**Americas: COMMERCIAL** 

## LNP\* Lubricomp\* Compound WBL36L

Also known as: WBL-4036 LE Product Reorder Name: WBL36L

LNP\* Lubricomp\* WBL36L is a compound based on Polybutylene Terephalate resin containing Glass Bead, PTFE. Added features of this material include: Internally Lubricated, Low Extractible.

## **Property**

TYPICAL PROPERTIES (1)				
MECHANICAL	Value	Unit	Standard	
Tensile Stress, yield	37	MPa	ASTM D 638	
Tensile Stress, break	36	MPa	ASTM D 638	
Tensile Strain, yield	2.2	%	ASTM D 638	
Tensile Strain, break	3	%	ASTM D 638	
Tensile Modulus, 50 mm/min	4130	MPa	ASTM D 638	
Flexural Stress	68	MPa	ASTM D 790	
Flexural Modulus	4130	MPa	ASTM D 790	
Tensile Stress, yield	37	MPa	ISO 527	
Tensile Stress, break	36	MPa	ISO 527	
Tensile Strain, yield	2.3	%	ISO 527	
Tensile Strain, break	3.3	%	ISO 527	
Tensile Modulus, 1 mm/min	4020	MPa	ISO 527	
Flexural Stress	75	MPa	ISO 178	
Flexural Modulus	3900	MPa	ISO 178	
IMPACT	Value	Unit	Standard	
Izod Impact, unnotched, 23°C	256	J/m	ASTM D 4812	
Izod Impact, notched, 23°C	32	J/m	ASTM D 256	
Instrumented Impact Energy @ peak, 23°C	3	J	ASTM D 3763	
Multiaxial Impact	1	J	ISO 6603	
Izod Impact, unnotched 80*10*4 +23°C	18	kJ/m²	ISO 180/1U	
Izod Impact, notched 80*10*4 +23°C	3	kJ/m²	ISO 180/1A	
THERMAL	Value	Unit Standard		
HDT, 0.45 MPa, 3.2 mm, unannealed	188	°C	ASTM D 648	
HDT, 1.82 MPa, 3.2mm, unannealed	95	°C	ASTM D 648	
CTE, -40°C to 40°C, flow	7.38E-05	1/°C	ASTM E 831	
CTE, -40°C to 40°C, xflow	7.02E-05	1/°C	ASTM E 831	
CTE, -40°C to 40°C, flow	7.4E-05	1/°C	ISO 11359-2	
CTE, -40°C to 40°C, xflow	7.1E-05	1/°C	ISO 11359-2	
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	184	°C	ISO 75/Bf	
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	94	°C	ISO 75/Af	
PHYSICAL	Value	Unit	Standard	
Density	1.69	g/cm³	ASTM D 792	
Mold Shrinkage, flow, 24 hrs	1 - 3	%	ASTM D 955	
Mold Shrinkage, xflow, 24 hrs	1.7 - 2	%	ASTM D 955	
Mold Shrinkage, flow, 24 hrs	2.4	%	ISO 294	
Mold Shrinkage, xflow, 24 hrs	1.9	%	ISO 294	
Wear Factor Washer	25	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified	
Dynamic COF	0.66	-	ASTM D 3702 Modified	

Static COF	0.63	-	ASTM D 3702 Modified
Density	1.69	g/cm³	ISO 1183

Source GMD, last updated:09/24/2008

## **Processing**

Parameter		
Injection Molding	Value	Unit
Drying Temperature	120	°C
Drying Time	4	hrs
Maximum Moisture Content	0.05	%
Melt Temperature	240 - 250	°C
Front - Zone 3 Temperature	250 - 260	°C
Middle - Zone 2 Temperature	240 - 250	°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

Source GMD, last updated:09/24/2008

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

## PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

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- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

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