LNP™ THERMOCOMP™ COMPOUND SF006

SF-1006

DESCRIPTION

LNP THERMOCOMP* SF006 is a compound based on Nylon 12 resin containing 30% Glass Fiber.

TYPICAL PROPERTY VALUES

Revision 20191213

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	106	MPa	ASTM D 638
Tensile Strain, break	4.7	%	ASTM D 638
Tensile Modulus, 50 mm/min	6550	MPa	ASTM D 638
Flexural Stress	170	MPa	ASTM D 790
Flexural Modulus	5860	MPa	ASTM D 790
Tensile Stress, break	108	MPa	ISO 527
Tensile Strain, break	4.6	%	ISO 527
Tensile Modulus, 1 mm/min	6580	MPa	ISO 527
Flexural Stress	169	MPa	ISO 178
Flexural Modulus	6240	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	950	J/m	ASTM D 4812
Izod Impact, notched, 23°C	149	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	13	J	ASTM D 3763
Multiaxial Impact	3	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	58	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	15	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	163	°C	ASTM D 648
CTE, -40°C to 40°C, flow	4.37E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.12E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	4.37E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.13E-04	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	162	°C	ISO 75/Af
PHYSICAL			
Density	1.243	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.14	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.2 – 0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.7 – 0.8	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.21 – 0.3	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.74 – 0.81	%	ISO 294
Density	1.24	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.22	%	ISO 62
INJECTION MOLDING			

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.12 – 0.2	%	
Melt Temperature	225 – 240	°C	
Front - Zone 3 Temperature	225 – 240	°C	
Middle - Zone 2 Temperature	220 – 230	°C	
Rear - Zone 1 Temperature	215 – 225	°C	
Mold Temperature	70 – 80	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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