LNP™ LUBRICOMP™ COMPOUND NL001

PCA-L-4010
REGION EUROPE

DESCRIPTION

LNP LUBRICOMP* NL001 is a compound b ased on PC+ABS resin containing 5% PTFE. Added features include: Wear Resistant, Suitable for Thin Wall Applications.

TYPICAL PROPERTY VALUES

Revision 20190925

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	53	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	43	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	3.6	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	24.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	2400	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	86	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2440	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	45	MPa	ISO 527
Tensile Stress, break, 5 mm/min	40	MPa	ISO 527
Tensile Stress, yield, 50 mm/min	50	MPa	ISO 527
Tensile Stress, break, 50 mm/min	40	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4	%	ISO 527
Tensile Strain, break, 5 mm/min	45	%	ISO 527
Tensile Strain, yield, 50 mm/min	4	%	ISO 527
Tensile Strain, break, 50 mm/min	20	%	ISO 527
Tensile Modulus, 1 mm/min	2300	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	80	MPa	ISO 178
Flexural Modulus, 2 mm/min	2500	MPa	ISO 178
IMPACT			
Izod Impact, notched 80*10*4 +23°C	10	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	8	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	13	kJ/m²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	10	kJ/m²	ISO 179/1eA
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	116	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	99	°C	ASTM D 648
CTE, 23°C to 80°C, flow	7.E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	8.7E-05	1/°C	ISO 11359-2
Ball Pressure Test, 75°C +/- 2°C	PASSES	-	IEC 60695-10-2
Ball Pressure Test, approximate maximum	100	°C	IEC 60695-10-2
Vicat Softening Temp, Rate B/50	113	°C	ISO 306
Vicat Softening Temp, Rate B/120	115	°C	ISO 306
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	95	°C	ISO 75/Ae

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	114	°C	ISO 75/Bf
Relative Temp Index, Elec [1]	60	°C	UL 746B
Relative Temp Index, Mech w/impact [1]	60	°C	UL 746B
Relative Temp Index, Mech w/o impact [1]	60	°C	UL 746B
PHYSICAL			
Specific Gravity	1.14	-	ASTM D 792
Mold Shrinkage on Tensile Bar, flow	0.5 – 0.7	%	SABIC method
Density	1.1	g/cm³	ISO 1183
Melt Volume Rate, MVR at 260°C/5.0 kg	26	cm³/10 min	ISO 1133
ELECTRICAL			
Volume Resistivity	>1.E+15	Ohm-cm	IEC 60093
Surface Resistivity, ROA	>1.E+15	Ohm	IEC 60093
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E45329-101344461	-	-
UL Recognized, 94HB Flame Class Rating	≥0.75	mm	UL 94
Oxygen Index (LOI)	21	%	ISO 4589
INJECTION MOLDING			
Drying Temperature	90 – 100	°C	
Drying Time	2 – 4	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	240 – 270	°C	
Nozzle Temperature	220 – 260	°C	
Front - Zone 3 Temperature	230 – 270	°C	
Middle - Zone 2 Temperature	230 – 270	°C	
Rear - Zone 1 Temperature	210 – 240	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	60 – 90	°C	

(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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