

# LNPTM COLORCOMPTM COMPOUND G1000LX1

## DESCRIPTION

LNP COLORCOMP G1000LX1 compound is based on unfilled Polysulfone (PSU) resin. Added features of this grade include: Low Extractables.

GENERAL INFORMATION	
Features	Aesthetics/Visual effects, Food contact, High temperature resistance, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polysulfone (PSU)
Processing Techniques	Injection Molding

  

INDUSTRY	SUB INDUSTRY
Building and Construction	Water Management
Consumer	Home Appliances
Packaging	Industrial Packaging, Food & Beverage

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL <sup>(1)</sup>			
Tensile Stress, yield, 50 mm/min	75	MPa	ISO 527
Tensile Stress, break, 50 mm/min	60	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6	%	ISO 527
Tensile Strain, break, 50 mm/min	65	%	ISO 527
Tensile Modulus, 1 mm/min	2550	MPa	ISO 527
Flexural Strength, 2 mm/min	115	MPa	ISO 178
Flexural Modulus, 2 mm/min	2500	MPa	ISO 178
Tensile Stress, yld, Type I, 50 mm/min	70	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	65	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	5	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	100	%	ASTM D638
Tensile Modulus, 5 mm/min	2600	MPa	ASTM D638
Flexural Strength, 1.3 mm/min, 50 mm span	115	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2560	MPa	ASTM D790
IMPACT <sup>(1)</sup>			
Izod Impact, unnotched 80*10*4 +23°C	137	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	9	kJ/m <sup>2</sup>	ISO 180/1A
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	100	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	5	kJ/m <sup>2</sup>	ISO 179/1eA
Izod Impact, unnotched, 23°C	1700	J/m	ASTM D4812
Izod Impact, notched, 23°C	50	J/m	ASTM D256
THERMAL <sup>(1)</sup>			
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	180	°C	ISO 75/Bf

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	170	°C	ISO 75/Af
Vicat Softening Temp, Rate B/50	185	°C	ISO 306
Vicat Softening Temp, Rate B/120	185	°C	ISO 306
CTE, 23°C to 60°C, flow	6.3E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	6.5E-05	1/°C	ISO 11359-2
HDT, 0.45 MPa, 3.2 mm, unannealed	180	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	170	°C	ASTM D648
PHYSICAL <sup>(1)</sup>			
Density	1.24	g/cm <sup>3</sup>	ISO 1183
Mold Shrinkage, flow <sup>(2)</sup>	0.7	%	SABIC method
Mold Shrinkage, xflow <sup>(2)</sup>	0.7	%	SABIC method
Moisture Absorption, (23°C/50% RH/24hrs)	0.1	%	ISO 62-4
Moisture Absorption, (23°C/50% RH/Equilibrium)	0.3	%	ISO 62-4
Melt Volume Rate, MVR at 345°C/2.16 kg	7.8	cm <sup>3</sup> /10 min	ISO 1133
INJECTION MOLDING <sup>(3)</sup>			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	360 – 370	°C	
Front - Zone 3 Temperature	350 – 360	°C	
Middle - Zone 2 Temperature	340 – 350	°C	
Rear - Zone 1 Temperature	325 – 340	°C	
Mold Temperature	150	°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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