LNP™ LUBRICOMP™ Compound ECL36

ECL-4036
REGION AMERICAS

DESCRIPTION

LNP LUBRICOMP ECL36 compound is based on Polyetherimide (PEI) resin containing 30% carbon fiber, 15% PTFE. Added features of this grade include: Wear Resistant, Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Wear resistant, Carbon fiber filled, High stiffness/Strength, High temperature resistance
Fillers	Carbon Fiber, PTFE
Polymer Types	Polyetherimide (PEI)
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 20260903

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, break	179	MPa	ASTM D638
Tensile Strain, break	1.7	%	ASTM D638
Flexural Stress	230	MPa	ASTM D790
Flexural Modulus	19160	MPa	ASTM D790
Tensile Stress, break	160	MPa	ISO 527
Tensile Strain, break	1.2	%	ISO 527
Tensile Modulus, 1 mm/min	21600	MPa	ISO 527
IMPACT [1]			
Izod Impact, Unnotched			
23°C	267	J/m	ASTM D4812
80*10*4 +23°C	18	kJ/m²	ISO 180/1U
Izod impact, notched			
23°C	42	J/m	ASTM D256
80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	208	°C	ASTM D648
PHYSICAL [1]			
Density	1.48	g/cm³	ASTM D792

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 24 hrs [2]	0.1 – 0.3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [2]	0.1 – 0.4	%	ASTM D955
Wear Factor Washer	31	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.39	-	ASTM D3702 Modified: Manual
Static COF	0.48	-	ASTM D3702 Modified: Manual
Density	1.49	g/cm³	ISO 1183
ELECTRICAL [1]			
Surface Resistivity	1.E+01 – 1.E+06	Ω	ASTM D257
INJECTION MOLDING [3]			
Drying Temperature	150	°C	
Drying Time	4 – 6	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	360 – 375	°C	
Rear - Zone 1 Temperature	355 – 365	°C	
Middle - Zone 2 Temperature	360 – 370	°C	
Front - Zone 3 Temperature	365 – 375	°C	
Nozzle Temperature	365 – 375	°C	
Mold Temperature	140 – 180	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw speed (Circumferential speed)	0.2 – 0.3	m/s	
Vent Depth	0.025 – 0.076	mm	

(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) 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.

(3) 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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