# LNP™ LUBRILOY™ COMPOUND UC206AXP

## DESCRIPTION

LNP™ LUBRILOY™ UC206AXP compound is based on Polyphthalamide (PPA) resin containing 30% carbon fiber and proprietary lubricant. Added features include; internally lubricated, wear resistant, PTFE not intentionally added.

| GENERAL INFORMATION | |
|---|---|
| **Features** | Wear and Friction, Lubricated |
| **Fillers** | Carbon Fiber |
| **Polymer Types** | Polyphthalamide (PPA) |
| **Processing Techniques** | Injection Molding |

| INDUSTRY | SUB INDUSTRY |
|---|---|
| Automotive | Automotive Under the Hood |
| Consumer | Home Appliances, Commercial Appliance |
| Electrical and Electronics | Electronic Components, Mobile Phone - Computer - Tablets |

## TYPICAL PROPERTY VALUES

Revision 20250731

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| MECHANICAL [1] | | | |
| **Tensile Stress, break** | 259 | MPa | ASTM D638 |
| **Tensile Strain, break** | 2.1 | % | ASTM D638 |
| **Tensile Modulus, 5 mm/min** | 23600 | MPa | ASTM D638 |
| **Flexural Stress** | 326 | MPa | ASTM D790 |
| **Flexural modulus** | 18700 | MPa | ASTM D790 |
| **Tensile Stress, break** | 259 | MPa | ISO 527 |
| **Tensile Strain, break** | 1.9 | % | ISO 527 |
| **Tensile Modulus, 1 mm/min** | 24900 | MPa | ISO 527 |
| **Flexural Stress** | 357 | MPa | ISO 178 |
| **Flexural Modulus** | 21400 | MPa | ISO 178 |
| IMPACT [1] | | | |
| **Izod Impact, unnotched, 23°C** | 577 | J/m | ASTM D4812 |
| **Izod Impact, notched, 23°C** | 50 | J/m | ASTM D256 |
| **Izod Impact, unnotched 80*10*4 +23°C** | 45 | kJ/m² | ISO 180/1U |
| **Izod Impact, notched 80*10*4 +23°C** | 6 | kJ/m² | ISO 180/1A |
| THERMAL [1] | | | |
| **HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm** | 281 | °C | ISO 75/Af |
| **CTE, 23°C to 60°C, flow** | 8.9E-06 | 1/°C | ISO 11359-2 |
| **CTE, 23°C to 60°C, xflow** | 6.5E-05 | 1/°C | ISO 11359-2 |
| PHYSICAL [1] | | | |
| **Density** | 1.29 | g/cm³ | ISO 1183 |
| **Water Absorption, (23°C/saturated)** | 2.0 – 3.0 | % | ISO 62-1 |

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| Moisture Absorption (23°C / 50% RH) | 0.5 – 0.7 | % | ISO 62 |
| Melt Volume Rate, MVR at 340°C/2.16 kg | 19 | cm³/10 min | ISO 1133 |
| Wear Factor Washer | 21 | 10^-10 in^5-min/ft-lb-hr | ASTM D3702 Modified: Instr. |
| Dynamic COF | 0.26 | - | ASTM D3702 Modified: Instr. |
| Static COF | 0.39 | - | ASTM D3702 Modified: Instr. |
| Mold Shrinkage, flow [2] | 0.2 – 0.4 | % | SABIC method |
| Mold Shrinkage, xflow [2] | 0.4 – 0.8 | % | SABIC method |
| INJECTION MOLDING [3] | | | |
| Drying Temperature | 120 – 150 | °C | |
| Drying Time | 4 | Hrs | |
| Maximum Moisture Content | 0.15 | % | |
| Melt Temperature | 315 – 330 | °C | |
| Rear - Zone 1 Temperature | 310 – 320 | °C | |
| Middle - Zone 2 Temperature | 315 – 325 | °C | |
| Front - Zone 3 Temperature | 325 – 340 | °C | |
| Mold Temperature | 150 – 170 | °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.

## MORE INFORMATION

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

## DISCLAIMER