

# LNPT<sup>™</sup> LUBRICOMP<sup>™</sup> COMPOUND DX00714H

FORMERLY KNOWN AS "PDX-D-00714 EES"

## DESCRIPTION

LNP LUBRICOMP DX00714H compound is based on Polycarbonate (PC) resin containing 20% glass fiber and proprietary lubricant. Added features of this grade include: Wear Resistant, Healthcare.

GENERAL INFORMATION	
Features	Wear resistant, Healthcare/Formula lock, No PFAS intentionally added
Fillers	Glass Fiber, Silicone
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

  

INDUSTRY	SUB INDUSTRY
Hygiene and Healthcare	Pharmaceutical Packaging and Drug Delivery, Surgical devices, General Healthcare, Patient Testing
Packaging	Industrial Packaging

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, break	89	MPa	ASTM D638
Tensile Strain, break	2.2	%	ASTM D638
Tensile Modulus, 50 mm/min	6550	MPa	ASTM D638
Flexural Stress	137	MPa	ASTM D790
Flexural Modulus	5310	MPa	ASTM D790
Tensile Stress, break	90	MPa	ISO 527
Tensile Strain, break	3.3	%	ISO 527
Tensile Modulus, 1 mm/min	6340	MPa	ISO 527
Flexural Stress	135	MPa	ISO 178
Flexural Modulus	5200	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched, 23°C	336	J/m	ASTM D4812
Izod Impact, notched, 23°C	74	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	30	J	ASTM D3763
Multiaxial Impact	72	J	ISO 6603
Izod Impact, unnotched 80°10°4 +23°C	35	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	9	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
HDT, 1.82 MPa, 3.2mm, unannealed	140	°C	ASTM D648
CTE, -40°C to 40°C, flow	6.84E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.02E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	6.85E-05	1/°C	ISO 11359-2

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, xflow	7.16E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	141	°C	ISO 75/Af
<b>PHYSICAL <sup>(1)</sup></b>			
Density	1.33	g/cm <sup>3</sup>	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.1	%	ASTM D570
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.3 – 0.5	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.6 – 0.8	%	ASTM D955
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.3 – 0.5	%	ISO 294
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.6 – 0.8	%	ISO 294
Wear Factor Washer	441	10 <sup>-10</sup> in <sup>4</sup> -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.46	-	ASTM D3702 Modified: Manual
Static COF	0.51	-	ASTM D3702 Modified: Manual
Density	1.33	g/cm <sup>3</sup>	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.12	%	ISO 62
<b>INJECTION MOLDING <sup>(3)</sup></b>			
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) 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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