



LNP™ LUBRILOY™ Compound D2000

Americas: COMMERCIAL

Also known as: LNP™ LUBRILOY™ Compound D

Product reorder name: D2000

LNP LUBRILOY™ D2000 is a compound based on Polycarbonate resin containing a Proprietary Non-Halogenated Lubrication System. Added feature of this material is: Wear Resistant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	580	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	460	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	6.1	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	47	%	ASTM D 638
Tensile Modulus, 5 mm/min	20900	kgf/cm ²	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	22100	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 5 mm/min	59	MPa	ISO 527
Tensile Stress, break, 5 mm/min	58	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	6.6	%	ISO 527
Tensile Strain, break, 5 mm/min	170	%	ISO 527
Tensile Modulus, 1 mm/min	2090	MPa	ISO 527
Flexural Stress	77	MPa	ISO 178
Flexural Modulus, 2 mm/min	1970	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	NB	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	70	cm-kgf/cm	ASTM D 256
Multiaxial Impact	428	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	509	cm-kgf	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	59	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	142	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	131	°C	ASTM D 648
CTE, -30°C to 30°C, flow	7.5E-05	1/°C	ASTM D 696



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
CTE, -30°C to 30°C, xflow	7.6E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	139	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	128	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.17	-	ASTM D 792
Density	1.17	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.14	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.8	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.8	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.84	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.81	%	ISO 294
Wear Factor Washer	38	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.31	-	ASTM D 3702 Modified
Static COF	0.22	-	ASTM D 3702 Modified
Moisture Absorption (23°C / 50% RH)	0.18	%	ISO 62
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating (3)	1.5	mm	UL 94



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	100	°C
Drying Time	4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	305 - 315	°C
Front - Zone 3 Temperature	305 - 315	°C
Middle - Zone 2 Temperature	300 - 310	°C
Rear - Zone 1 Temperature	295 - 305	°C
Mold Temperature	65 - 95	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm