

LNP™ LUBRILOY™ COMPOUND K2000XXH

K
REGION AMERICAS

DESCRIPTION

LNP LUBRILOY* K2000XXH is a compound based on Acetal resin containing Proprietary Lubricant. Added features of this material are: Wear Resistant, Healthcare.

TYPICAL PROPERTY VALUES

Revision 20170913

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	55	MPa	ASTM D 638
Tensile Stress, break	51	MPa	ASTM D 638
Tensile Strain, yield	9.3	%	ASTM D 638
Tensile Strain, break	32.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	2060	MPa	ASTM D 638
Flexural Stress	84	MPa	ASTM D 790
Tensile Stress, yield	60	MPa	ISO 527
Tensile Stress, break	59	MPa	ISO 527
Tensile Strain, yield	9	%	ISO 527
Tensile Strain, break	13.3	%	ISO 527
Tensile Modulus, 1 mm/min	2560	MPa	ISO 527
Flexural Stress	65	MPa	ISO 178
Flexural Modulus	2420	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1356	J/m	ASTM D 4812
Izod Impact, notched, 23°C	69	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	6	J	ASTM D 3763
Multiaxial Impact	0	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	48	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	158	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	110	°C	ASTM D 648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, flow	1.15E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.11E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.15E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.11E-04	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	87	°C	ISO 75/Af
PHYSICAL			
Density	1.4	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.33	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	2.2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	2.3	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	2.21	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	2.14	%	ISO 294
Wear Factor Washer	10	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.38	-	ASTM D 3702 Modified: Manual
Static COF	0.24	-	ASTM D 3702 Modified: Manual
Density	1.4	g/cm ³	ISO 1183
MECHANICAL PROPERTIES			
Flexural modulus	2420	MPa	ISO 178/1A
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Melt Temperature	200 – 215	°C	
Front - Zone 3 Temperature	210 – 220	°C	
Middle - Zone 2 Temperature	195 – 205	°C	
Rear - Zone 1 Temperature	175 – 190	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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