LNP™ LUBRICOMP™ WFL33 compound

Polybutylene Terephthalate

SABIC Innovative Plastics

Message:

LNP LUBRICOMP WFL33 is a compound based on PBT containing 15% Glass Fiber, 15% PTFE. Added feature of this grade is: Wear Resistant.
Also known as: LNP* LUBRICOMP* Compound WFL-4033
Product reorder name: WFL33

General Information			
Filler / Reinforcement	Glass Fiber,15% Filler by Weight		
Additive	PTFE Lubricant (15%)		
Features	Good Wear Resistance Lubricated		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity			
--	1.53	g/cm³	ASTM D792
--	1.52	g/cm³	ISO 1183
Molding Shrinkage			ASTM D955
Flow : 24 hr	0.70 to 0.90	%	
Across Flow : 24 hr	1.0 to 3.0	%	
Water Absorption			
24 hr, 50% RH	0.050	%	ASTM D570
Equilibrium, 23°C, 50% RH	0.060	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus			
-- [1]	6360	MPa	ASTM D638
--	6200	MPa	ISO 527-2/1
Tensile Stress			
Yield	90.0	MPa	ISO 527-2/5
Break [2]	87.0	MPa	ASTM D638
Break	85.0	MPa	ISO 527-2/5
Tensile Strain			
Yield	3.0	%	ISO 527-2/5
Break [3]	2.9	%	ASTM D638
Break	3.1	%	ISO 527-2/5
Flexural Modulus			
50.0 mm Span [4]	5700	MPa	ASTM D790
-- [5]	5510	MPa	ISO 178
Flexural Stress			

--	145	MPa	ISO 178
Yield, 50.0 mm Span [6]	150	MPa	ASTM D790
Break, 50.0 mm Span [7]	149	MPa	ASTM D790
Coefficient of Friction			ASTM D3702 Modified
vs. Itself - Dynamic	0.46		
vs. Itself - Static	0.44		
Wear Factor			ASTM D3702 Modified
Ring	4.80	10^-10 in^5-min/ft-lb-hr	
Washer	53.0	10^-10 in^5-min/ft-lb-hr	
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact			
23°C	62	J/m	ASTM D256
23°C [8]	3.2	kJ/m²	ISO 180/1A
Unnotched Izod Impact			
23°C	600	J/m	ASTM D4812
23°C [9]	38	kJ/m²	ISO 180/1U
Instrumented Dart Impact			
23°C, Total Energy	7.50	J	ASTM D3763
--	1.80	J	ISO 6603-2
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			
0.45 MPa, Unannealed, 3.20 mm	222	°C	ASTM D648
0.45 MPa, Unannealed, 64.0 mm Span [10]	221	°C	ISO 75-2/Bf
1.8 MPa, Unannealed, 3.20 mm	207	°C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span [11]	196	°C	ISO 75-2/Af
CLTE			ASTM D696
Flow : -30 to 30°C	4.4E-5	cm/cm/°C	
Transverse : -30 to 30°C	1.2E-4	cm/cm/°C	
Injection	**Nominal Value**	**Unit**	
Drying Temperature	121	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.050	%	
Rear Temperature	221 to 232	°C	
Middle Temperature	243 to 254	°C	
Front Temperature	260 to 271	°C	
Processing (Melt) Temp	238 to 266	°C	
Mold Temperature	82.2 to 98.9	°C	
Back Pressure	0.172 to 0.344	MPa	
Screw Speed	30 to 60	rpm	
NOTE			
1.	50 mm/min		
2.	Type I, 5.0 mm/min		

3.	Type I, 5.0 mm/min
4.	1.3 mm/min
5.	2.0 mm/min
6.	1.3 mm/min
7.	1.3 mm/min
8.	80*10*4
9.	80*10*4
10.	80*10*4 mm
11.	80*10*4 mm

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China