

LNPTTM LUBRICOMPTM COMPOUND QFP36

QFL-4536

DESCRIPTION

LNP LUBRICOMP QFP36 compound is based on Nylon 6/10 resin containing 30% glass fiber, 15% PTFE/silicone. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant, High stiffness/Strength
Fillers	Glass Fiber, PTFE/Silicone
Polymer Types	Polyamide 610 (Nylon 610)
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	8100	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3	%	ISO 527
Tensile Stress, yield, 5 mm/min	118	MPa	ISO 527
Flexural Modulus, 2 mm/min	6200	MPa	ISO 178
Flexural Stress, yield, 2 mm/min	165	MPa	ISO 178
Tensile Stress, break	136	MPa	ASTM D638
Tensile Strain, break	2.8	%	ASTM D638
Flexural Stress	212	MPa	ASTM D790
Flexural Modulus	8610	MPa	ASTM D790
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	907	J/m	ASTM D4812
Izod Impact, notched, 23°C	90	J/m	ASTM D256
THERMAL ⁽¹⁾			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	198	°C	ISO 75/Af
CTE, 23°C to 60°C, flow	2.3E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.0E-04	1/°C	ISO 11359-2
HDT, 1.82 MPa, 3.2mm, unannealed	201	°C	ASTM D648
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

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL ⁽¹⁾			
Density	1.41	g/cm ³	ISO 1183
Density	1.44	g/cm ³	ASTM D792
Mold Shrinkage, flow, 24 hrs ⁽³⁾	0.2	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	0.9	%	ASTM D955
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	<u>E121562-101344702</u>	-	-
UL Yellow Card Link 2	<u>E207780-103093577</u>	-	-
UL Yellow Card Link 3	<u>E45329-101344685</u>	-	-
UL Recognized, 94HB Flame Class Rating	0.75	mm	UL 94
INJECTION MOLDING ⁽⁴⁾			
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	250 – 260	°C	
Mold Temperature	80 – 95	°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.

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