

# LNPT<sup>TM</sup> LUBRICOMP<sup>TM</sup> COMPOUND WX12001J

## DESCRIPTION

LNP LUBRICOMP WX12001J compound is based on Polybutylene Terephthalate (PBT) resin containing proprietary lubricant. Added features of this grade include: Internally Lubricated, Wear Resistant, Low Extractables, Healthcare, Food Contact compliant.

| GENERAL INFORMATION   |   |
|-----------------------|---|
| Features              | Wear resistant, Food contact, Healthcare/Formula lock |
| Fillers               | Proprietary Filler, Unreinforced                      |
| Polymer Types         | Polybutylene Terephthalate (PBT)                      |
| Processing Techniques | Injection Molding                                     |

| INDUSTRY                  | SUB INDUSTRY  |
|---------------------------|---|
| Building and Construction | Water Management  |
| Consumer                  | Home Appliances   |
| Hygiene and Healthcare    | Pharmaceutical Packaging and Drug Delivery, Surgical devices, General Healthcare, Patient Testing |
| Packaging                 | Industrial Packaging, Food & Beverage   |

## TYPICAL PROPERTY VALUES

Revision 20230713

| PROPERTIES                                     | TYPICAL VALUES | UNITS  | TEST METHODS                |
|--|----------------|--|-----------------------------|
| <b>MECHANICAL <sup>(1)</sup></b>               |                |  |                             |
| Tensile Stress, yield, 50 mm/min               | 56             | MPa  | ISO 527                     |
| Tensile Stress, break, 50 mm/min               | 54             | MPa  | ISO 527                     |
| Tensile Strain, yield, 50 mm/min               | 10             | %  | ISO 527                     |
| Tensile Strain, break, 50 mm/min               | 13             | %  | ISO 527                     |
| Tensile Modulus, 1 mm/min                      | 2500           | MPa  | ISO 527                     |
| Flexural Strength, 2 mm/min                    | 80             | MPa  | ISO 178                     |
| Flexural Modulus, 2 mm/min                     | 2300           | MPa  | ISO 178                     |
| <b>IMPACT <sup>(1)</sup></b>                   |                |  |                             |
| Izod Impact, unnotched 80*10*4 +23°C           | 47             | kJ/m <sup>2</sup>                                  | ISO 180/1U                  |
| Izod Impact, notched 80*10*4 +23°C             | 3              | kJ/m <sup>2</sup>                                  | ISO 180/1A                  |
| Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm     | 4              | kJ/m <sup>2</sup>                                  | ISO 179/1eA                 |
| <b>PHYSICAL <sup>(1)</sup></b>                 |                |  |                             |
| Wear Factor Washer                             | 111            | 10 <sup>-4</sup> -10 in <sup>4</sup> -min/ft-lb-hr | ASTM D3702 Modified: Instr. |
| Dynamic COF                                    | 0.31           | -  | ASTM D3702 Modified: Instr. |
| Static COF                                     | 0.48           | -  | ASTM D3702 Modified: Instr. |
| Density  | 1.34           | g/cm <sup>3</sup>                                  | ISO 1183                    |
| Moisture Absorption, (23°C/50% RH/Equilibrium) | 0.06           | %  | ISO 62-4                    |
| Melt Volume Rate, MVR at 250°C/2.16 kg         | 25             | cm <sup>3</sup> /10 min                            | ISO 1133                    |
| <b>INJECTION MOLDING <sup>(2)</sup></b>        |                |  |                             |
| Drying Temperature                             | 120            | °C   |                             |
| Drying Time                                    | 4              | Hrs  |                             |

| PROPERTIES                  | TYPICAL VALUES | UNITS | TEST METHODS |
|-----------------------------|----------------|-------|--------------|
| Maximum Moisture Content    | 0.05           | %     |              |
| Melt Temperature            | 240 – 265      | °C    |              |
| Front - Zone 3 Temperature  | 260 – 270      | °C    |              |
| Middle - Zone 2 Temperature | 245 – 255      | °C    |              |
| Rear - Zone 1 Temperature   | 220 – 230      | °C    |              |
| Mold Temperature            | 80 – 100       | °C    |              |
| Back Pressure               | 0.2 – 0.3      | MPa   |              |
| Screw Speed                 | 30 – 60        | rpm   |              |

- (1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

## MORE INFORMATION

For curve data and CAE cards, please visit and register at <https://materialfinder.sabic-specialties.com>

## DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.