

LNPTM THERMOCOMPTM 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	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
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

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.

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