

# LNPTM COLORCOMPTM COMPOUND N1000E

## DESCRIPTION

LNP COLORCOMP N1000E compound is based on unfilled Polycarbonate/Acrylonitrile Butadiene Styrene (PC/ABS) blend. Added features of this grade include: Excellent Flow, Impact, High Heat Resistance, Low Temperature Ductility.

GENERAL INFORMATION	
Features	Good Processability, Aesthetics/Visual effects, High temperature resistance, Impact resistant, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polycarbonate + ABS (PC+ABS)
Processing Techniques	Injection Molding

  

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Interiors
Consumer	Home Decoration, Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, yld, Type I, 50 mm/min	57	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, 50 mm/min	2270	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	88	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2340	MPa	ASTM D790
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, notched, 23°C	587	J/m	ASTM D256
Izod Impact, notched, -30°C	480	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	54	J	ASTM D3763
Instrumented Dart Impact Total Energy, -30°C	54	J	ASTM D3763
<b>THERMAL <sup>(1)</sup></b>			
Vicat Softening Temp, Rate B/50	130	°C	ISO 306
HDT, 0.45 MPa, 3.2 mm, unannealed	129	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	112	°C	ASTM D648
CTE, -40°C to 40°C, flow	7.2E-05	1/°C	ASTM E831
Relative Temp Index, Elec <sup>(2)</sup>	105	°C	UL 746B
Relative Temp Index, Mech w/impact <sup>(2)</sup>	80	°C	UL 746B
Relative Temp Index, Mech w/o impact <sup>(2)</sup>	105	°C	UL 746B
<b>PHYSICAL <sup>(1)</sup></b>			
Specific Gravity	1.15	-	ASTM D792

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Melt Flow Rate, 260°C/5.0 kgf	19	g/10 min	ASTM D1238
Mold Shrinkage, flow, 3.2 mm <sup>(3)</sup>	0.5 – 0.7	%	SABIC method
<b>ELECTRICAL <sup>(1)</sup></b>			
Comparative Tracking Index (UL) {PLC}	2	PLC Code	UL 746A
Hot-Wire Ignition (HWI), PLC 3	≥1.2	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 1	≥1.2	mm	UL 746A
<b>FLAME CHARACTERISTICS <sup>(2)</sup></b>			
UL Yellow Card Link	<a href="#">E121562-103956763</a>	-	-
UL Yellow Card Link 2	<a href="#">E207780-103938405</a>	-	-
UL Recognized, 94HB Flame Class Rating	≥0.75	mm	UL 94
Glow Wire Flammability Index, 3.5 mm	960	°C	IEC 60695-2-12
Glow Wire Ignitability Temperature, 3.5 mm	725	°C	IEC 60695-2-13
<b>INJECTION MOLDING <sup>(4)</sup></b>			
Drying Temperature	100 – 110	°C	
Drying Time	3 – 4	Hrs	
Drying Time (Cumulative)	8	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	275 – 300	°C	
Nozzle Temperature	275 – 300	°C	
Front - Zone 3 Temperature	260 – 300	°C	
Middle - Zone 2 Temperature	255 – 295	°C	
Rear - Zone 1 Temperature	250 – 290	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	60 – 90	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 – 70	rpm	
Shot to Cylinder Size	30 – 80	%	
Vent Depth	0.038-0.076	mm	

(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) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

(3) 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.

(4) 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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