LNP™ LUBRILOY™ COMPOUND D20001

D-FR ECO
REGION ASIA

DESCRIPTION

LNP LUBRILOY* D20001 is a compound based on Polycarbonate resin containing Proprietary Lubricant. Added features of this material include: Flame Retardant. Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20191031

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	67	MPa	ASTM D 638
Tensile Stress, break	60	MPa	ASTM D 638
Tensile Strain, yield	4.5	%	ASTM D 638
Tensile Strain, break	6.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	2550	MPa	ASTM D 638
Flexural Stress	103	MPa	ASTM D 790
Flexural Modulus	2820	MPa	ASTM D 790
Tensile Stress, yield	62	MPa	ISO 527
Tensile Stress, break	54	MPa	ISO 527
Tensile Strain, yield	4.3	%	ISO 527
Tensile Strain, break	6.7	%	ISO 527
Tensile Modulus, 1 mm/min	2600	MPa	ISO 527
Flexural Stress	102	MPa	ISO 178
Flexural Modulus	2800	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1612	J/m	ASTM D 4812
Izod Impact, notched, 23°C	141	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	51	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	104	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	97	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	89	°C	ASTM D 648
CTE, -40°C to 40°C, flow	6.57E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.66E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	6.57E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.65E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	94	°C	ISO 75/Af
Relative Temp Index, Elec (1)	80	°C	UL 746B
Relative Temp Index, Mech w/impact (1)	80	°C	UL 746B
Relative Temp Index, Mech w/o impact (1)	80	°C	UL 746B
PHYSICAL			
Density	1.2	g/cm³	ASTM D 792

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 24 hrs	0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.6	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.53	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.57	%	ISO 294
Wear Factor Washer	30	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.09	-	ASTM D 3702 Modified: Manual
Static COF	0.22	-	ASTM D 3702 Modified: Manual
Density	1.2	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.12	%	ISO 62
Melt Volume Rate, MVR at 300°C/1.2 kg	15.7	cm³/10 min	ASTM D 1238
ELECTRICAL			
Comparative Tracking Index (UL) {PLC}	0	PLC Code	UL 746A
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E207780-101345223	-	-
UL Recognized, 94V-0 Flame Class Rating	≥1.5	mm	UL 94
UL Recognized, 94V-2 Flame Class Rating	≥0.8	mm	UL 94
UL Recognized, 94HB Flame Class Rating	≥0.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4 – 6	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	255 – 290	°C	
Front - Zone 3 Temperature	260 – 270	°C	
Middle - Zone 2 Temperature	255 – 265	°C	
Rear - Zone 1 Temperature	250 – 260	°C	
Mold Temperature	40 – 65	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

(1) 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.

APPLICATIONS

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