

LNPT[™] THERMOCOMP[™] COMPOUND MB008S

MB-1008 HS

DESCRIPTION

LNP THERMOCOMP MB008S compound is based on Polypropylene (PP) resin containing 40% 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 Bead
Polymer Types	Polypropylene, Unspecified (PP, Unspecified)
Processing Techniques	Injection Molding
INDUSTRY	SUB INDUSTRY
Consumer	Sport/Leisure, Personal Accessory
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yield	19	MPa	ISO 527
Tensile Stress, break	15	MPa	ISO 527
Tensile Strain, yield	6.1	%	ISO 527
Tensile Strain, break	43.8	%	ISO 527
Tensile Modulus, 1 mm/min	1660	MPa	ISO 527
Flexural Stress	36	MPa	ISO 178
Flexural Modulus	2200	MPa	ISO 178
Tensile Stress, yield	19	MPa	ASTM D638
Tensile Stress, break	15	MPa	ASTM D638
Tensile Strain, yield	6	%	ASTM D638
Tensile Strain, break	160	%	ASTM D638
Tensile Modulus, 50 mm/min	2060	MPa	ASTM D638
Flexural Stress	27	MPa	ASTM D790
Flexural Modulus	2060	MPa	ASTM D790
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	15	kJ/m ²	ISO 180/1U
Multiaxial Impact	1	J	ISO 6603
Izod Impact, notched, 23°C	26	J/m	ASTM D256
Izod Impact, unnotched, 23°C	261	J/m	ASTM D4812
Instrumented Dart Impact Energy @ peak, 23°C	6	J	ASTM D3763

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
THERMAL ⁽¹⁾			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	61	°C	ISO 75/Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	103	°C	ISO 75/Bf
CTE, -40°C to 40°C, flow	6.64E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.67E-05	1/°C	ISO 11359-2
HDT, 0.45 MPa, 3.2 mm, unannealed	102	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	60	°C	ASTM D648
CTE, -40°C to 40°C, flow	7.20E-06	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.20E-06	1/°C	ASTM E831
PHYSICAL ⁽¹⁾			
Density	1.21	g/cm ³	ISO 1183
Mold Shrinkage, flow, 24 hrs ⁽²⁾	1.3	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	1.4	%	ISO 294
Density	1.22	g/cm ³	ASTM D792
Mold Shrinkage, flow, 24 hrs ⁽²⁾	1.2 – 1.4	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	1.3 – 1.5	%	ASTM D955
INJECTION MOLDING ⁽³⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Melt Temperature	225 – 250	°C	
Front - Zone 3 Temperature	240 – 250	°C	
Middle - Zone 2 Temperature	215 – 225	°C	
Rear - Zone 1 Temperature	195 – 205	°C	
Mold Temperature	30 – 50	°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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