

## LNPTM LUBRICOMPTM COMPOUND AG5LT2

## **DESCRIPTION**

LNP LUBRICOMP AG5LT2 compound is based on Nylon 6/6 resin containing 25% glass fiber and 10% PTFE. Added features of this grade include: Wear Resistant.

| GENERAL INFORMATION   |                         |
|-----------------------|-------------------------|
| Features              | Wear resistant          |
| Fillers               | Glass Fiber, PTFE       |
| Polymer Types         | Polyamide 66 (Nylon 66) |
| Processing Techniques | Injection Molding       |

| INDUSTRY                   | SUB INDUSTRY   |
|----------------------------|--|
| Building and Construction  | Building Component   |
| Consumer                   | Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance |
| Electrical and Electronics | Mobile Phone - Computer - Tablets  |
| Industrial                 | Electrical   |

## **TYPICAL PROPERTY VALUES**

Revision 20231109

| PROPERTIES                             | TYPICAL VALUES | UNITS                    | TEST METHODS                |
|--|----------------|--------------------------|-----------------------------|
| MECHANICAL (1)                         |                |                          |                             |
| Tensile Stress, break, 5 mm/min        | 168            | MPa                      | ISO 527                     |
| Tensile Strain, yield, 5 mm/min        | 3.4            | %                        | ISO 527                     |
| Tensile Modulus, 1 mm/min              | 9500           | MPa                      | ISO 527                     |
| Flexural Stress, break, 2 mm/min       | 234            | MPa                      | ISO 178                     |
| Flexural Strain, break, 2 mm/min       | 3.7            | %                        | ISO 178                     |
| Flexural Modulus, 2 mm/min             | 7900           | MPa                      | ISO 178                     |
| IMPACT (1)                             |                |                          |                             |
| Izod Impact, unnotched 80*10*4 +23°C   | 55             | kJ/m²                    | ISO 180/1U                  |
| Izod Impact, notched 80*10*4 +23°C     | 11             | kJ/m²                    | ISO 180/1A                  |
| THERMAL (1)                            |                |                          |                             |
| CTE, 23°C to 60°C, flow                | 2.5E-05        | 1/°C                     | ISO 11359-2                 |
| CTE, 23°C to 60°C, xflow               | 9.9E-05        | 1/°C                     | ISO 11359-2                 |
| HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm | 259            | °C                       | ISO 75/Bf                   |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm  | 246            | °C                       | ISO 75/Af                   |
| PHYSICAL (1)                           |                |                          |                             |
| Mold Shrinkage, flow <sup>(2)</sup>    | 0.2 - 0.4      | %                        | SABIC method                |
| Wear Factor Washer                     | 11             | 10^-10 in^5-min/ft-lb-hr | ASTM D3702 Modified: Instr. |
| Dynamic COF                            | 0.42           | -                        | ASTM D3702 Modified: Instr. |
| Static COF                             | 0.35           | -                        | ASTM D3702 Modified: Instr. |
| Density                                | 1.4            | g/cm³                    | ISO 1183                    |
| Water Absorption, (23°C/24hrs)         | 0.74           | %                        | ISO 62-1                    |



| PROPERTIES                  | TYPICAL VALUES | UNITS | TEST METHODS |
|-----------------------------|----------------|-------|--------------|
| INJECTION MOLDING (3)       |                |       |              |
| 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   |              |

- (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) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
- (3) 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.

## **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.