LNP™ LUBRICOMP™ WBL36L compound

Polybutylene Terephthalate

SABIC Innovative Plastics

Message:

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.
Also known as: LNP* LUBRICOMP* Compound WBL-4036 LE
Product reorder name: WBL36L

General Information			
Filler / Reinforcement	Glass beads		
Additive	PTFE lubricant		
Features	Low extract Lubrication		
Processing Method	Injection molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.69	g/cm³	ASTM D792, ISO 1183
Molding Shrinkage			
Flow	2.4	%	Internal method
Flow: 24 hours	1.0 - 3.0	%	ASTM D955
Transverse flow	1.9	%	Internal method
Transverse flow: 24 hours	1.7 - 2.0	%	ASTM D955
Vertical flow direction: 24 hours	1.9	%	ISO 294-4
Flow direction: 24 hours	2.4	%	ISO 294-4
Water Absorption (24 hr, 50% RH)	0.040	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus			
-- [1]	4140	MPa	ASTM D638
--	4020	MPa	ISO 527-2/1
Tensile Strength			
Yield	37.2	MPa	ASTM D638
Yield [2]	37.6	MPa	ASTM D638
Yield	37.0	MPa	ISO 527-2, ISO 527-2/5
Fracture	36.5	MPa	ASTM D638
Fracture [3]	36.7	MPa	ASTM D638
Fracture	36.0	MPa	ISO 527-2, ISO 527-2/5
Tensile Elongation			
Yield	2.2	%	ASTM D638
Yield [4]	2.2	%	ASTM D638
Yield	2.4	%	ISO 527-2, ISO 527-2/5

Fracture	3.0	%	ASTM D638
Fracture [5]	3.1	%	ASTM D638
Fracture	3.4	%	ISO 527-2, ISO 527-2/5
Flexural Modulus			
50.0mm span [6]	3900	MPa	ASTM D790
--	4140	MPa	ASTM D790
--	3900	MPa	ISO 178
-- [7]	4140	MPa	ISO 178
Flexural Strength			
--	68.9	MPa	ASTM D790
--	75.0	MPa	ISO 178
--	75.0	MPa	ISO 178
Yield, 50.0mm span [8]	74.6	MPa	ASTM D790
Coefficient of Friction			ASTM D3702 Modified
With self-dynamics	0.66		ASTM D3702 Modified
With Self-Static	0.63		ASTM D3702 Modified
Wear Factor - Washer	25.0	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			
23°C	32	J/m	ASTM D256
23°C [9]	3.2	kJ/m²	ISO 180/1A
Unnotched Izod Impact			
23°C	260	J/m	ASTM D4812
23°C [10]	19	kJ/m²	ISO 180/1U
Instrumented Dart Impact			
23°C, Energy at Peak Load	3.50	J	ASTM D3763
--	1.20	J	ISO 6603-2

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, unannealed, 3.20mm	189	°C	ASTM D648
0.45 MPa, unannealed, 64.0mm span [11]	184	°C	ISO 75-2/Bf
1.8 MPa, unannealed, 3.20mm	95.0	°C	ASTM D648
1.8 MPa, unannealed, 64.0mm span [12]	94.0	°C	ISO 75-2/Af
Linear thermal expansion coefficient			
Flow: -40 to 40°C	7.4E-5	cm/cm/°C	ASTM E831, ISO 11359-2
Flow: 23 to 60°C	7.4E-5	cm/cm/°C	ISO 11359-2
Lateral: -40 to 40°C	7.0E-5	cm/cm/°C	ASTM E831
Lateral: -40 to 40°C	7.1E-5	cm/cm/°C	ISO 11359-2
Lateral: 23 to 60°C	7.1E-5	cm/cm/°C	ISO 11359-2

Injection	Nominal Value	Unit
Drying Temperature	121	°C
Drying Time	4.0	hr

Suggested Max Moisture	0.050	%
Rear Temperature	221 - 232	°C
Middle Temperature	238 - 249	°C
Front Temperature	249 - 260	°C
Processing (Melt) Temp	238 - 249	°C
Mold Temperature	82.2 - 98.9	°C
Back Pressure	0.172 - 0.344	MPa
Screw Speed	30 - 60	rpm

NOTE	
1.	50 mm/min
2.	Type 1, 5.0 mm/min
3.	Type 1, 5.0 mm/min
4.	Type 1, 5.0 mm/min
5.	Type 1, 5.0 mm/min
6.	1.3 mm/min
7.	2.0 mm/min
8.	1.3 mm/min
9.	80*10*4
10.	80*10*4
11.	80*10*4 mm
12.	80*10*4 mm

Recommended distributors for this material

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