

LNPTM THERMOCOMPTM COMPOUND

PDXE00715EES

DESCRIPTION

LNP THERMOCOMP PDXE00715EES compound is based on Polyetherimide (PEI) resin containing 10% glass fiber. Added features of this grade include: Healthcare.

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

INDUSTRY	SUB INDUSTRY
Hygiene and Healthcare	Pharmaceutical Packaging and Drug Delivery, Surgical devices, General Healthcare, Patient Testing
Packaging	Industrial Packaging

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Flexural Modulus, 1.3 mm/min, 50 mm span	5090	MPa	ASTM D790
Flexural Modulus, 2 mm/min	5084	MPa	ISO 178
Flexural Stress	202	MPa	ISO 178
Tensile Modulus, 5 mm/min	5022	MPa	ASTM D638
Tensile Stress, yld, Type I, 5 mm/min	129	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	129	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	4.7	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	6	%	ASTM D638
Tensile Modulus, 1 mm/min	4986	MPa	ISO 527
Tensile Stress, yield, 5 mm/min	127	MPa	ISO 527
Tensile Stress, break, 5 mm/min	123	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4.5	%	ISO 527
Tensile Strain, break, 5 mm/min	5.8	%	ISO 527
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	52.9	J/m	ASTM D256
Izod Impact, unnotched, 23°C	687	J/m	ASTM D4812
Izod Impact, unnotched 80*10*4 +23°C	37.2	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5.2	kJ/m ²	ISO 180/1A
Multiaxial Impact	7.1	J	ASTM D3763
Multiaxial Impact	2.2	J	ISO 6603

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	205	°C	ASTM D648
HDT, 0.45 MPa, 3.2 mm, unannealed	211	°C	ASTM D648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	205	°C	ISO 75/Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	213	°C	ISO 75/Bf
CTE, -30°C to 30°C, xflow	0.000046	1 / °C	ASTM D696
CTE, -30°C to 30°C, flow	0.000032	1 / °C	ASTM D696
PHYSICAL ⁽¹⁾			
Density	1.35	g / cm ³	ASTM D792
Specific Gravity	1.36	-	ASTM D792
Mold Shrinkage, flow, 24 hrs ⁽²⁾	2.3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	2.4	%	ASTM D955
Moisture Absorption, (23°C/50% RH/24 hrs)	0.17	%	ASTM D570
Moisture Absorption (23°C / 50% RH)	0.29	%	ISO 62
INJECTION MOLDING ⁽³⁾			
Drying Temperature	121	°C	
Drying Time (Cumulative)	4 – 6	Hrs	
Melt Temperature	360 – 365	°C	
Front - Zone 3 Temperature	365 – 376	°C	
Middle - Zone 2 Temperature	354 – 365	°C	
Rear - Zone 1 Temperature	343 – 354	°C	
Mold Temperature	121 – 148	°C	
Back Pressure	0.34 – 0.68	MPa	
Screw Speed	60 – 100	rpm	
Maximum Moisture Content	0.02	%	

- (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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