

LNP* Thermocomp* Compound LF003

Americas: COMMERCIAL

Also known as: LF-1003
Product Reorder Name: LF003

LNP* Thermocomp* LF003 is a compound based on Polyetheretherketone resin containing Glass Fiber.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	136	MPa	ASTM D 638
Tensile Stress, break	136	MPa	ASTM D 638
Tensile Strain, yield	2.9	%	ASTM D 638
Tensile Strain, break	3.1	%	ASTM D 638
Tensile Modulus, 50 mm/min	74460	MPa	ASTM D 638
Flexural Stress	199	MPa	ASTM D 790
Flexural Modulus	62740	MPa	ASTM D 790
Tensile Stress, yield	125	MPa	ISO 527
Tensile Stress, break	125	MPa	ISO 527
Tensile Strain, yield	2.3	%	ISO 527
Tensile Strain, break	2.3	%	ISO 527
Tensile Modulus, 1 mm/min	6930	MPa	ISO 527
Flexural Stress	209	MPa	ISO 178
Flexural Modulus	7000	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	854	J/m	ASTM D 4812
Izod Impact, notched, 23°C	53	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	14	J	ASTM D 3763
Multiaxial Impact	3	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	54	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m ²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	328	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	258	°C	ASTM D 648
CTE, -40°C to 40°C, flow	4.86E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	3.06E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	4.8E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	3.1E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	325	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	244	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.39	g/cm ³	ASTM D 792

Source GMD, last updated:05/12/2007

Processing

Parameter	Value	Unit
Injection Molding		

Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Maximum Moisture Content	0.1	%
Melt Temperature	380 - 390	°C
Front - Zone 3 Temperature	380 - 395	°C
Middle - Zone 2 Temperature	365 - 375	°C
Rear - Zone 1 Temperature	350 - 360	°C
Mold Temperature	140 - 165	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	60 - 100	rpm

Source GMD, last updated:05/12/2007

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

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