LNP™ THERMOCOMP™ COMPOUND MF006SXP

MFX-1006
REGION AMERICAS

DESCRIPTION

LNP THERMOCOMP* MF006SXP is a compound based on Polypropylene resin containing 30% Glass Fiber. Added features of this material include: Chemically Coupled.

TYPICAL PROPERTY VALUES

Revision 20190405

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	88	MPa	ASTM D 638
Tensile Strain, break	3	%	ASTM D 638
Tensile Modulus, 50 mm/min	7300	MPa	ASTM D 638
Flexural Stress	139	MPa	ASTM D 790
Flexural modulus	6200	MPa	ASTM D 790
Tensile Stress, break	91	MPa	ISO 527
Tensile Strain, break	3.2	%	ISO 527
Tensile Modulus, 1 mm/min	7600	MPa	ISO 527
Flexural Stress	159	MPa	ISO 178
Flexural Modulus	8700	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	704	J/m	ASTM D 4812
Izod Impact, notched, 23°C	117	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	3	J	ASTM D 3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	45	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	11	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	160	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	150	°C	ASTM D 648
CTE, -40°C to 40°C, flow	2.64E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	5.97E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	2.64E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	5.98E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	152	°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	1.13	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.02	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1	%	ASTM D 955

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 24 hrs	0.5	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.96	%	ISO 294
Density	1.13	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.03	%	ISO 62
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	E121562-101283897	-	-
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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