LNP™ THERMOCOMP™ COMPOUND EC006

EC-1006
REGION ASIA

DESCRIPTION

LNP THERMOCOMP* EC006 is a compound based on Polyetherimide resin containing 30% Carbon Fiber. Added features of this material include: Electrically Conductive.

TYPICAL PROPERTY VALUES

Revision 20190717

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	196	MPa	ASTM D 638
Tensile Strain, break	1.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	19440	MPa	ASTM D 638
Flexural Stress	280	MPa	ASTM D 790
Flexural modulus	18170	MPa	ASTM D 790
Tensile Stress, break	183	MPa	ISO 527
Tensile Strain, break	1.1	%	ISO 527
Tensile Modulus, 1 mm/min	20200	MPa	ISO 527
Flexural Stress	269	MPa	ISO 178
Flexural Modulus	17930	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	373	J/m	ASTM D 4812
Izod Impact, notched, 23°C	42	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	7	J	ASTM D 3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	26	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	217	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	217	°C	ISO 75/Af
PHYSICAL			
Density	1.388	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.19	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.1 – 0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.3 – 0.5	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.1	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.39	%	ISO 294
Wear Factor Washer	75	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.52	-	ASTM D 3702 Modified: Manual
Static COF	0.48	-	ASTM D 3702 Modified: Manual
Density	1.38	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.28	%	ISO 62
ELECTRICAL			

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Surface Resistivity	1.E+02 – 1.E+06	Ohm	ASTM D 257
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E207780-101282611	-	-
UL Recognized, 94V-0 Flame Class Rating	0.75	mm	UL 94
INJECTION MOLDING			
Drying Temperature	120 – 150	°C	
Drying Time	4 – 6	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	360 – 365	°C	
Front - Zone 3 Temperature	365 – 375	°C	
Middle - Zone 2 Temperature	355 – 365	°C	
Rear - Zone 1 Temperature	345 – 355	°C	
Mold Temperature	120 – 150	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	60 – 100	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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