| Tensile Strength at Yield                | <b>84</b>    | MPa               | ASTM D 638           |
| Tensile Strength at Break                | <b>84</b>    | MPa               | ASTM D 638           |
| Elongation at Yield                      | <b>2.9</b>   | %                 | ASTM D 638           |
| Elongation at Break                      | <b>3.8</b>   | %                 | ASTM D 638           |
| Flexural Modulus                         | <b>3440</b>  | MPa               | ASTM D 790           |
| Izod Impact notched, 1/8 in              | <b>26</b>    | J/m               | ASTM D 256           |
| Izod Impact unnotched, 1/8 in            | <b>1110</b>  | J/m               | ASTM D 256           |

| <b>Thermal properties</b>                | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|--|--------------|-------------|----------------------|
| <b>ISO Data</b>                          |              |             |                      |
| Temp. of deflection under load, 0.45 MPa | <b>223</b>   | °C          | ISO 75-1/-2          |
| <b>ASTM Data</b>                         |              |             |                      |
| DTUL @ 66 psi                            | <b>231</b>   | °C          | ASTM D 648           |
| DTUL @ 264 psi                           | <b>76</b>    | °C          | ASTM D 648           |

| <b>Other properties</b> | <b>Value</b> | <b>Unit</b>       | <b>Test Standard</b> |
|-------------------------|--------------|-------------------|----------------------|
| Density                 | <b>1160</b>  | kg/m <sup>3</sup> | ISO 1183             |
| Density                 | <b>1160</b>  | kg/m <sup>3</sup> | ASTM D 792           |

| <b>Processing Recommendation Injection Molding</b> | <b>Value</b>     | <b>Unit</b> | <b>Test Standard</b> |
|--|------------------|-------------|----------------------|
| Pre-drying - Temperature                           | <b>80</b>        | °C          | -                    |
| Pre-drying - Time                                  | <b>4</b>         | h           | -                    |
| Processing humidity                                | <b>≤0.25</b>     | %           | -                    |
| Melt temperature                                   | <b>275 - 290</b> | °C          | -                    |
| Mold temperature                                   | <b>80 - 95</b>   | °C          | -                    |
| Zone 1   | <b>265 - 275</b> | °C          | -                    |
| Zone 2   | <b>280 - 295</b> | °C          | -                    |
| Zone 3   | <b>295 - 305</b> | °C          | -                    |
| Screw speed  | <b>30 - 60</b>   | rpm         | -                    |
| Back pressure                                      | <b>0.2 - 0.3</b> | MPa         | -                    |

**Characteristics**

**Processing**  
Injection Molding

**Regional Availability**  
Asia Pacific