LNP™ THERMOCOMP™ COMPOUND IF006

IF-1006
REGION AMERICAS

DESCRIPTION

LNP THERMOCOMP* IF006 is a compound based on Nylon 6/12 resin containing 30% Glass Fiber.

TYPICAL PROPERTY VALUES

Revision 20190607

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	182	MPa	ASTM D 638
Tensile Strain, break	3.7	%	ASTM D 638
Tensile Modulus, 50 mm/min	9580	MPa	ASTM D 638
Flexural Stress	291	MPa	ASTM D 790
Flexural modulus	9300	MPa	ASTM D 790
Tensile Stress, break	178	MPa	ISO 527
Tensile Strain, break	3.4	%	ISO 527
Tensile Modulus, 1 mm/min	10320	MPa	ISO 527
Flexural Stress	250	MPa	ISO 178
Flexural Modulus	8830	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1238	J/m	ASTM D 4812
Izod Impact, notched, 23°C	138	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	14	J	ASTM D 3763
Multiaxial Impact	3	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	78	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	14	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	213	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	198	°C	ASTM D 648
CTE, -40°C to 40°C, flow	4.05E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.3E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	4.05E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.31E-05	1/°C	ISO 11359-2
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	1.32	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.17	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.1 – 0.2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.7 – 0.8	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.11 – 0.16	%	ISO 294

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, xflow, 24 hrs	0.66 – 0.71	%	ISO 294
Density	1.29	g/cm³	ISO 1183
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E121562-101282574	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.12 – 0.2	%	
Melt Temperature	270 – 275	°C	
Front - Zone 3 Temperature	270 – 280	°C	
Middle - Zone 2 Temperature	260 – 270	°C	
Rear - Zone 1 Temperature	255 – 265	°C	
Mold Temperature	65 – 95	°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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