

LNPTTM LUBRICOMPTM COMPOUND DFL36E

DFL-4036 EM

DESCRIPTION

LNP LUBRICOMP DFL36E compound is based on Polycarbonate (PC) resin containing 30% glass fiber, 15% PTFE. Added features of this grade include: Easy Molding, Wear Resistant.

GENERAL INFORMATION	
Features	Good Processability, Wear resistant, High stiffness/Strength
Fillers	Glass Fiber, PTFE
Polymer Types	Polycarbonate (PC)
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 Modulus, 1 mm/min	8400	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2	%	ISO 527
Tensile Stress, break, 5 mm/min	118	MPa	ISO 527
Flexural Modulus, 2 mm/min	8100	MPa	ISO 178
Tensile Stress, brk, Type I, 5 mm/min	123	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2.4	%	ASTM D638
Flexural Strength, 1.3 mm/min, 50 mm span	188	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	9370	MPa	ASTM D790
IMPACT ⁽¹⁾			
Izod Impact, notched 80*10*4 +23°C	11	kJ/m ²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	45	kJ/m ²	ISO 180/1U
Izod Impact, notched, 23°C	149	J/m	ASTM D256
Izod Impact, unnotched, 23°C	694	J/m	ASTM D4812
THERMAL ⁽¹⁾			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	138	°C	ISO 75/Af
CTE, 23°C to 60°C, flow	2.0E-5	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	8.0E-5	1/°C	ISO 11359-2
PHYSICAL ⁽¹⁾			
Density	1.55	g/cm ³	ISO 1183
Water Absorption, (23°C/24hrs)	0.11	%	ISO 62-1

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Density	1.57	g/cm ³	ASTM D792
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.2	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.6	%	ASTM D955
Mold Shrinkage, flow ⁽²⁾	0.16	%	SABIC method
FLAME CHARACTERISTICS ⁽³⁾			
UL Yellow Card Link	E121562-101344609	-	-
UL Yellow Card Link 2	E45329-101344594	-	-
UL Recognized, 94V-1 Flame Class Rating	3	mm	UL 94
INJECTION MOLDING ⁽⁴⁾			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 – 330	°C	
Middle - Zone 2 Temperature	310 – 320	°C	
Rear - Zone 1 Temperature	295 – 305	°C	
Mold Temperature	80 – 110	°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) 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.
- (4) 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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