# LNP™ THERMOCOMP™ COMPOUND ZFM3314M

ZFM-3314M

## DESCRIPTION

LNP THERMOCOMP ZFM3314M compound is based on Polyphenylene Ether / Polystyrene (PPE/PS) blend containing 20% glass fiber and minerals. Added features of this grade include: Non-Brominated & Non-Chlorinated Flame Retardant, Impact Modified, Heat Stabilized.

| GENERAL INFORMATION | |
|---|---|
| **Features** | Flame Retardant, Heat Stabilized, Non Cl/Br flame retardant, High stiffness/Strength, Impact resistant, No PFAS intentionally added |
| **Fillers** | Glass Fiber, Mineral |
| **Polymer Types** | Polyphenylene Ether + PS (PPE+PS) |
| **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** | 95 | MPa | ISO 527 |
| **Tensile Strain, break, 5 mm/min** | 2.1 | % | ISO 527 |
| **Tensile Modulus, 1 mm/min** | 6100 | MPa | ISO 527 |
| **Flexural Stress, yield, 2 mm/min** | 145 | MPa | ISO 178 |
| **Flexural Modulus, 2 mm/min** | 5800 | 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** | 7 | kJ/m² | ISO 180/1A |
| THERMAL [1] | | | |
| **CTE, 23°C to 60°C, flow** | 3.2E-05 | 1/°C | ISO 11359-2 |
| **CTE, 23°C to 60°C, xflow** | 6.2E-05 | 1/°C | ISO 11359-2 |
| **Vicat Softening Temp, Rate B/120** | 179 | °C | ISO 306 |
| **HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm** | 170 | °C | ISO 75/Af |
| PHYSICAL [1] | | | |
| **Density** | 1.25 | g/cm³ | ISO 1183 |
| **Melt Volume Rate, MVR at 300°C/5.0 kg** | 17 | cm³/10 min | ISO 1133 |
| INJECTION MOLDING [2] | | | |
| **Drying Temperature** | 80 | °C | |
| **Drying Time** | 2 – 8 | Hrs | |

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| Drying Time (Cumulative) | 8 | Hrs | |
| Maximum Moisture Content | 0.02 | % | |
| Melt Temperature | 295 – 315 | °C | |
| Nozzle Temperature | 295 – 315 | °C | |
| Front - Zone 3 Temperature | 280 – 315 | °C | |
| Middle - Zone 2 Temperature | 270 – 310 | °C | |
| Rear - Zone 1 Temperature | 260 – 305 | °C | |
| Mold Temperature | 75 – 105 | °C | |
| Back Pressure | 0.3 – 0.7 | MPa | |
| Screw Speed | 20 – 100 | rpm | |
| Shot to Cylinder Size | 30 – 70 | % | |

(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) 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