LNP™ LUBRICOMP™ COMPOUND WFL369

WFL-4036 FR-1
REGION ASIA

DESCRIPTION

LNP* Lubricomp* WFL369 is a compound based on Polybutylene Terephalate resin containing Glass Fiber, PTFE, Flame Retardant. Added features of this material include: Wear Resistant, Flame Retardant.

TYPICAL PROPERTY VALUES

Revision 20190717

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	105	MPa	ASTM D 638
Tensile Stress, break	102	MPa	ASTM D 638
Tensile Strain, yield	2.1	%	ASTM D 638
Tensile Strain, break	2.1	%	ASTM D 638
Tensile Modulus, 50 mm/min	12410	MPa	ASTM D 638
Flexural Stress	158	MPa	ASTM D 790
Flexural Modulus	10340	MPa	ASTM D 790
Tensile Stress, yield	106	MPa	ISO 527
Tensile Stress, break	106	MPa	ISO 527
Tensile Strain, yield	2	%	ISO 527
Tensile Strain, break	2	%	ISO 527
Tensile Modulus, 1 mm/min	11000	MPa	ISO 527
Flexural Stress	161	MPa	ISO 178
Flexural Modulus	8900	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	667	J/m	ASTM D 4812
Izod Impact, notched, 23°C	58	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	6	J	ASTM D 3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	30	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	221	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	207	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.02E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	2.88E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	7.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	2.9E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	221	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	202	°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

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL			
Density	1.78	g/cm³	ASTM D 792
Mold Shrinkage, flow, 24 hrs	0.4 – 0.6	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.4 – 1.6	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.51	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.5	%	ISO 294
Wear Factor Washer	25	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.53	-	ASTM D 3702 Modified: Manual
Static COF	0.41	-	ASTM D 3702 Modified: Manual
Density	1.78	g/cm³	ISO 1183
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E207780-101345254	-	-
UL Yellow Card Link 2	E207780-103093706	-	-
UL Recognized, 94V-0 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	245 – 260	°C	
Front - Zone 3 Temperature	250 – 260	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	230 – 245	°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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