

LNPT[™] THERMOCOMP[™] COMPOUND RX99732C

PDX-R-99732

DESCRIPTION

LNP THERMOCOMP RX99732C compound is based on Nylon 6/6 resin containing 45% glass fibers.

GENERAL INFORMATION	
Features	High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding

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

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yld, Type I, 5 mm/min	186	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	186	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	2.8	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2.9	%	ASTM D638
Tensile Modulus, 50 mm/min	15180	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	253	MPa	ASTM D790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	250	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	10200	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	186	MPa	ISO 527
Tensile Stress, break, 5 mm/min	186	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.7	%	ISO 527
Tensile Strain, break, 5 mm/min	2.8	%	ISO 527
Tensile Modulus, 1 mm/min	14010	MPa	ISO 527
Flexural Modulus, 2 mm/min	10830	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	1290	J/m	ASTM D4812
Izod Impact, notched, 23°C	145	J/m	ASTM D256
Multiaxial Impact	3	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	17	J	ASTM D3763
Izod Impact, unnotched 80°10°4 +23°C	74	kJ/m ²	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	14	kJ/m ²	ISO 180/1A

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	252	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	234	°C	ASTM D648
CTE, -30°C to 30°C, flow	2.3E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	5.1E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	253	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	234	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Density	1.51	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.59	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.1 – 0.3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.9 – 2	%	ASTM D955
Moisture Absorption (23°C / 50% RH)	0.81	%	ISO 62
INJECTION MOLDING ⁽³⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	280 – 305	°C	
Front - Zone 3 Temperature	295 – 305	°C	
Middle - Zone 2 Temperature	280 – 295	°C	
Rear - Zone 1 Temperature	265 – 275	°C	
Mold Temperature	95 – 110	°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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