

LNPT[™] LUBRICOMP[™] COMPOUND DFL32XXP

DFL-4032

REGION ASIA

DESCRIPTION

LNP LUBRICOMP DFL32XXP compound is based on Polycarbonate (PC) resin containing 10% glass fiber and 15% PTFE. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION

Features	Wear resistant
Fillers	Glass Fiber, PTFE
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY

Building and Construction
Consumer
Electrical and Electronics
Industrial

SUB INDUSTRY

Building Component
Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Mobile Phone - Computer - Tablets
Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break	73	MPa	ASTM D638
Tensile Strain, break	3.1	%	ASTM D638
Tensile Modulus, 50 mm/min	4350	MPa	ASTM D638
Flexural Stress	123	MPa	ASTM D790
Flexural Modulus	4350	MPa	ASTM D790
Tensile Stress, break	71	MPa	ISO 527
Tensile Strain, break	2.8	%	ISO 527
Tensile Modulus, 1 mm/min	4100	MPa	ISO 527
Flexural Stress	114	MPa	ISO 178
Flexural Modulus	4170	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	534	J/m	ASTM D4812
Izod Impact, notched, 23°C	90	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	11	J	ASTM D3763
Multiaxial Impact	4	J	ISO 6603
Izod Impact, unnotched 80°10°4 +23°C	34	kJ/m ²	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	10	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	141	°C	ASTM D648

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CHEMISTRY THAT MATTERS[™]

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	140	°C	ISO 75/Af
Relative Temp Index, Elec ⁽²⁾	125	°C	UL 746B
Relative Temp Index, Mech w/impact ⁽²⁾	115	°C	UL 746B
Relative Temp Index, Mech w/o impact ⁽²⁾	125	°C	UL 746B
PHYSICAL ⁽¹⁾			
Density	1.37	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.11	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽³⁾	0.2	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	0.7	%	ASTM D955
Mold Shrinkage, flow, 24 hrs ⁽³⁾	0.23	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	0.67	%	ISO 294
Moisture Absorption (23°C / 50% RH)	0.17	%	ISO 62
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	E207780-101358149	-	-
UL Recognized, 94HB Flame Class Rating	1.8	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) 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) 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.

(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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