LNP™ LUBRILOY™ COMPOUND RX05497

RW
REGION ASIA

DESCRIPTION

LNP LUBRILOY* RX05497 is a compound based on Nylon 66 resin containing Proprietary Lubricant. Added feature of this material is: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20190814

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	82	MPa	ASTM D 638
Tensile Stress, break	67	MPa	ASTM D 638
Tensile Strain, yield	5.2	%	ASTM D 638
Tensile Strain, break	24.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	3040	MPa	ASTM D 638
Flexural Stress	105	MPa	ASTM D 790
Flexural Modulus	2790	MPa	ASTM D 790
Tensile Stress, yield	69	MPa	ISO 527
Tensile Stress, break	57	MPa	ISO 527
Tensile Strain, yield	17.2	%	ISO 527
Tensile Strain, break	31.4	%	ISO 527
Tensile Modulus, 1 mm/min	2730	MPa	ISO 527
Flexural Stress	90	MPa	ISO 178
Flexural Modulus	2430	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D 4812
Izod Impact, notched, 23°C	64	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	60	J	ASTM D 3763
Multiaxial Impact	76	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	137	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	58	°C	ASTM D 648
CTE, -40°C to 40°C, flow	9.86E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	9.12E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	9.86E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	9.13E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	58	°C	ISO 75/Af
Relative Temp Index, Elec (1)	65	°C	UL 746B
Relative Temp Index, Mech w/impact (1)	65	°C	UL 746B
Relative Temp Index, Mech w/o impact (1)	65	°C	UL 746B
PHYSICAL			
Density	1.12	g/cm³	ASTM D 792

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture Absorption, 50% RH, 24 hrs	0.88	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	2.3 – 2.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	2.3 – 2.5	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	2.31 – 2.52	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	2.31 – 2.52	%	ISO 294
Wear Factor Washer	10	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.3	-	ASTM D 3702 Modified: Manual
Static COF	0.16	-	ASTM D 3702 Modified: Manual
Density	1.12	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	1.18	%	ISO 62
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E207780-103093666	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	280 – 305	°C	
Front - Zone 3 Temperature	295 – 305	°C	
Middle - Zone 2 Temperature	280 – 295	°C	
Rear - Zone 1 Temperature	265 – 275	°C	
Mold Temperature	95 – 110	°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.

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