# LNP™ THERMOCOMP™ RC003SXS compound

Polyamide 66

SABIC Innovative Plastics Europe

## Message:

LNP THERMOCOMP RC003SXS is a compound based on PA 66 resin containing Carbon fiber. Added features include: Electrically Conductive, Heat Stabilized
Also known as: LNP* THERMOCOMP* Compound RC-1003 HS
Product reorder name: RC003SXS

| General Information | | | |
|---|---|---|---|
| Filler / Reinforcement | Carbon Fiber | | |
| Additive | Heat Stabilizer | | |
| Features | Electrically Conductive<br>Heat Stabilized | | |
| RoHS Compliance | RoHS Compliant | | |
| Processing Method | Injection Molding | | |
| **Physical** | **Nominal Value** | **Unit** | **Test Method** |
| Density | 1.19 | g/cm³ | ISO 1183 |
| Molding Shrinkage - Flow [1] | 0.10 to 0.20 | % | Internal Method |
| Water Absorption (Saturation, 23°C) | 5.5 | % | ISO 62 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Rockwell Hardness (L-Scale) | 105 | | ISO 2039-2 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Modulus | 13000 | MPa | ISO 527-2/1 |
| Tensile Stress (Break) | 170 | MPa | ISO 527-2/5 |
| Tensile Strain (Break) | 2.0 | % | ISO 527-2/5 |
| Flexural Modulus [2] | 10000 | MPa | ISO 178 |
| Flexural Stress | 230 | MPa | ISO 178 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Charpy Unnotched Impact Strength [3] (23°C) | 45 | kJ/m² | ISO 179/1eU |
| Notched Izod Impact Strength [4] | | | ISO 180/1A |
| -40°C | 3.0 | kJ/m² | |
| -20°C | 4.0 | kJ/m² | |
| 23°C | 5.0 | kJ/m² | |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Heat Deflection Temperature [5] | | | |
| 0.45 MPa, Unannealed, 100 mm Span | 252 | °C | ISO 75-2/Be |

| | | | |
|---|---|---|---|
| 1.8 MPa, Unannealed, 100 mm Span | 250 | °C | ISO 75-2/Ae |
| Vicat Softening Temperature | 255 | °C | ISO 306/B120 |
| CLTE | | | ISO 11359-2 |
| Flow : 23 to 60°C | 2.0E-5 | cm/cm/°C | |
| Transverse : 23 to 60°C | 1.1E-4 | cm/cm/°C | |
| Electrical | Nominal Value | Unit | Test Method |
| Surface Resistivity | 1.8E+5 | ohms | IEC 60093 |
| Volume Resistivity | 1.8E+5 | ohms·cm | IEC 60093 |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating (1.60 mm, Testing by SABIC) | HB | | UL 94 |
| Oxygen Index | 28 | % | ISO 4589-2 |
| Injection | Nominal Value | Unit | |
| Drying Temperature | 120 | °C | |
| Drying Time | 2.0 to 4.0 | hr | |
| Suggested Max Moisture | 0.020 | % | |
| Hopper Temperature | 60.0 to 90.0 | °C | |
| Rear Temperature | 280 to 320 | °C | |
| Middle Temperature | 320 to 360 | °C | |
| Front Temperature | 320 to 360 | °C | |
| Nozzle Temperature | 280 to 320 | °C | |
| Processing (Melt) Temp | 320 to 360 | °C | |
| Mold Temperature | 80.0 to 100 | °C | |
| NOTE | | | |
| 1. | Tensile Bar | | |
| 2. | 2.0 mm/min | | |
| 3. | 80*10*4 sp=62mm | | |
| 4. | 80*10*4 | | |
| 5. | 120*10*4 mm | | |



Recommended distributors for this material

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