

LNPTM LUBRICOMPTM COMPOUND LFL36E

LFL-4036 EM

DESCRIPTION

LNP LUBRICOMP LFL36E compound is based on Polyetheretherketone (PEEK) resin containing 30% glass fiber, 15% PTFE. Added features of this grade include: Wear Resistant, Easy Molding.

GENERAL INFORMATION	
Features	Good Processability, Wear resistant, High stiffness/Strength, High temperature resistance
Fillers	Glass Fiber, PTFE
Polymer Types	Polyetheretherketone (PEEK)
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

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yld, Type I, 5 mm/min	176	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	170	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	2	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2	%	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	263	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	11700	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	177	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2	%	ISO 527
Tensile Modulus, 1 mm/min	12240	MPa	ISO 527
Flexural Modulus, 2 mm/min	11360	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	861	J/m	ASTM D4812
Izod Impact, notched, 23°C	103	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	13	J	ASTM D3763
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	339	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	327	°C	ASTM D648
CTE, -30°C to 30°C, flow	1.8E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	3.6E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	337	°C	ISO 75/Bf

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	322	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Density	1.64	g/cm ³	ASTM D792
Wear Factor Washer	64	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D3702 Modified: Manual
Wear Factor Ring	9	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.49	-	ASTM D3702 Modified: Manual
Static COF	0.73	-	ASTM D3702 Modified: Manual
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	E121562-101283797	-	-
UL Recognized, 94V-0 Flame Class Rating	0.8	mm	UL 94
INJECTION MOLDING ⁽³⁾			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.1	%	
Melt Temperature	380 – 390	°C	
Front - Zone 3 Temperature	380 – 395	°C	
Middle - Zone 2 Temperature	365 – 375	°C	
Rear - Zone 1 Temperature	350 – 360	°C	
Mold Temperature	140 – 165	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	60 – 100	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.