

## LNP\* Lubriloy\* Compound U2000A Asia Pacific: COMMERCIAL

**Also known as: U**

**Product Reorder Name: U2000A**

LNP\* Lubriloy\* U2000A is a compound based on Polyphthalamide resin containing Proprietary Lubricant. Added features of this material include: Internally Lubricated.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	81	MPa	ASTM D 638
Tensile Stress, break	81	MPa	ASTM D 638
Tensile Strain, yield	3.6	%	ASTM D 638
Tensile Strain, break	3.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	3440	MPa	ASTM D 638
Flexural Modulus	2750	MPa	ASTM D 790
Tensile Stress, yield	78	MPa	ISO 527
Tensile Stress, break	78	MPa	ISO 527
Tensile Strain, yield	3.4	%	ISO 527
Tensile Strain, break	3.4	%	ISO 527
Tensile Modulus, 1 mm/min	3530	MPa	ISO 527
Flexural Stress	109	MPa	ISO 178
Flexural Modulus	2900	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	1345	J/m	ASTM D 4812
Izod Impact, notched, 23°C	58	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	4	J	ASTM D 3763
Multiaxial Impact	16	J	ISO 6603
Izod Impact, notched 80*10*4 +23°C	5	kJ/m <sup>2</sup>	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	163	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	106	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.02E-05	1/°C	ASTM E 831

CTE, -40°C to 40°C, xflow	7.02E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	7.1E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.1E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	183	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	103	°C	ISO 75/Af
<b>PHYSICAL</b>	<b>Value</b>	<b>Unit</b>	<b>Standard</b>
Density	1.14	g/cm <sup>3</sup>	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.3	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	1.6 - 1.8	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.6 - 1.8	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	1.7	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.7	%	ISO 294
Wear Factor Washer	20	10 <sup>-10</sup> in <sup>5</sup> -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.22	-	ASTM D 3702 Modified
Static COF	0.22	-	ASTM D 3702 Modified
Density	1.14	g/cm <sup>3</sup>	ISO 1183

Source GMD, last updated:09/24/2008

## Processing

Parameter		
Injection Molding	Value	Unit
Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Maximum Moisture Content	0.15	%
Melt Temperature	310 - 315	°C
Front - Zone 3 Temperature	305 - 315	°C
Middle - Zone 2 Temperature	305 - 315	°C
Rear - Zone 1 Temperature	305 - 315	°C
Mold Temperature	120 - 150	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:09/24/2008

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

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