# LNP™ THERMOCOMP™ Compound RF0069XZ

RF-1006 FR

## DESCRIPTION

LNP THERMOCOMP RF0069XZ compound is based on Nylon 6/6 resin containing 30% glass fiber. Added features of this grade include: Flame Retardant.

| GENERAL INFORMATION | |
|---|---|
| **Features** | Flame Retardant, High stiffness/Strength, No PFAS intentionally added |
| **Fillers** | Glass Fiber (Total fluorine >50ppm only from inorganic fluorine) |
| **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** | 155 | MPa | ISO 527 |
| **Tensile Strain, break, 5 mm/min** | 1.9 | % | ISO 527 |
| **Tensile Modulus, 1 mm/min** | 13090 | MPa | ISO 527 |
| **Flexural Modulus, 2 mm/min** | 11950 | MPa | ISO 178 |
| **Tensile Stress, brk, Type I, 5 mm/min** | 165 | MPa | ASTM D638 |
| **Tensile Strain, brk, Type I, 5 mm/min** | 2.2 | % | ASTM D638 |
| **Tensile Modulus, 5 mm/min** | 13550 | MPa | ASTM D638 |
| **Flexural Stress, brk, 1.3 mm/min, 50 mm span** | 241 | MPa | ASTM D790 |
| **Flexural Modulus, 1.3 mm/min, 50 mm span** | 11720 | MPa | ASTM D790 |
| IMPACT [1] | | | |
| **Izod Impact, notched 80*10*4 +23°C** | 8 | kJ/m² | ISO 180/1A |
| **Izod Impact, unnotched 80*10*4 +23°C** | 45 | kJ/m² | ISO 180/1U |
| **Multiaxial Impact** | 2 | J | ISO 6603 |
| **Izod Impact, notched, 23°C** | 80 | J/m | ASTM D256 |
| **Izod Impact, unnotched, 23°C** | 710 | J/m | ASTM D4812 |
| **Instrumented Dart Impact Total Energy, 23°C** | 8 | J | ASTM D3763 |
| THERMAL [1] | | | |
| **HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm** | 240 | °C | ISO 75/Af |
| **HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm** | 255 | °C | ISO 75/Bf |
| **HDT, 0.45 MPa, 3.2 mm, unannealed** | 254 | °C | ASTM D648 |
| **HDT, 1.82 MPa, 3.2mm, unannealed** | 242 | °C | ASTM D648 |

© 2026 Copyright by SABIC. All rights reserved

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| CTE, -30°C to 30°C, flow | 2.54E-05 | 1/°C | ASTM D696 |
| CTE, -30°C to 30°C, xflow | 4.97E-05 | 1/°C | ASTM D696 |
| PHYSICAL [1] | | | |
| Density | 1.68 | g/cm³ | ISO 1183 |
| Moisture Absorption (23°C / 50% RH) | 0.54 | % | ISO 62 |
| Specific Gravity | 1.69 | - | ASTM D792 |
| Density | 1.69 | g/cm³ | ASTM D792 |
| Moisture Absorption, (23°C/50% RH/24 hrs) | 0.36 | % | ASTM D570 |
| Mold Shrinkage, flow, 24 hrs [2] | 0.2 – 0.5 | % | ASTM D955 |
| Mold Shrinkage, xflow, 24 hrs [2] | 1 – 4 | % | ASTM D955 |
| FLAME CHARACTERISTICS [3] | | | |
| UL Yellow Card Link | E121562-101281619 | - | - |
| UL Yellow Card Link 2 | E207780-101281630 | - | - |
| UL Recognized, 94V-0 Flame Class Rating | 1.5 | mm | UL 94 |
| INJECTION MOLDING [4] | | | |
| 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) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

(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

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.

© 2026 Copyright by SABIC. All rights reserved