LNP™ THERMOCOMP™ COMPOUND LF006

LF-1006
REGION AMERICAS

DESCRIPTION

LNP THERMOCOMP LF006 compound is based on Polyetheretherketone (PEEK) resin containing 30% glass fiber.

GENERAL INFORMATION	
Features	High stiffness/Strength, High temperature resistance, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polyetheretherketone (PEEK)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Consumer	Commercial Appliance
Electrical and Electronics	Electronic Components, Mobile Phone - Computer - Tablets
Industrial	Electrical, Material Handling

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, break	176	MPa	ASTM D638
Tensile Strain, break	2	%	ASTM D638
Tensile Modulus, 5 mm/min	13230	MPa	ASTM D638
Flexural Stress	245	MPa	ASTM D790
Flexural modulus	10750	MPa	ASTM D790
Tensile Stress, break	175	MPa	ISO 527
Tensile Strain, break	1.9	%	ISO 527
Tensile Modulus, 1 mm/min	13100	MPa	ISO 527
Flexural Stress	263	MPa	ISO 178
Flexural Modulus	12700	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	875	J/m	ASTM D4812
Izod Impact, notched, 23°C	117	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	13	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	57	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	11	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	>298	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	>298	°C	ASTM D648
CTE, -40°C to 40°C, flow	1.62E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	4.68E-05	1/°C	ASTM E831

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, flow	1.7E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	4.84E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	>240	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	>240	°C	ISO 75/Af
PHYSICAL (1)			
Density	1.54	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.1	%	ASTM D570
Density	1.53	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.08	%	ISO 62
FLAME CHARACTERISTICS (2)			
UL Yellow Card Link	E121562-101284444	-	-
UL Recognized, 94V-0 Flame Class Rating	0.78	mm	UL 94
INJECTION MOLDING (3)			
Drying Temperature	150	°C	
Drying Time	4 – 6	Hrs	
Front - Zone 3 Temperature	380 – 400	°C	
Middle - Zone 2 Temperature	380 – 400	°C	
Rear - Zone 1 Temperature	370 – 380	°C	
Mold Temperature	175 – 190	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	60 – 100	rpm	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) 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.

(3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.