

LNP™ LUBRILOY™ COMPOUND D20001

D-FR ECO
REGION AMERICAS

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 20170816

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
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	64	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/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m ²	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

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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
PHYSICAL			
Density	1.2	g/cm ³	ASTM D 792
Mold Shrinkage, flow, 24 hrs (5)	0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.6	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.53	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.57	%	ISO 294
Wear Factor Washer	10	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.29	-	ASTM D 3702 Modified: Manual
Static COF	0.16	-	ASTM D 3702 Modified: Manual
Density	1.2	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.12	%	ISO 62
FLAME CHARACTERISTICS			
UL Recognized, 94V-0 Flame Class Rating (3)	1.5	mm	UL 94
MECHANICAL PROPERTIES			
Flexural modulus	2820	MPa	ISO 178/1A
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	

APPLICATIONS

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain



typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

SABIC as referred to herein means any legal entity belonging to the group of companies headed by Saudi Arabia Basic Industries Corporation.