

# LNPTM THERMOCOMPTM COMPOUND PF008S

PF-1008 HS REGION AMERICAS

### **DESCRIPTION**

LNP THERMOCOMP PF008S compound is based on Nylon 6 resin containing 40% glass fiber. Added features of this grade include: Heat Stabilized.

GENERAL INFORMATION	
Features	Heat Stabilized, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber
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	183	MPa	ASTM D638
Tensile Strain, break	3.3	%	ASTM D638
Tensile Modulus, 50 mm/min	12670	MPa	ASTM D638
Flexural Stress	278	MPa	ASTM D790
Flexural modulus	9250	MPa	ASTM D790
Tensile Stress, break	186	MPa	ISO 527
Tensile Strain, break	3.3	%	ISO 527
Tensile Modulus, 1 mm/min	12990	MPa	ISO 527
Flexural Stress	278	MPa	ISO 178
Flexural Modulus	9530	MPa	ISO 178
IMPACT (1)			
Izod Impact, notched, 23°C	133	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	25	J	ASTM D3763
Multiaxial Impact	21	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	92	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	17	kJ/m²	ISO 180/1A
THERMAL (1)			
HDT, 1.82 MPa, 3.2mm, unannealed	195	°C	ASTM D648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	208	°C	ISO 75/Af



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL (1)			
Density	1.47	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.98	%	ASTM D570
Mold Shrinkage, flow, 24 hrs (2)	0.2 – 0.4	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.6 – 0.8	%	ASTM D955
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.2 – 0.4	%	ISO 294
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.6 - 0.8	%	ISO 294
Density	1.47	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	1.26	%	ISO 62
INJECTION MOLDING (3)			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15 – 0.25	%	
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.

#### **MORE INFORMATION**

For curve data and CAE cards, please visit and register at https://materialfinder.sabic-specialties.com

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