LNP™ THERMOCOMP™ COMPOUND WC006

WC-1006
REGION ASIA

DESCRIPTION

LNP THERMOCOMP WC006 is a compound based on PBT resin containing 30% Carbon Fiber. Added feature of this grade is: Electrically Conductive.

TYPICAL PROPERTY VALUES

Revision 20181231

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	158	MPa	ASTM D 638
Tensile Stress, break	158	MPa	ASTM D 638
Tensile Strain, yield	1.2	%	ASTM D 638
Tensile Strain, break	1.2	%	ASTM D 638
Tensile Modulus, 50 mm/min	19990	MPa	ASTM D 638
Flexural Stress	206	MPa	ASTM D 790
Flexural modulus	15160	MPa	ASTM D 790
Tensile Stress, yield	158	MPa	ISO 527
Tensile Stress, break	158	MPa	ISO 527
Tensile Strain, yield	1.2	%	ISO 527
Tensile Strain, break	1.2	%	ISO 527
Tensile Modulus, 1 mm/min	20660	MPa	ISO 527
Flexural Stress	219	MPa	ISO 178
Flexural Modulus	17000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	464	J/m	ASTM D 4812
Izod Impact, notched, 23°C	42	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	8	J	ASTM D 3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	30	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	222	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	211	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.26E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.8E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.2E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.8E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	223	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	209	°C	ISO 75/Af
PHYSICAL			
Density	1.43	g/cm³	ASTM D 792
Mold Shrinkage, flow, 24 hrs	0.1 – 0.3	%	ASTM D 955

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, xflow, 24 hrs	1 – 2	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.23	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.2	%	ISO 294
Density	1.43	g/cm³	ISO 1183
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	240 – 265	°C	
Front - Zone 3 Temperature	260 – 270	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	220 – 230	°C	
Mold Temperature	80 – 100	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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