

## LNP\* Thermocomp\* Compound LX03447

Americas: COMMERCIAL

Also known as: THERMOCOMP PDX-L-03447  
Product Reorder Name: LX03447

LNP\* Thermocomp\* LX03447 is a compound based on Polyetheretherketone containing Proprietary Fillers.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
	Value	Unit	Standard
<b>MECHANICAL</b>			
Tensile Stress, brk, Type I, 5 mm/min	248	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	28540	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	370	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	365	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	23700	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	246	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.5	%	ISO 527
Tensile Modulus, 1 mm/min	28350	MPa	ISO 527
Flexural Stress	360	MPa	ISO 178
Flexural Modulus, 2 mm/min	23800	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, unnotched, 23°C	771	J/m	ASTM D 4812
Izod Impact, notched, 23°C	70	J/m	ASTM D 256
Multiaxial Impact	3	J	ISO 6603
Instrumented Impact Total Energy, 23°C	7	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	45	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL</b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	337	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	325	°C	ASTM D 648
CTE, -30°C to 30°C, flow	9.E+00	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	3.89E+01	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	335	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	318	°C	ISO 75/Af
<b>PHYSICAL</b>			
Density	1.43	g/cm <sup>3</sup>	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.05	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.1 - 3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.7 - 0.9	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.07	%	ISO 62

Source GMD, last updated:2009/09/02

### 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:2009/09/02

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.

(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

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