LNP™ THERMOCOMP™ COMPOUND MF004S

MFX-1004 HS
REGION AMERICAS

DESCRIPTION

LNP THERMOCOMP MF004S compound is based on Polypropylene (PP) resin containing 20% glass fiber. Added features of this grade include: Heat Stabilized.

GENERAL INFORMATION	
Features	Heat Stabilized, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber
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, break	66	MPa	ASTM D638
Tensile Strain, break	3.1	%	ASTM D638
Flexural Stress	106	MPa	ASTM D790
Flexural Modulus	4130	MPa	ASTM D790
IMPACT [1]			
Izod Impact, unnotched, 23°C	534	J/m	ASTM D4812
Izod Impact, notched, 23°C	42	J/m	ASTM D256
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	145	°C	ASTM D648
Relative Temp Index, Elec	65	°C	UL 746B
Relative Temp Index, Mech w/impact	65	°C	UL 746B
Relative Temp Index, Mech w/o impact	65	°C	UL 746B
PHYSICAL [1]			
Density	1.04	g/cm³	ASTM D792
Mold Shrinkage, flow, 24 hrs [2]	0.4	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [2]	1	%	ASTM D955
ELECTRICAL [1]			
Comparative Tracking Index (UL) {PLC}	0	PLC Code	UL 746A
Hot-Wire Ignition (HWI), PLC 2	≥3	mm	UL 746A
Hot-Wire Ignition (HWI), PLC 3	≥1	mm	UL 746A

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
High Amp Arc Ignition (HAI), PLC 1	≥1.5	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 3	≥1	mm	UL 746A
High Voltage Arc Track Rate {PLC}	1	PLC Code	UL 746A
Arc Resistance, Tungsten {PLC}	6	PLC Code	ASTM D495
FLAME CHARACTERISTICS [3]			
UL Yellow Card Link	E121562-101283897	-	-
UL Recognized, 94HB Flame Class Rating	≥1	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) 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) 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.

(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.

DISCLAIMER