

# LNP<sup>TM</sup> THERMOCOMP<sup>TM</sup> COMPOUND NX11302

## DESCRIPTION

This is a PC/ABS compound with colorable, good plating, surface and mechanical performance, a good candidate for Laser Direct Structuring applications

## TYPICAL PROPERTY VALUES

Revision 20191217

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 50 mm/min	47	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	46	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	4.6	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	75	%	ASTM D 638
Tensile Modulus, 50 mm/min	2350	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	79	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	78	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2230	MPa	ASTM D 790
<b>IMPACT</b>			
Izod Impact, notched, 23°C	550	J/m	ASTM D 256
<b>THERMAL</b>			
HDT, 1.82 MPa, 3.2mm, unannealed	106	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.1E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.6E-05	1/°C	ASTM E 831
Relative Temp Index, Elec <sup>(1)</sup>	60	°C	UL 746B
Relative Temp Index, Mech w/impact <sup>(1)</sup>	60	°C	UL 746B
Relative Temp Index, Mech w/o impact <sup>(1)</sup>	60	°C	UL 746B
<b>PHYSICAL</b>			
Density	1.22	g/cm <sup>3</sup>	ASTM D 792
Water Absorption, 24 hours	0.01	%	ASTM D 570
Moisture Absorption, 50% RH, 24 hrs	0.01	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.6	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.6	%	ASTM D 955
Melt Volume Rate, MVR at 260°C/5.0 kg	14	cm <sup>3</sup> /10 min	ISO 1133
<b>ELECTRICAL</b>			
Relative Permittivity, 1 GHz	2.94	-	IEC 60250
Dissipation Factor, 1 GHz	0.0057	-	IEC 60250
<b>FLAME CHARACTERISTICS <sup>(1)</sup></b>			
UL Yellow Card Link	<a href="#">E207780-100974177</a>	-	-
UL Recognized, 94HB Flame Class Rating	≥0.6	mm	UL 94
<b>INJECTION MOLDING</b>			
Drying Temperature	85 – 95	°C	
Drying Time	2 – 4	hrs	
Drying Time (Cumulative)	8	hrs	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Maximum Moisture Content	0.01	%	
Melt Temperature	220 – 260	°C	
Nozzle Temperature	220 – 260	°C	
Front - Zone 3 Temperature	215 – 255	°C	
Middle - Zone 2 Temperature	215 – 255	°C	
Rear - Zone 1 Temperature	200 – 250	°C	
Mold Temperature	40 – 75	°C	
Back Pressure	0.5 – 0.9	MPa	
Screw Speed	50 – 100	rpm	
Shot to Cylinder Size	50 – 70	%	
Vent Depth	0.038 – 0.051	mm	

(1) 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.

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