

# LNPT<sup>TM</sup> THERMOCOMP<sup>TM</sup> COMPOUND RB00A

RB-100-10

## DESCRIPTION

LNP THERMOCOMP RB00A compound is based on Nylon 6/6 resin containing 50% glass bead.

GENERAL INFORMATION	
Features	Low Warpage, High stiffness/Strength
Fillers	Glass Bead
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding
INDUSTRY	SUB INDUSTRY
Industrial	Electrical

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, break, 5 mm/min	85	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.5	%	ISO 527
Tensile Modulus, 1 mm/min	6200	MPa	ISO 527
Flexural Stress, break, 2 mm/min	140	MPa	ISO 178
Flexural Modulus, 2 mm/min	6000	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, notched 80*10*4 +23°C	5	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 -20°C	4	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	3	kJ/m <sup>2</sup>	ISO 180/1A
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	30	kJ/m <sup>2</sup>	ISO 179/1eU
<b>THERMAL <sup>(1)</sup></b>			
CTE, 23°C to 60°C, flow	3.E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	3.E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate A/50	255	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	245	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	175	°C	ISO 75/Ae
<b>PHYSICAL <sup>(1)</sup></b>			
Mold Shrinkage on Tensile Bar, flow <sup>(2)</sup>	0.5 – 0.8	%	SABIC method
Density	1.56	g/cm <sup>3</sup>	ISO 1183
Water Absorption, (23°C/saturated)	4.5	%	ISO 62-1
<b>ELECTRICAL <sup>(1)</sup></b>			
Comparative Tracking Index	500	V	IEC 60112
Comparative Tracking Index, M	400	V	IEC 60112

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>FLAME CHARACTERISTICS</b>			
UL Compliant, 94HB Flame Class Rating <sup>(3)</sup>	1.6	mm	UL 94 by SABIC-IP
<b>INJECTION MOLDING <sup>(4)</sup></b>			
Drying Temperature	75 – 85	°C	
Drying Time	4 – 6	Hrs	
Maximum Moisture Content	0.2	%	
Melt Temperature	260 – 290	°C	
Nozzle Temperature	250 – 270	°C	
Front - Zone 3 Temperature	260 – 280	°C	
Middle - Zone 2 Temperature	260 – 280	°C	
Rear - Zone 1 Temperature	270 – 290	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	70 – 120	°C	

- (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) 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.
- (3) UL rating shown here is based on internal measurements.
- (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.

## DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.