

LNPTM LUBRICOMPTM COMPOUND UCL36S

UCL-4036 HS

DESCRIPTION

LNP LUBRICOMP UCL36S compound is based on Polyphthalamide (PPA) resin containing 15% PTFE, 30% carbon fiber. Added features of this grade include: Internally Lubricated, Wear Resistant, Heat Stabilized, Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Heat Stabilized, Wear resistant, Carbon fiber filled, High stiffness/Strength, High temperature resistance
Fillers	Carbon Fiber, PTFE
Polymer Types	Polyphthalamide (PPA)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Under the Hood
Consumer	Home Appliances, Commercial Appliance
Electrical and Electronics	Electronic Components, Mobile Phone - Computer - Tablets

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break	216	MPa	ASTM D638
Tensile Strain, break	1.6	%	ASTM D638
Tensile Modulus, 50 mm/min	20130	MPa	ASTM D638
Flexural Stress	324	MPa	ASTM D790
Flexural Modulus	18820	MPa	ASTM D790
Tensile Stress, break	214	MPa	ISO 527
Tensile Strain, break	1.2	%	ISO 527
Flexural Stress	334	MPa	ISO 178
Flexural Modulus	22700	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	939	J/m	ASTM D4812
Izod Impact, notched, 23°C	96	J/m	ASTM D256
Izod Impact, unnotched 80*10*4 +23°C	39	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	279	°C	ASTM D648
PHYSICAL ⁽¹⁾			
Density	1.41	g/cm ³	ASTM D792
Wear Factor Washer	16	10 ⁻⁴ in ³ -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.36	-	ASTM D3702 Modified: Manual

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Static COF	0.27	-	ASTM D3702 Modified: Manual
ELECTRICAL ⁽¹⁾			
Surface Resistivity	1.E+02 – 1.E+06	Ω	ASTM D257
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	<u>E121562-101345286</u>	-	-
UL Yellow Card Link 2	<u>E207780-101345253</u>	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING ⁽³⁾			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15	%	
Melt Temperature	315 – 330	°C	
Front - Zone 3 Temperature	325 – 340	°C	
Middle - Zone 2 Temperature	315 – 325	°C	
Rear - Zone 1 Temperature	310 – 320	°C	
Mold Temperature	150 – 170	°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) 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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