

LNPT[™] THERMOCOMP[™] COMPOUND WF006

WF-1006

REGION AMERICAS

DESCRIPTION

LNP THERMOCOMP[®] WF006 is a compound based on PBT resin containing 30% Glass Fiber.

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	137	MPa	ASTM D638
Tensile Strain, break	2.9	%	ASTM D638
Tensile Modulus, 50 mm/min	10160	MPa	ASTM D638
Flexural Stress	222	MPa	ASTM D790
Flexural Modulus	9350	MPa	ASTM D790
Tensile Stress, break	133	MPa	ISO 527
Tensile Strain, break	2.5	%	ISO 527
Tensile Modulus, 1 mm/min	11180	MPa	ISO 527
Flexural Stress	208	MPa	ISO 178
Flexural Modulus	9100	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	838	J/m	ASTM D4812
Izod Impact, notched, 23°C	90	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	11	J	ASTM D3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	51	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	9	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	222	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	207	°C	ASTM D648
CTE, -40°C to 40°C, flow	3.11E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	3.11E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	221	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	202	°C	ISO 75/Af
PHYSICAL			
Density	1.559	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.05	%	ASTM D570
Mold Shrinkage, flow, 24 hrs	0.3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs	1.1	%	ASTM D955
Mold Shrinkage, flow, 24 hrs	0.3	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.07	%	ISO 294
Density	1.55	g/cm ³	ISO 1183

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture Absorption (23°C / 50% RH)	0.07	%	ISO 62
FLAME CHARACTERISTICS			
UL Compliant, 94HB Flame Class Rating ⁽¹⁾	1.5	mm	UL 94 by SABIC-IP
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	

(1) UL rating shown here is based on internal measurements.

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