

# LNP\* Thermocomp\* RF00AH

Polyamide 66

SABIC Innovative Plastics



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## Technical Data

### Product Description

LNP\* Thermocomp\* RF00AH is a compound based on Nylon 66 resin containing Glass Fiber. Added feature of this grade is: Healthcare.

Also known as: LNP\* Thermocomp\* Compound RF-100-10 / HC  
Product Reorder name: RF00AH

### General

|                           |                                                                                   |
|---------------------------|-----------------------------------------------------------------------------------|
| Material Status           | • Commercial: Active                                                              |
| Literature <sup>1</sup>   | • <a href="#">Technical Datasheet</a>                                             |
| Search for UL Yellow Card | • <a href="#">SABIC Innovative Plastics</a><br>• <a href="#">LNP* Thermocomp*</a> |
| Availability              | • North America                                                                   |
| Filler / Reinforcement    | • Glass Fiber Reinforcement                                                       |
| Uses                      | • Medical/Healthcare Applications                                                 |
| Processing Method         | • Injection Molding                                                               |

| Physical                         | Nominal Value Unit     | Test Method           |
|----------------------------------|------------------------|-----------------------|
| Specific Gravity                 | 1.60 g/cm <sup>3</sup> | ASTM D792<br>ISO 1183 |
| Molding Shrinkage                |                        |                       |
| Flow: 24 hr                      | 0.30 to 0.50 %         | ASTM D955             |
| Across Flow: 24 hr               | 1.1 to 1.3 %           | ASTM D955             |
| Across Flow: 24 hr               | 1.2 %                  | ISO 294-4             |
| Flow: 24 hr                      | 0.37 %                 | ISO 294-4             |
| Water Absorption (24 hr, 50% RH) | 0.40 %                 | ASTM D570             |

| Mechanical         | Nominal Value Unit | Test Method |
|--------------------|--------------------|-------------|
| Tensile Modulus    |                    |             |
| -- <sup>3</sup>    | 17200 MPa          | ASTM D638   |
| --                 | 17800 MPa          | ISO 527-2/1 |
| Tensile Strength   |                    |             |
| Break              | 166 MPa            | ASTM D638   |
| Break              | 182 MPa            | ISO 527-2   |
| Tensile Elongation |                    |             |
| Break              | 7.8 %              | ASTM D638   |
| Break              | 8.1 %              | ISO 527-2   |
| Flexural Modulus   |                    |             |
| --                 | 14500 MPa          | ASTM D790   |
| --                 | 14900 MPa          | ISO 178     |
| Flexural Strength  |                    |             |
| --                 | 262 MPa            | ASTM D790   |
| --                 | 265 MPa            | ISO 178     |

| Impact                | Nominal Value Unit   | Test Method |
|-----------------------|----------------------|-------------|
| Notched Izod Impact   |                      |             |
| 23°C                  | 96 J/m               | ASTM D256   |
| 23°C <sup>4</sup>     | 11 kJ/m <sup>2</sup> | ISO 180/1A  |
| Unnotched Izod Impact |                      |             |
| 23°C                  | 940 J/m              | ASTM D4812  |
| 23°C <sup>4</sup>     | 60 kJ/m <sup>2</sup> | ISO 180/1U  |

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| Thermal                                        | Nominal Value Unit | Test Method              |
|------------------------------------------------|--------------------|--------------------------|
| Deflection Temperature Under Load              |                    |                          |
| 0.45 MPa, Unannealed, 3.20 mm                  | 253 °C             | ASTM D648                |
| 1.8 MPa, Unannealed, 3.20 mm                   | 244 °C             | ASTM D648                |
| 1.8 MPa, Unannealed, 64.0 mm Span <sup>5</sup> | 243 °C             | ISO 75-2/Af              |
| CLTE                                           |                    |                          |
| Flow: -40 to 40°C                              | 0.000052 cm/cm/°C  | ASTM E831                |
| Flow: -40 to 40°C                              | 0.000051 cm/cm/°C  | ISO 11359-2              |
| Transverse: -40 to 40°C                        | 0.000022 cm/cm/°C  | ASTM E831<br>ISO 11359-2 |

| Injection              | Nominal Value Unit |
|------------------------|--------------------|
| Drying Temperature     | 82.2 °C            |
| Drying Time            | 4.0 hr             |
| Suggested Max Moisture | 0.15 to 0.25 %     |
| Rear Temperature       | 266 to 277 °C      |
| Middle Temperature     | 282 to 293 °C      |
| Front Temperature      | 293 to 304 °C      |
| Processing (Melt) Temp | 282 to 304 °C      |
| Mold Temperature       | 93.3 to 110 °C     |
| Back Pressure          | 0.172 to 0.344 MPa |
| Screw Speed            | 30 to 60 rpm       |

## Notes

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> Typical properties: these are not to be construed as specifications.

<sup>3</sup> 50 mm/min

<sup>4</sup> 80\*10\*4

<sup>5</sup> 80\*10\*4 mm

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**SABIC Innovative Plastics**



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## Where to Buy

### Supplier

#### **SABIC Innovative Plastics**

Pittsfield, MA USA

**Telephone:** 800-845-0600

**Web:** <http://www.sabic-ip.com/>

### Distributor

#### **Nexeo Solutions**

**Telephone:** 800-531-7106

**Web:** <http://www.nexeosolutions.com/>

**Availability:** North America



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