# LNP™ THERMOCOMP™ COMPOUND WB006

WB-1006
REGION EUROPE

## DESCRIPTION

LNP THERMOCOMP WB006 compound is based on Polybutylene Terephthalate (PBT) resin containing 30% glass bead.

| GENERAL INFORMATION | |
|---|---|
| **Features** | Low Warpage, High stiffness/Strength, No PFAS intentionally added |
| **Fillers** | Glass Bead |
| **Polymer Types** | Polybutylene Terephthalate (PBT) |
| **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, yield, 5 mm/min** | 44 | MPa | ISO 527 |
| **Tensile Strain, break, 5 mm/min** | 4 | % | ISO 527 |
| **Flexural Stress, yield, 2 mm/min** | 81 | MPa | ISO 178 |
| **Flexural Modulus, 2 mm/min** | 3300 | MPa | ISO 178 |
| **IMPACT** [1] | | | |
| **Izod Impact, unnotched 80*10*4 +23°C** | 25 | kJ/m² | ISO 180/1U |
| **Izod Impact, notched 80*10*4 +23°C** | 4 | kJ/m² | ISO 180/1A |
| **THERMAL** [1] | | | |
| **HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm** | 83 | °C | ISO 75/Af |
| **PHYSICAL** [1] | | | |
| **Mold Shrinkage, flow** [2] | 2 | % | SABIC method |
| **Density** | 1.54 | g/cm³ | ISO 1183 |
| **ELECTRICAL** [1] | | | |
| **Volume Resistivity** | 1.E+15 | Ω.cm | ASTM D257 |
| **Surface Resistivity** | 1.E+14 | Ω | ASTM D257 |
| **FLAME CHARACTERISTICS** | | | |
| **UL Compliant, 94HB Flame Class Rating** [3] | 3 | mm | UL 94 by SABIC-IP |
| **INJECTION MOLDING** [4] | | | |
| **Drying Temperature** | 120 | °C | |

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| **Drying Time** | 4 | Hrs | |
| **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) 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) UL rating shown here is based on internal measurements.
(4) 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