LNP™ LUBRICOMP™ COMPOUND WL004

WL-4040
REGION EUROPE

DESCRIPTION

LNP LUBRICOMP* WL004 is a compound based on PBT resin containing 20% PTFE. Added features of this material include: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20191108

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield, 5 mm/min	41	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	12.2	%	ISO 527
Tensile Modulus, 1 mm/min	2420	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	68	MPa	ISO 178
Flexural Strain, break, 2 mm/min	6	%	ISO 178
Flexural Modulus, 2 mm/min	2200	MPa	ISO 178
Flexural Strain, break, 2 mm/min, 60°C	7	%	ISO 178
Flexural Strain, break, 2 mm/min, 100°C	7	%	ISO 178
Flexural Stress, yield, 2 mm/min, 60°C	21	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 100°C	14	MPa	ISO 178
Flexural Modulus, 2 mm/min, 60°C	800	MPa	ISO 178
Flexural Modulus, 2 mm/min, 100°C	500	MPa	ISO 178
IMPACT			
Izod Impact, unnotched 80*10*4 +23°C	27	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m²	ISO 180/1A
THERMAL			
CTE, 23°C to 60°C, flow	1.17E-04	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.07E-04	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	153	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	61	°C	ISO 75/Af
Relative Temp Index, Elec (1)	75	°C	UL 746B
Relative Temp Index, Mech w/impact (1)	75	°C	UL 746B
Relative Temp Index, Mech w/o impact (1)	75	°C	UL 746B
PHYSICAL			
Mold Shrinkage, flow	1 – 1.7	%	SABIC method
Mold Shrinkage, xflow	0.8 – 1.7	%	SABIC method
Wear Factor Washer	58	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.33	-	ASTM D 3702 Modified: Manual
Static COF	0.24	-	ASTM D 3702 Modified: Manual
Density	1.43	g/cm³	ISO 1183
Melt Volume Rate, MVR at 250°C/2.16 kg	18 – 21	cm³/10 min	ISO 1133
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E45329-101282617	-	-

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
UL Recognized, 94HB Flame Class Rating	≥1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	240 – 265	°C	
Front - Zone 3 Temperature	260 – 270	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	220 – 230	°C	
Mold Temperature	80 – 100	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

(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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