LNP™ LUBRICOMP™ COMPOUND PFL26

DESCRIPTION

LNP LUBRICOMP PFL26 compound is based on Nylon 6 resin containing 30% glass fiber, 10% PTFE. Added features of this grade include: Wear Resistant

GENERAL INFORMATION	
Features	Wear resistant, High stiffness/Strength
Fillers	Glass Fiber, PTFE
Polymer Types	Polyamide 6 (Nylon 6)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Modulus, 1 mm/min	10200	MPa	ISO 527
Tensile Stress, break, 5 mm/min	250	MPa	ISO 527
Tensile Strain, break, 5 mm/min	4.2	%	ISO 527
Flexural Modulus, 2 mm/min	8600	MPa	ISO 178
Flexural Stress, break, 2 mm/min	165	MPa	ISO 178
Flexural Strain, break, 2 mm/min	3.9	%	ISO 178
IMPACT [1]			
Izod Impact, notched 80*10*4 +23°C	14	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	98	kJ/m²	ISO 180/1U
THERMAL [1]			
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	219	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	206	°C	ISO 75/Af
CTE, 23°C to 60°C, flow	2.4E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	7.5E-05	1/°C	ISO 11359-2
Relative Temp Index, Elec [2]	65	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	65	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	65	°C	UL 746B
PHYSICAL [1]			
Wear Factor Washer	10	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Instr.
Dynamic COF	0.57	-	ASTM D3702 Modified: Instr.
Static COF	0.99	-	ASTM D3702 Modified: Instr.

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Density	1.44	g/cm³	ISO 1183
Mold Shrinkage, flow [3]	0.1 – 0.3	%	SABIC method
ELECTRICAL [1]			
Comparative Tracking Index (UL) {PLC} [2]	1	PLC Code	UL 746A
Hot-Wire Ignition (HWI), PLC 0 [2]	≥2.5	mm	UL 746A
Hot-Wire Ignition (HWI), PLC 1 [2]	≥1.5	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 0 [2]	≥1.5	mm	UL 746A
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E45329-103600532	-	-
UL Recognized, 94HB Flame Class Rating	≥1.5	mm	UL 94
UV-light, water exposure/immersion	F1	-	UL 746C
INJECTION MOLDING [4]			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	280 – 305	°C	
Front - Zone 3 Temperature	295 – 305	°C	
Middle - Zone 2 Temperature	280 – 295	°C	
Rear - Zone 1 Temperature	265 – 275	°C	
Mold Temperature	95 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) 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.

(3) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(4) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

DISCLAIMER