LNP™ THERMOCOMP™ Compound MFB82I

MFX-100-10 MG-S

DESCRIPTION

LNP THERMOCOMP MFB82I compound is based on Polypropylene (PP) resin containing 10% glass fiber, 40% glass bead. Added features of this grade include: Improved Impact.

GENERAL INFORMATION	
Features	Low Warpage, High stiffness/Strength, Impact resistant, No PFAS intentionally added
Fillers	Glass Bead, Glass Fiber (Total fluorine >50ppm only from inorganic fluorine)
Polymer Types	Polypropylene, Unspecified (PP, Unspecified)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Consumer	Sport/Leisure, Personal Accessory, Home Appliances
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, break, 5 mm/min	50	MPa	ISO 527
Tensile Strain, break, 5 mm/min	3.5	%	ISO 527
Tensile Modulus, 1 mm/min	4500	MPa	ISO 527
Flexural Stress, break, 2 mm/min	58	MPa	ISO 178
Flexural Modulus, 2 mm/min	3800	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched 80*10*4 +23°C	35	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	14	kJ/m²	ISO 180/1A
THERMAL [1]			
CTE, 23°C to 60°C, flow	3.7E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.25E-04	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	133	°C	ISO 75/Af
Relative Temp Index, Elec [2]	65	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	65	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	65	°C	UL 746B
PHYSICAL [1]			
Mold Shrinkage on Tensile Bar, flow [3]	0.1 – 0.3	%	SABIC method
Density	1.32	g/cm³	ISO 1183
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E45329-101282765	-	-

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
UL Yellow Card Link 2	E207780-101344665	-	-
UL Recognized, 94HB Flame Class Rating	≥0.75	mm	UL 94
INJECTION MOLDING [4]			
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) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

(3) 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.

(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.

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