# LNP™ THERMOCOMP™ COMPOUND RX10405H

RX10405H

## DESCRIPTION

LNP THERMOCOMP RX10405H compound is based on Nylon 6/6 resin containing 40% carbon fiber. Added features of this grade include: Electrically Conductive, Healthcare.

| GENERAL INFORMATION | |
|---|---|
| **Features** | Electrically Conductive, Healthcare/Formula lock, Carbon fiber filled, High stiffness/Strength, No PFAS intentionally added |
| **Fillers** | Carbon Fiber |
| **Polymer Types** | Polyamide 66 (Nylon 66) |
| **Processing Techniques** | Injection Molding |

| INDUSTRY | SUB INDUSTRY |
|---|---|
| Hygiene and Healthcare | Pharmaceutical Packaging and Drug Delivery, Surgical devices, General Healthcare, Patient Testing |
| Packaging | Industrial Packaging |

## TYPICAL PROPERTY VALUES

Revision 20231109

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| MECHANICAL [1] | | | |
| **Tensile Stress, brk, Type I, 5 mm/min** | 276 | MPa | ASTM D638 |
| **Tensile Strain, brk, Type I, 5 mm/min** | 1.6 | % | ASTM D638 |
| **Tensile Modulus, 5 mm/min** | 31000 | MPa | ASTM D638 |
| **Flexural Stress, brk, 1.3 mm/min, 50 mm span** | 386 | MPa | ASTM D790 |
| **Flexural Modulus, 1.3 mm/min, 50 mm span** | 24400 | MPa | ASTM D790 |
| IMPACT [1] | | | |
| **Izod Impact, notched, 23°C** | 101 | J/m | ASTM D256 |
| THERMAL [1] | | | |
| **HDT, 1.82 MPa, 3.2mm, unannealed** | 256 | °C | ASTM D648 |
| PHYSICAL [1] | | | |
| **Specific Gravity** | 1.33 | - | ASTM D792 |
| ELECTRICAL [1] | | | |
| **Surface Resistivity** | 1.E+02 | Ω | ASTM D257 |
| INJECTION MOLDING [2] | | | |
| **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 | |

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| **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) 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.

## ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

## DISCLAIMER