LNP™ THERMOCOMP™ COMPOUND OF006

OF-1006

DESCRIPTION

LNP THERMOCOMP OF006 is a compound based on Linear PPS containing 30% Glass Fiber.

TYPICAL PROPERTY VALUES

Revision 20200108

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	132	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	12100	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	170	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	10000	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	126	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.3	%	ISO 527
Tensile Modulus, 1 mm/min	11960	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	175	MPa	ISO 178
Flexural Modulus, 2 mm/min	10520	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	391	J/m	ASTM D 4812
Izod Impact, notched, 23°C	58	J/m	ASTM D 256
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	24	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	276	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	261	°C	ASTM D 648
CTE, -30°C to 30°C, flow	2.2E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	4.5E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	275	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	258	°C	ISO 75/Af
Relative Temp Index, Elec [1]	220	°C	UL 746B
Relative Temp Index, Mech w/impact [1]	200	°C	UL 746B
Relative Temp Index, Mech w/o impact [1]	220	°C	UL 746B
PHYSICAL			
Density	1.57	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.02	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.1 – 0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.7 – 0.9	%	ASTM D 955
Density	1.57	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.06	%	ISO 62
ELECTRICAL [1]			

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Comparative Tracking Index (UL) {PLC}	4	PLC Code	UL 746A
Hot-Wire Ignition (HWI), PLC 0	≥6	mm	UL 746A
Hot-Wire Ignition (HWI), PLC 1	≥3	mm	UL 746A
Hot-Wire Ignition (HWI), PLC 2	≥1.5	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 4	≥1.5	mm	UL 746A
High Voltage Arc Track Rate {PLC}	1	PLC Code	UL 746A
Arc Resistance, Tungsten {PLC}	5	PLC Code	ASTM D 495
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E121562-101283822	-	-
UL Yellow Card Link 2	E121562-101283821	-	-
UL Recognized, 94-5VA Flame Class Rating	≥1.5	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating	≥0.45	mm	UL 94
UV-light, water exposure/immersion	F1	-	UL 746C
INJECTION MOLDING			
Drying Temperature	120 – 150	°C	
Drying Time	4	hrs	
Melt Temperature	315 – 320	°C	
Front - Zone 3 Temperature	330 – 345	°C	
Middle - Zone 2 Temperature	320 – 330	°C	
Rear - Zone 1 Temperature	305 – 315	°C	
Mold Temperature	140 – 165	°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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