

LNPT[™] THERMOCOMP[™] COMPOUND WB004U

WB-1004

DESCRIPTION

LNP THERMOCOMP WB004U is a compound based on Polybutylene Terephthalate (PBT) resin containing 20% Glass bead. Added features of this grade are: UV Stabilized.

GENERAL INFORMATION

Features	Low Warpage, UV-C resistant, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Bead
Polymer Types	Polybutylene Terephthalate (PBT)
Processing Techniques	Injection Molding

INDUSTRY

Building and Construction
Consumer
Electrical and Electronics
Industrial

SUB INDUSTRY

Building Component
Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Mobile Phone - Computer - Tablets
Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, brk, Type I, 5 mm/min	46	MPa	ASTM D638
Tensile Stress, yld, Type I, 5 mm/min	43	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	3	%	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	8	%	ASTM D638
Tensile Modulus, 5 mm/min	3500	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	3200	MPa	ASTM D790
Flexural Stress, yld, 1.3 mm/min, 50 mm span	85	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	43	MPa	ISO 527
Tensile Stress, yield, 5 mm/min	45	MPa	ISO 527
Tensile Strain, break, 5 mm/min	5	%	ISO 527
Tensile Strain, yield, 5 mm/min	3	%	ISO 527
Tensile Modulus, 1 mm/min	3600	MPa	ISO 527
Flexural Stress, break, 2 mm/min	78	MPa	ISO 178
Flexural Stress, yield, 2 mm/min	85	MPa	ISO 178
Flexural Modulus, 2 mm/min	3200	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, notched 80°10°4 +23°C	2	kJ/m ²	ISO 180/1A
Izod Impact, unnotched 80°10°4 +23°C	21	kJ/m ²	ISO 180/1U
Izod Impact, unnotched, 23°C	323	J/m	ASTM D4812
Izod Impact, notched, 23°C	32	J/m	ASTM D256

© 2023 Copyright by SABIC. All rights reserved

CHEMISTRY THAT MATTERS[™]

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	178	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	60	°C	ASTM D648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	164	°C	ISO 75 /Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	71	°C	ISO 75 /Af
PHYSICAL ⁽¹⁾			
Specific Gravity	1.46	-	ASTM D792
Density	1.46	g/cm ³	ASTM D792
INJECTION MOLDING ⁽²⁾			
Drying Temperature	120	°C	
Drying Time (Cumulative)	4	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	240 – 264	°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) 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.

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

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.