LNP™ LUBRICOMP™ COMPOUND IBP34

IBL-4534

DESCRIPTION

LNP LUBRICOMP IBP34 is a compound based on Nylon 6/12 containing 20% Glass Bead, 15% PTFE/Silicone. Added features include: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20200109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	45	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	3.6	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	3.9	%	ASTM D 638
Tensile Modulus, 50 mm/min	2740	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	76	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2610	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	44	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3.5	%	ISO 527
Tensile Strain, break, 5 mm/min	3.7	%	ISO 527
Tensile Modulus, 1 mm/min	2670	MPa	ISO 527
Flexural Stress	73	MPa	ISO 178
Flexural Modulus, 2 mm/min	2650	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	329	J/m	ASTM D 4812
Izod Impact, notched, 23°C	28	J/m	ASTM D 256
Multiaxial Impact	1	J	ISO 6603
Instrumented Impact Total Energy, 23°C	4	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	18	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	2	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	170	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	106	°C	ASTM D 648
CTE, -30°C to 30°C, flow	8.8E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	8.7E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	159	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	70	°C	ISO 75/Af
Relative Temp Index, Elec (1)	65	°C	UL 746B
Relative Temp Index, Mech w/impact (1)	65	°C	UL 746B
Relative Temp Index, Mech w/o impact (1)	65	°C	UL 746B
PHYSICAL			
Specific Gravity	1.32	-	ASTM D 792
Density	1.32	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.22	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	2 – 4	%	ASTM D 955

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Mold Shrinkage, xflow, 24 hrs	2 – 4	%	ASTM D 955
Wear Factor Washer	13	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Wear Factor Ring	0	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.56	-	ASTM D 3702 Modified: Manual
Static COF	0.59	-	ASTM D 3702 Modified: Manual
Moisture Absorption (23°C / 50% RH)	0.26	%	ISO 62
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E121562-101345274	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.12 – 0.2	%	
Melt Temperature	270 – 275	°C	
Front - Zone 3 Temperature	270 – 280	°C	
Middle - Zone 2 Temperature	260 – 270	°C	
Rear - Zone 1 Temperature	255 – 265	°C	
Mold Temperature	65 – 95	°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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