

**Product Texts**

LNP LUBRILOY D2000 compound is based on Polycarbonate (PC) resin containing a proprietary non-halogenated lubrication system. Added features of this grade include: Wear Resistant.

UL Yellow Card Link [E121562-101283866](https://www.ulprospector.com/usa/121562-101283866)

| Processing/Physical Characteristics | Value | Unit  | Test Standard   |
|-------------------------------------|-------|-------|-----------------|
| <b>ISO Data</b>                     |       |       |                 |
| Molding shrinkage, parallel         | 0.8   | %     | ISO 294-4, 2577 |
| Molding shrinkage, normal           | 0.8   | %     | ISO 294-4, 2577 |
| <b>ASTM Data</b>                    |       |       |                 |
| Mold Shrinkage, MD                  | 0.8   | mm/mm | ASTM D 955      |
| Mold Shrinkage, TD                  | 0.8   | mm/mm | ASTM D 955      |

| Mechanical properties                    | Value | Unit              | Test Standard |
|--|-------|-------------------|---------------|
| <b>ISO Data</b>                          |       |                   |               |
| Tensile Modulus                          | 2120  | MPa               | ISO 527       |
| Yield stress                             | 59    | MPa               | ISO 527       |
| Yield strain                             | 6.6   | %                 | ISO 527       |
| Stress at break                          | 58    | MPa               | ISO 527       |
| Strain at break                          | 50    | %                 | ISO 527       |
| Flexural modulus                         | 1970  | MPa               | ISO 178       |
| Flexural strength                        | 78    | MPa               | ISO 178       |
| Izod notched impact strength, +23°C, 4mm | 58    | kJ/m <sup>2</sup> | ISO 180/1A    |
| <b>ASTM Data</b>                         |       |                   |               |
| Tensile Modulus                          | 2050  | MPa               | ASTM D 638    |
| Tensile Strength at Yield                | 57    | MPa               | ASTM D 638    |
| Tensile Strength at Break                | 46    | MPa               | ASTM D 638    |
| Elongation at Yield                      | 6.1   | %                 | ASTM D 638    |
| Elongation at Break                      | 47    | %                 | ASTM D 638    |
| Flexural Modulus                         | 2170  | MPa               | ASTM D 790    |
| Izod Impact notched, 1/8 in              | 704   | J/m               | ASTM D 256    |
| Izod Impact unnotched, 1/8 in            | N     | J/m               | ASTM D 256    |

| Thermal properties                       | Value | Unit  | Test Standard   |
|--|-------|-------|-----------------|
| <b>ISO Data</b>                          |       |       |                 |
| Temp. of deflection under load, 1.80 MPa | 128   | °C    | ISO 75-1/-2     |
| Temp. of deflection under load, 0.45 MPa | 140   | °C    | ISO 75-1/-2     |
| Burning behav. at 1.5 mm nom. thickn.    | HB    | class | IEC 60695-11-10 |
| Thickness tested                         | 1.5   | mm    | -               |
| <b>ASTM Data</b>                         |       |       |                 |
| Coefficient of Thermal Expansion, MD     | 75.1  | E-6/K | ASTM D 696      |
| Coefficient of Thermal Expansion, TD     | 76    | E-6/K | ASTM D 696      |
| DTUL @ 66 psi                            | 142   | °C    | ASTM D 648      |
| DTUL @ 264 psi                           | 130   | °C    | ASTM D 648      |

| Other properties       | Value | Unit              | Test Standard  |
|------------------------|-------|-------------------|----------------|
| Humidity absorption    | 0.18  | %                 | Sim. to ISO 62 |
| Water Absorption, 24hr | 0.14  | %                 | ASTM D 570     |
| Density                | 1170  | kg/m <sup>3</sup> | ASTM D 792     |

| Processing Recommendation Injection Molding | Value     | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature                    | 100       | °C   | -             |
| Pre-drying - Time                           | 4         | h    | -             |
| Processing humidity                         | ≤0.02     | %    | -             |
| Melt temperature                            | 290 - 315 | °C   | -             |
| Mold temperature                            | 65 - 95   | °C   | -             |
| Zone 1                                      | 275 - 300 | °C   | -             |
| Zone 2                                      | 280 - 300 | °C   | -             |

**LNP™ LUBRILOY™ Compound D2000 - Americas**

PC

Saudi Basic Industries Corporation (SABIC)

|               |                  |     |   |
|---------------|------------------|-----|---|
| Zone 3        | <b>280 - 310</b> | °C  | - |
| Screw speed   | <b>30 - 60</b>   | rpm | - |
| Back pressure | <b>0.2 - 0.3</b> | MPa | - |

**Characteristics****Processing**

Injection Molding

**Regional Availability**

North America