



**LNP™ LUBRICOMP™ Compound Cycloy\_C6303**  
**Americas: COMMERCIAL**

LNP LUBRICOMP CYCOLOY\_C6303 compound is a Wear resistant (5% PTFE), flame retardant PC+ABS. High heat and good hydrolytic stability. UL listing from Japan and Pacific.

| TYPICAL PROPERTIES <sup>1</sup>              | TYPICAL VALUE | Unit                | Standard    |
|----------------------------------------------|---------------|---------------------|-------------|
| <b>MECHANICAL</b>                            |               |                     |             |
| Tensile Stress, yld, Type I, 50 mm/min       | 660           | kgf/cm <sup>2</sup> | ASTM D 638  |
| Tensile Stress, brk, Type I, 50 mm/min       | 520           | kgf/cm <sup>2</sup> | ASTM D 638  |
| Tensile Strain, yld, Type I, 50 mm/min       | 4.5           | %                   | ASTM D 638  |
| Tensile Strain, brk, Type I, 50 mm/min       | 30            | %                   | ASTM D 638  |
| Tensile Modulus, 50 mm/min                   | 27400         | kgf/cm <sup>2</sup> | ASTM D 638  |
| Flexural Stress, yld, 1.3 mm/min, 50 mm span | 1080          | kgf/cm <sup>2</sup> | ASTM D 790  |
| Flexural Modulus, 1.3 mm/min, 50 mm span     | 28100         | kgf/cm <sup>2</sup> | ASTM D 790  |
| Tensile Stress, yield, 5 mm/min              | 100           | MPa                 | ISO 527     |
| Tensile Stress, yield, 50 mm/min             | 65            | MPa                 | ISO 527     |
| Tensile Stress, break, 50 mm/min             | 50            | MPa                 | ISO 527     |
| Tensile Strain, yield, 5 mm/min              | 6             | %                   | ISO 527     |
| Tensile Strain, yield, 50 mm/min             | 4.6           | %                   | ISO 527     |
| Tensile Strain, break, 50 mm/min             | 22            | %                   | ISO 527     |
| Tensile Modulus, 1 mm/min                    | 2870          | MPa                 | ISO 527     |
| Flexural Modulus, 2 mm/min                   | 2600          | MPa                 | ISO 178     |
| <b>IMPACT</b>                                |               |                     |             |
| Izod Impact, notched, 23°C                   | 9             | cm-kgf/cm           | ASTM D 256  |
| Instrumented Impact Total Energy, 23°C       | 495           | cm-kgf              | ASTM D 3763 |
| Izod Impact, notched 80*10*4 +23°C           | 7             | kJ/m <sup>2</sup>   | ISO 180/1A  |
| <b>THERMAL</b>                               |               |                     |             |
| Vicat Softening Temp, Rate B/50              | 117           | °C                  | ASTM D 1525 |
| HDT, 0.45 MPa, 3.2 mm, unannealed            | 109           | °C                  | ASTM D 648  |
| HDT, 1.82 MPa, 3.2mm, unannealed             | 92            | °C                  | ASTM D 648  |





## LNP™ LUBRICOMP™ Compound Cycloyol\_C6303

Americas: COMMERCIAL

| TYPICAL PROPERTIES <sup>1</sup>             | TYPICAL VALUE | Unit     | Standard     |
|---------------------------------------------|---------------|----------|--------------|
| <b>THERMAL</b>                              |               |          |              |
| HDT, 1.82 MPa, 6.4 mm, unannealed           | 102           | °C       | ASTM D 648   |
| CTE, -40°C to 40°C, flow                    | 6.3E-05       | 1/°C     | ASTM E 831   |
| CTE, -40°C to 40°C, xflow                   | 6.3E-05       | 1/°C     | ASTM E 831   |
| CTE, 23°C to 80°C, flow                     | 6.5E-05       | 1/°C     | ISO 11359-2  |
| CTE, 23°C to 80°C, xflow                    | 6.8E-05       | 1/°C     | ISO 11359-2  |
| Vicat Softening Temp, Rate B/120            | 117           | °C       | ISO 306      |
| Relative Temp Index, Elec                   | 60            | °C       | UL 746B      |
| Relative Temp Index, Mech w/impact          | 60            | °C       | UL 746B      |
| Relative Temp Index, Mech w/o impact        | 60            | °C       | UL 746B      |
| <b>PHYSICAL</b>                             |               |          |              |
| Specific Gravity                            | 1.25          | -        | ASTM D 792   |
| Mold Shrinkage, flow, 3.2 mm (5)            | 0.4 - 0.6     | %        | SABIC Method |
| Melt Flow Rate, 260°C/2.16 kgf              | 10            | g/10 min | ASTM D 1238  |
| Melt Flow Rate, 260°C/5.0 kgf               | 50            | g/10 min | ASTM D 1238  |
| <b>ELECTRICAL</b>                           |               |          |              |
| Hot Wire Ignition {PLC}                     | 3             | PLC Code | UL 746A      |
| High Ampere Arc Ign, surface {PLC}          | 1             | PLC Code | UL 746A      |
| <b>FLAME CHARACTERISTICS</b>                |               |          |              |
| UL Recognized, 94V-1 Flame Class Rating (3) | 1.19          | mm       | UL 94        |
| UL Recognized, 94V-0 Flame Class Rating (3) | 1.49          | mm       | UL 94        |
| UL Recognized, 94-5VB Rating (3)            | 2.48          | mm       | UL 94        |





## LNP™ LUBRICOMP™ Compound Cycloyol\_C6303

Americas: COMMERCIAL

| PROCESSING PARAMETERS       | TYPICAL VALUE | Unit |
|-----------------------------|---------------|------|
| <b>Injection Molding</b>    |               |      |
| Drying Temperature          | 80 - 90       | °C   |
| Drying Time                 | 3 - 4         | hrs  |
| Drying Time (Cumulative)    | 8             | hrs  |
| Maximum Moisture Content    | 0.04          | %    |
| Melt Temperature            | 245 - 275     | °C   |
| Nozzle Temperature          | 245 - 275     | °C   |
| Front - Zone 3 Temperature  | 245 - 275     | °C   |
| Middle - Zone 2 Temperature | 220 - 265     | °C   |
| Rear - Zone 1 Temperature   | 220 - 255     | °C   |
| Mold Temperature            | 60 - 80       | °C   |
| Back Pressure               | 0.3 - 0.7     | MPa  |
| Screw Speed                 | 40 - 70       | rpm  |
| Shot to Cylinder Size       | 30 - 80       | %    |
| Vent Depth                  | 0.038 - 0.076 | mm   |

