

# LNPT<sup>TM</sup> THERMOCOMP<sup>TM</sup> COMPOUND PDXE98480

PDX-E-98480 PS

## DESCRIPTION

LNP THERMOCOMP PDXE98480 compound is based on Polyetherimide (PEI) resin containing 40% glass fiber.

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

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical, Defense

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, brk, Type I, 5 mm/min	180	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	1.7	%	ASTM D638
Tensile Modulus, 5 mm/min	15100	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	254	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	13400	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	162	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.5	%	ISO 527
Tensile Modulus, 1 mm/min	14220	MPa	ISO 527
Flexural Stress	243	MPa	ISO 178
Flexural Modulus, 2 mm/min	12790	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched, 23°C	500	J/m	ASTM D4812
Izod Impact, notched, 23°C	92	J/m	ASTM D256
Multiaxial Impact	4	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	12	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	33	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	213	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	208	°C	ASTM D648
CTE, -30°C to 30°C, flow	2.9E-05	1/°C	ASTM D696

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -30°C to 30°C, xflow	9.2E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	213	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	208	°C	ISO 75/Af
<b>PHYSICAL <sup>(1)</sup></b>			
Specific Gravity	1.6	-	ASTM D792
Density	1.6	g/cm <sup>3</sup>	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.12	%	ASTM D570
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.2 – 0.4	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.4 – 0.6	%	ASTM D955
Moisture Absorption (23°C / 50% RH)	0.17	%	ISO 62
<b>INJECTION MOLDING <sup>(3)</sup></b>			
Drying Temperature	120 – 150	°C	
Drying Time	4 – 6	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	360 – 365	°C	
Front - Zone 3 Temperature	365 – 375	°C	
Middle - Zone 2 Temperature	355 – 365	°C	
Rear - Zone 1 Temperature	345 – 355	°C	
Mold Temperature	120 – 150	°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) 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.
- (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.

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