

LNPT[™] LUBRICOMP[™] COMPOUND DX9665 1

PDX-D-96651 SF

DESCRIPTION

LNP LUBRICOMP DX9665 1 compound is based on Polycarbonate (PC) resin containing proprietary fillers. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION

Features	Wear resistant
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	48	MPa	ASTM D638
Tensile Stress, break	58	MPa	ASTM D638
Tensile Modulus, 50 mm/min	2200	MPa	ASTM D638
Flexural Stress	93	MPa	ASTM D790
Flexural Modulus	2480	MPa	ASTM D790
Tensile Stress, yield	55	MPa	ISO 527
Tensile Stress, break	46	MPa	ISO 527
Tensile Modulus, 1 mm/min	2400	MPa	ISO 527
Flexural Stress	90	MPa	ISO 178
Flexural Modulus	2600	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D4812
Izod Impact, notched, 23°C	101	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	41	J	ASTM D3763
Multiaxial Impact	128	J	ISO 6603
Izod Impact, unnotched 80°10°4 +23°C	137	kJ/m ²	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	9	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	140	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	127	°C	ASTM D648

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CHEMISTRY THAT MATTERS[™]

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, flow	6.55E-05	1 / °C	ASTM E831
CTE, -40°C to 40°C, xflow	6.58E-05	1 / °C	ASTM E831
CTE, -40°C to 40°C, flow	6.55E-05	1 / °C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.6E-05	1 / °C	ISO 11359-2
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	1.23	g / cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.16	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽³⁾	0.7	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	0.7	%	ASTM D955
Mold Shrinkage, flow, 24 hrs ⁽³⁾	0.73	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	0.75	%	ISO 294
Density	1.23	g / cm ³	ISO 1183
ELECTRICAL ^{(1) (2)}			
Comparative Tracking Index (UL) {PLC}	3	PLC Code	UL 746A
Hot-Wire Ignition (HWI), PLC 1	≥3	mm	UL 746A
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	E121562-101343437	-	-
UL Yellow Card Link 2	E207780-103093544	-	-
UL Recognized, 94V-2 Flame Class Rating	≥1.5	mm	UL 94
INJECTION MOLDING ⁽⁴⁾			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	300 – 315	°C	
Front - Zone 3 Temperature	310 – 320	°C	
Middle - Zone 2 Temperature	305 – 315	°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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