

LNPTM THERMOCOMPTM COMPOUND PFB91S

PDX-P-00461 REGION AMERICAS

DESCRIPTION

LNP THERMOCOMP PFB91S compound is based on Nylon 6 resin containing 45% glass bead, 5% glass fiber.

GENERAL INFORMATION	
Features	Low Warpage, Dimensional stability, High stiffness/Strength
Fillers	Glass Fiber, Glass Bead
Polymer Types	Polyamide 6 (Nylon 6)
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

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL (1)			
Tensile Stress, break	62	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	62	MPa	ASTM D638
Tensile Strain, break	2.7	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2.7	%	ASTM D638
Tensile Modulus, 50 mm/min	7490	MPa	ASTM D638
Flexural Modulus	6040	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	6040	MPa	ASTM D790
IMPACT (1)			
Izod Impact, unnotched, 23°C	283	J/m	ASTM D4812
Izod Impact, notched, 23°C	37	J/m	ASTM D256
THERMAL (1)			
HDT, 1.82 MPa, 3.2mm, unannealed	163	°C	ASTM D648
PHYSICAL (1)			
Density	1.57	g/cm³	ASTM D792
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.6	%	ASTM D955
INJECTION MOLDING (3)			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15 – 0.25	%	



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Melt Temperature	265 – 275	°C	
Front - Zone 3 Temperature	275 – 290	°C	
Middle - Zone 2 Temperature	265 – 275	°C	
Rear - Zone 1 Temperature	250 – 260	°C	
Mold Temperature	80 – 95	°C	
Back Pressure	0.3 – 0.7	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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