

LNPT[™] THERMOCOMP[™] COMPOUND MF006SXP

MFX-1006

REGION AMERICAS

DESCRIPTION

LNP THERMOCOMP MF006SXP compound is based on Polypropylene (PP) resin containing 30% 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

Consumer
Electrical and Electronics
Industrial

SUB INDUSTRY

Sport/Leisure, Personal Accessory
Mobile Phone - Computer - Tablets
Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break	88	MPa	ASTM D638
Tensile Strain, break	3	%	ASTM D638
Tensile Modulus, 50 mm/min	7300	MPa	ASTM D638
Flexural Stress	139	MPa	ASTM D790
Flexural modulus	6200	MPa	ASTM D790
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 ⁽¹⁾			
Izod Impact, unnotched, 23°C	704	J/m	ASTM D4812
Izod Impact, notched, 23°C	117	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	3	J	ASTM D3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	45	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	11	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	160	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	150	°C	ASTM D648

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CHEMISTRY THAT MATTERS[™]

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, flow	2.64E-05	1 / °C	ASTM E831
CTE, -40°C to 40°C, xflow	5.97E-05	1 / °C	ASTM E831
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 ⁽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⁾			
Density	1.13	g / cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.02	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽³⁾	0.5	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	1	%	ASTM D955
Mold Shrinkage, flow, 24 hrs ⁽³⁾	0.5	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	0.96	%	ISO 294
Density	1.13	g / cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.03	%	ISO 62
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
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 ⁽²⁾			
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) 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.



ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

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