

LNPTM LUBRICOMPTM COMPOUND OFL36A

OFL-4036

REGION EUROPE

DESCRIPTION

LNP LUBRICOMP OFL36A compound is based on Polyphenylene Sulfide (PPS) - branched resin containing 30% glass fiber, 15% PTFE. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant, High stiffness/Strength
Fillers	Glass Fiber, PTFE
Polymer Types	Polyphenylene Sulfide, Branched (PPS, Branched)
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 Stress, break, 5 mm/min	124	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.4	%	ISO 527
Tensile Modulus, 1 mm/min	11100	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	216	MPa	ISO 178
Flexural Strain, break, 2 mm/min	2.4	%	ISO 178
Flexural Modulus, 2 mm/min	9700	MPa	ISO 178
Flexural Strain, break, 2 mm/min, 80°C	2.6	%	ISO 178
Flexural Strain, break, 2 mm/min, 120°C	5.2	%	ISO 178
Flexural Strain, break, 2 mm/min, 150°C	5.8	%	ISO 178
Flexural Strain, break, 2 mm/min, 200°C	5.7	%	ISO 178
Flexural Stress, yield, 2 mm/min, 80°C	184	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 120°C	114	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 150°C	80	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 200°C	58	MPa	ISO 178
Flexural Modulus, 2 mm/min, 80°C	9300	MPa	ISO 178
Flexural Modulus, 2 mm/min, 120°C	4700	MPa	ISO 178
Flexural Modulus, 2 mm/min, 150°C	4000	MPa	ISO 178
Flexural Modulus, 2 mm/min, 200°C	3100	MPa	ISO 178
IMPACT ⁽¹⁾			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Multiaxial Impact	1	J	ISO 6603
Izod Impact, notched 80*10*3 -40°C	8	kJ/m ²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	26	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -40°C	31	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
Specific Heat	1490	J/kg-K	ASTM E1269
CTE, 23°C to 60°C, flow	2.4E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	5.E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	266	°C	ISO 75/Af
Thermal Conductivity	0.29	W/m-K	ASTM D5930
Relative Temp Index, Elec ⁽²⁾	200	°C	UL 746B
Relative Temp Index, Mech w/impact ⁽²⁾	130	°C	UL 746B
Relative Temp Index, Mech w/o impact ⁽²⁾	130	°C	UL 746B
PHYSICAL ⁽¹⁾			
Wear Factor Washer	33	10 ⁻¹⁰ in ⁴ -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.44	-	ASTM D3702 Modified: Manual
Static COF	0.35	-	ASTM D3702 Modified: Manual
Density	1.69	g/cm ³	ISO 1183
Water Absorption, (23°C/24hrs)	0.02	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.04	%	ISO 62
Melt Volume Rate, MVR at 315°C/5.0 kg	10 – 15	cm ³ /10 min	ISO 1133
ELECTRICAL ⁽¹⁾			
Comparative Tracking Index (UL) {PLC} ⁽²⁾	4	PLC Code	UL 746A
Hot-Wire Ignition (HWI), PLC 0 ⁽²⁾	≥1.5	mm	UL 746A
Hot-Wire Ignition (HWI), PLC 3 ⁽²⁾	≥0.75	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 0 ⁽²⁾	≥1.5	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 2 ⁽²⁾	≥0.75	mm	UL 746A
High Voltage Arc Track Rate {PLC} ⁽²⁾	4	PLC Code	UL 746A
Arc Resistance, Tungsten {PLC} ⁽²⁾	7	PLC Code	ASTM D495
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	E45329-101283832	-	-
UL Yellow Card Link 2	E45329-101344460	-	-
UL Recognized, 94V-0 Flame Class Rating	≥0.75	mm	UL 94
INJECTION MOLDING ⁽³⁾			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Melt Temperature	315 – 320	°C	
Front - Zone 3 Temperature	330 – 345	°C	
Middle - Zone 2 Temperature	320 – 330	°C	
Rear - Zone 1 Temperature	305 – 315	°C	
Mold Temperature	140 – 165	°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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