

## LNP\* Thermocomp\* Compound RF00BS

### Asia Pacific: COMMERCIAL

Also known as: LNP\* Thermocomp\* Compound RF-100-12 HS

Product reorder name: RF00BS

LNP\* Thermocomp\* RF00BS is a compound based on Nylon 66 resin containing Glass Fiber. Added features of this material include: Heat Stabilized.

| TYPICAL PROPERTIES <sup>1</sup>         | TYPICAL VALUE | UNIT                | STANDARD    |
|-----------------------------------------|---------------|---------------------|-------------|
| <b>MECHANICAL</b>                       |               |                     |             |
| Tensile Stress, yield                   | 2580          | kgf/cm <sup>2</sup> | ASTM D 638  |
| Tensile Stress, break                   | 2580          | kgf/cm <sup>2</sup> | ASTM D 638  |
| Tensile Strain, yield                   | 2.2           | %                   | ASTM D 638  |
| Tensile Strain, break                   | 2.2           | %                   | ASTM D 638  |
| Tensile Modulus, 50 mm/min              | 217900        | kgf/cm <sup>2</sup> | ASTM D 638  |
| Flexural Stress                         | 3650          | kgf/cm <sup>2</sup> | ASTM D 790  |
| Flexural Modulus                        | 196800        | kgf/cm <sup>2</sup> | ASTM D 790  |
| Tensile Stress, yield                   | 253           | MPa                 | ISO 527     |
| Tensile Stress, break                   | 253           | MPa                 | ISO 527     |
| Tensile Strain, yield                   | 2             | %                   | ISO 527     |
| Tensile Strain, break                   | 2             | %                   | ISO 527     |
| Tensile Modulus, 1 mm/min               | 21360         | MPa                 | ISO 527     |
| Flexural Stress                         | 375           | MPa                 | ISO 178     |
| Flexural Modulus                        | 20000         | MPa                 | ISO 178     |
| <b>IMPACT</b>                           |               |                     |             |
| Izod Impact, unnotched, 23°C            | 125           | cm-kgf/cm           | ASTM D 4812 |
| Izod Impact, notched, 23°C              | 16            | cm-kgf/cm           | ASTM D 256  |
| Instrumented Impact Energy @ peak, 23°C | 105           | cm-kgf              | ASTM D 3763 |
| Izod Impact, unnotched 80*10*4 +23°C    | 76            | kJ/m <sup>2</sup>   | ISO 180/1U  |
| Izod Impact, notched 80*10*4 +23°C      | 19            | kJ/m <sup>2</sup>   | ISO 180/1A  |
| <b>THERMAL</b>                          |               |                     |             |
| HDT, 0.45 MPa, 3.2 mm, unannealed       | 260           | °C                  | ASTM D 648  |
| HDT, 1.82 MPa, 3.2mm, unannealed        | 255           | °C                  | ASTM D 648  |

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| TYPICAL PROPERTIES <sup>1</sup>        | TYPICAL VALUE | UNIT              | STANDARD    |
|----------------------------------------|---------------|-------------------|-------------|
| <b>THERMAL</b>                         |               |                   |             |
| CTE, -40°C to 40°C, flow               | 3.78E-05      | 1/°C              | ASTM E 831  |
| CTE, -40°C to 40°C, xflow              | 1.62E-05      | 1/°C              | ASTM E 831  |
| CTE, -40°C to 40°C, flow               | 3.8E-05       | 1/°C              | ISO 11359-2 |
| CTE, -40°C to 40°C, xflow              | 1.6E-05       | 1/°C              | ISO 11359-2 |
| HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm | 260           | °C                | ISO 75/Bf   |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm  | 254           | °C                | ISO 75/Af   |
| <b>PHYSICAL</b>                        |               |                   |             |
| Density                                | 1.72          | g/cm <sup>3</sup> | ASTM D 792  |
| Moisture Absorption, 50% RH, 24 hrs    | 0.3           | %                 | ASTM D 570  |
| Mold Shrinkage, flow, 24 hrs           | 0.3           | %                 | ASTM D 955  |
| Mold Shrinkage, xflow, 24 hrs          | 0.4           | %                 | ASTM D 955  |
| Mold Shrinkage, flow, 24 hrs           | 0.29          | %                 | ISO 294     |
| Mold Shrinkage, xflow, 24 hrs          | 0.44          | %                 | ISO 294     |
| Density                                | 1.72          | g/cm <sup>3</sup> | ISO 1183    |