

LNPT[™] THERMOCOMP[™] COMPOUND 2X95787

PDX-FP-E-95787

REGION AMERICAS

DESCRIPTION

LNP THERMOCOMP 2X95787 compound is based on Ethylene Tetrafluoroethylene (ETFE) resin containing 15% glass fiber.

GENERAL INFORMATION	
Features	High stiffness/Strength
Fillers	Glass Fiber
Polymer Types	Ethylene Tetrafluoroethylene Copolymer (ETFE)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Energy Management, Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yield	48	MPa	ASTM D638
Tensile Stress, break	45	MPa	ASTM D638
Tensile Strain, yield	9.3	%	ASTM D638
Tensile Strain, break	13.7	%	ASTM D638
Tensile Modulus, 5 mm/min	4270	MPa	ASTM D638
Flexural Modulus	3400	MPa	ASTM D790
Tensile Stress, yield	47	MPa	ISO 527
Tensile Stress, break	45	MPa	ISO 527
Tensile Strain, yield	8.6	%	ISO 527
Tensile Strain, break	12.8	%	ISO 527
Tensile Modulus, 1 mm/min	4050	MPa	ISO 527
Flexural Stress	66	MPa	ISO 178
Flexural Modulus	4000	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	1335	J/m	ASTM D4812
Izod Impact, notched, 23°C	480	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	19	J	ASTM D3763
Izod Impact, unnotched 80°10*4 +23°C	83	kJ/m ²	ISO 180/1U
Izod Impact, notched 80°10*4 +23°C	24	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	222	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	107	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	203	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	91	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Density	1.84	g/cm ³	ASTM D792
Mold Shrinkage, flow, 24 hrs ⁽²⁾	1.8	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	2.4	%	ASTM D955
Mold Shrinkage, flow, 24 hrs ⁽²⁾	1.8	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	2.4	%	ISO 294
Density	1.83	g/cm ³	ISO 1183
INJECTION MOLDING ⁽³⁾			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Melt Temperature	315	°C	
Front - Zone 3 Temperature	330 – 345	°C	
Middle - Zone 2 Temperature	310 – 320	°C	
Rear - Zone 1 Temperature	280 – 295	°C	
Mold Temperature	95 – 120	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	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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