

# LNPT<sup>™</sup> THERMOCOMP<sup>™</sup> COMPOUND WZ002

WF-1002 M

## DESCRIPTION

LNP THERMOCOMP WZ002 compound is based on Polybutylene Terephthalate (PBT) resin containing 10% milled glass.

GENERAL INFORMATION	
Features	Low Warpage, High stiffness/Strength, No PFAS intentionally added
Fillers	Milled Glass Fiber
Polymer Types	Polybutylene Terephthalate (PBT)
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

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, yield, 5 mm/min	47	MPa	ISO 527
Tensile Stress, break, 5 mm/min	45	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.3	%	ISO 527
Tensile Strain, break, 5 mm/min	2.4	%	ISO 527
Tensile Modulus, 1 mm/min	5000	MPa	ISO 527
Flexural Stress, break, 2 mm/min	85	MPa	ISO 178
Flexural Modulus, 2 mm/min	2900	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched 80*10*4 +23°C	20	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	149	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	64	°C	ISO 75/Af
<b>PHYSICAL <sup>(1)</sup></b>			
Mold Shrinkage, flow <sup>(2)</sup>	1.9	%	SABIC method
Density	1.4	g/cm <sup>3</sup>	ISO 1183
Water Absorption, (23°C/24hrs)	0.1	%	ISO 62-1
<b>INJECTION MOLDING <sup>(3)</sup></b>			
Drying Temperature	120	°C	
Drying Time	4	Hrs	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Maximum Moisture Content	0.05	%	
Melt Temperature	240 – 265	°C	
Front - Zone 3 Temperature	260 – 270	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	220 – 230	°C	
Mold Temperature	80 – 100	°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) 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) 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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