LNP™ THERMOCOMP™ COMPOUND MF006S

MFX-1006 HS
REGION ASIA

DESCRIPTION

LNP THERMOCOMP MF006S is a compound based on Polypropylene resin containing 30% Glass Fiber. Added features of this material include: Heat Stabilized.

TYPICAL PROPERTY VALUES

Revision 20190405

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	81	MPa	ASTM D 638
Tensile Strain, break	1.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	14470	MPa	ASTM D 638
Flexural Stress	131	MPa	ASTM D 790
Flexural Modulus	6200	MPa	ASTM D 790
Tensile Stress, break	80	MPa	ISO 527
Tensile Strain, break	3	%	ISO 527
Tensile Modulus, 1 mm/min	9120	MPa	ISO 527
Flexural Stress	135	MPa	ISO 178
Flexural Modulus	6800	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	603	J/m	ASTM D 4812
Izod Impact, notched, 23°C	53	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	37	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	157	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	133	°C	ASTM D 648
CTE, -40°C to 40°C, flow	6.84E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	4.5E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	6.9E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	4.4E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	161	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	141	°C	ISO 75/Af
Relative Temp Index, Elec (1)	65	°C	UL 746B
Relative Temp Index, Mech w/impact (1)	65	°C	UL 746B
Relative Temp Index, Mech w/o impact (1)	65	°C	UL 746B
PHYSICAL			
Density	1.12	g/cm³	ASTM D 792
Mold Shrinkage, flow, 24 hrs	0.6 – 0.8	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.9 – 1.1	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.65	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.98	%	ISO 294

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Density	1.12	g/cm³	ISO 1183
ELECTRICAL			
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
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 D 495
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E207780-101283850	-	-
UL Recognized, 94HB Flame Class Rating	≥1	mm	UL 94
INJECTION MOLDING			
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) 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.

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