

# LNPTM THERMOCOMPTM COMPOUND RFB71S

## RF-1008 HS MG

#### DESCRIPTION

LNP THERMOCOMP RFB71S compound is based on Nylon 6/6 resin containing 5% glass fiber, 35% glass bead. Added features of this grade include: Heat Stabilized.

GENERAL INFORMATION	
Features	Heat Stabilized, Low Warpage, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber, Glass Bead
Polymer Types	Polyamide 66 (Nylon 66)
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**

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL <sup>(1)</sup>			
Tensile Stress, break, 5 mm/min	99	MPa	ISO 527
Tensile Strain, break, 5 mm/min	3.3	%	ISO 527
Tensile Modulus, 1 mm/min	5800	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	155	MPa	ISO 178
Flexural Stress, break, 2 mm/min	90	MPa	ISO 178
Flexural Modulus, 2 mm/min	5000	MPa	ISO 178
IMPACT <sup>(1)</sup>			
Izod Impact, unnotched 80*10*4 +23°C	25	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
THERMAL <sup>(1)</sup>			
CTE, 23°C to 60°C, flow	5.2E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	7.3E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	243	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	137	°C	ISO 75/Af
Relative Temp Index, Elec <sup>(2)</sup>	65	°C	UL 746B
Relative Temp Index, Mech w/impact <sup>(2)</sup>	65	°C	UL 746B
Relative Temp Index, Mech w/o impact $^{(2)}$	65	°C	UL 746B
PHYSICAL <sup>(1)</sup>			
Mold Shrinkage on Tensile Bar, flow <sup>(3)</sup>	0.7 – 0.9	%	SABIC method
Density	1.45	g/cm <sup>3</sup>	ISO 1183
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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
FLAME CHARACTERISTICS (2)			
UL Yellow Card Link	E45329-101282594	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING <sup>(4)</sup>			
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	
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) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

(3) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(4) 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.

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