# LNP™ THERMOCOMP™ COMPOUND RF008XXZ

RF-1008
REGION AMERICAS

## DESCRIPTION

LNP THERMOCOMP* RF008XXZ is a compound based on Nylon 66 resin containing 40% Glass Fiber.

## TYPICAL PROPERTY VALUES

Revision 20190718

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| MECHANICAL | | | |
| Tensile Stress, break | 184 | MPa | ASTM D 638 |
| Tensile Strain, break | 2.5 | % | ASTM D 638 |
| Tensile Modulus, 50 mm/min | 13300 | MPa | ASTM D 638 |
| Flexural Stress | 275 | MPa | ASTM D 790 |
| Flexural modulus | 10410 | MPa | ASTM D 790 |
| Tensile Stress, break | 188 | MPa | ISO 527 |
| Tensile Strain, break | 2.7 | % | ISO 527 |
| Tensile Modulus, 1 mm/min | 12200 | MPa | ISO 527 |
| Flexural Stress | 287 | MPa | ISO 178 |
| Flexural Modulus | 12100 | MPa | ISO 178 |
| IMPACT | | | |
| Izod Impact, unnotched, 23°C | 1137 | J/m | ASTM D 4812 |
| Izod Impact, notched, 23°C | 117 | J/m | ASTM D 256 |
| Instrumented Impact Energy @ peak, 23°C | 10 | J | ASTM D 3763 |
| Multiaxial Impact | 3 | J | ISO 6603 |
| Izod Impact, unnotched 80*10*4 +23°C | 74 | kJ/m² | ISO 180/1U |
| Izod Impact, notched 80*10*4 +23°C | 13 | kJ/m² | ISO 180/1A |
| THERMAL | | | |
| HDT, 1.82 MPa, 3.2mm, unannealed | 252 | °C | ASTM D 648 |
| CTE, -40°C to 40°C, flow | 2.52E-05 | 1/°C | ASTM E 831 |
| CTE, -40°C to 40°C, xflow | 5.76E-05 | 1/°C | ASTM E 831 |
| CTE, -40°C to 40°C, flow | 2.68E-05 | 1/°C | ISO 11359-2 |
| CTE, -40°C to 40°C, xflow | 5.92E-05 | 1/°C | ISO 11359-2 |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm | >240 | °C | ISO 75/Af |
| PHYSICAL | | | |
| Density | 1.478 | g/cm³ | ASTM D 792 |
| Moisture Absorption, 50% RH, 24 hrs | 0.6 | % | ASTM D 570 |
| Mold Shrinkage, flow, 24 hrs | 0.3 | % | ASTM D 955 |
| Mold Shrinkage, xflow, 24 hrs | 1.3 | % | ASTM D 955 |
| Mold Shrinkage, flow, 24 hrs | 0.28 | % | ISO 294 |
| Mold Shrinkage, xflow, 24 hrs | 1.34 | % | ISO 294 |
| Density | 1.47 | g/cm³ | ISO 1183 |
| Moisture Absorption (23°C / 50% RH) | 0.97 | % | ISO 62 |

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| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| FLAME CHARACTERISTICS [1] | | | |
| UL Yellow Card Link | E121562-101281621 | - | - |
| UL Recognized, 94HB Flame Class Rating | 1.5 | mm | UL 94 |
| INJECTION MOLDING | | | |
| 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) 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.

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