

LNPT[™] LUBRILOY[™] COMPOUND D2000P

D-EP

DESCRIPTION

LNP LUBRILOY D2000P compound is based on Polycarbonate (PC) resin containing proprietary lubricant. Added features of this grade include: Exceptional Processing, Wear Resistant.

GENERAL INFORMATION

Features	High Flow, Wear resistant, No PFAS intentionally added
Fillers	Unreinforced
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, yield	56	MPa	ASTM D638
Tensile Stress, break	46	MPa	ASTM D638
Tensile Strain, yield	5.9	%	ASTM D638
Tensile Strain, break	42.3	%	ASTM D638
Tensile Modulus, 50 mm/min	1930	MPa	ASTM D638
Flexural Stress	86	MPa	ASTM D790
Flexural Modulus	2270	MPa	ASTM D790
Tensile Stress, yield	54	MPa	ISO 527
Tensile Stress, break	46	MPa	ISO 527
Tensile Strain, yield	5.3	%	ISO 527
Tensile Strain, break	43.1	%	ISO 527
Tensile Modulus, 1 mm/min	2100	MPa	ISO 527
Flexural Stress	86	MPa	ISO 178
Flexural Modulus	2300	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D4812
Izod Impact, notched, 23°C	453	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	40	J	ASTM D3763
Multiaxial Impact	43	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	137	kJ/m ²	ISO 180/1U

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CHEMISTRY THAT MATTERS[™]

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Izod Impact, notched 80*10*4 +23°C	12	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	137	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	125	°C	ASTM D648
CTE, -40°C to 40°C, flow	7.12E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.27E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	7.12E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.28E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	131	°C	ISO 75 /Af
Relative Temp Index, Elec ⁽²⁾	80	°C	UL 746B
Relative Temp Index, Mech w/impact ⁽²⁾	80	°C	UL 746B
Relative Temp Index, Mech w/o impact ⁽²⁾	80	°C	UL 746B
PHYSICAL ⁽¹⁾			
Density	1.17	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.13	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽³⁾	0.8	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	0.8	%	ASTM D955
Mold Shrinkage, flow, 24 hrs ⁽³⁾	0.84	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	0.81	%	ISO 294
Wear Factor Washer	44	10 ⁻⁴ in ³ /min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.19	-	ASTM D3702 Modified: Manual
Static COF	0.15	-	ASTM D3702 Modified: Manual
Density	1.17	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.21	%	ISO 62
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	E121562-101283868	-	-
UL Yellow Card Link 2	E207780-101283839	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING ⁽⁴⁾			
Drying Temperature	100	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	290 – 315	°C	
Front - Zone 3 Temperature	280 – 310	°C	
Middle - Zone 2 Temperature	280 – 300	°C	
Rear - Zone 1 Temperature	275 – 300	°C	
Mold Temperature	65 – 95	°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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ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

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