

LNPTM LUBRICOMPTM COMPOUND 2FL24

FP-EFL-4024

DESCRIPTION

LNP LUBRICOMP 2FL24 compound is based on Ethylene Tetrafluoroethylene (ETFE) resin containing 20% glass fiber and 10% PTFE. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant
Fillers	Glass Fiber, PTFE
Polymer Types	Ethylene Tetrafluoroethylene Copolymer (ETFE)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Energy Management, Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, brk, Type I, 5 mm/min	69	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	6.5	%	ASTM D638
Tensile Modulus, 5 mm/min	6440	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	4760	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	67	MPa	ISO 527
Tensile Strain, break, 5 mm/min	6.2	%	ISO 527
Tensile Modulus, 1 mm/min	5000	MPa	ISO 527
Flexural Strength, 2 mm/min	89	MPa	ISO 178
Flexural Modulus, 2 mm/min	4980	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	1340	J/m	ASTM D4812
Izod Impact, notched, 23°C	488	J/m	ASTM D256
Multiaxial Impact	8	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	20	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	92	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	45	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	251	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	198	°C	ASTM D648
CTE, -30°C to 30°C, flow	2.4E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	9.4E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	239	°C	ISO 75/Bf

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	160	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Specific Gravity	1.8	-	ASTM D792
Density	1.8	g/cm ³	ASTM D792
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.6 – 0.8	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	1 – 3	%	ASTM D955
Moisture Absorption (23°C / 50% RH)	0.01	%	ISO 62
INJECTION MOLDING ⁽³⁾			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Melt Temperature	315	°C	
Front - Zone 3 Temperature	325 – 340	°C	
Middle - Zone 2 Temperature	300 – 325	°C	
Rear - Zone 1 Temperature	280 – 300	°C	
Mold Temperature	90 – 120	°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) 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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