



LNP™ LUBRILOY™ Compound RX05497

Americas: COMMERCIAL

Also known as: LNP™ LUBRILOY™ Compound RW

Product reorder name: RX05497

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

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	840	kgf/cm ²	ASTM D 638
Tensile Stress, break	680	kgf/cm ²	ASTM D 638
Tensile Strain, yield	5.2	%	ASTM D 638
Tensile Strain, break	24.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	31000	kgf/cm ²	ASTM D 638
Flexural Stress	1070	kgf/cm ²	ASTM D 790
Flexural Modulus	28500	kgf/cm ²	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	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	6	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	612	cm-kgf	ASTM D 3763
Multiaxial Impact	776	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	137	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	58	°C	ASTM D 648



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THERMAL			
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
PHYSICAL			
Density	1.12	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.88	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	2.3 - 2.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	2.3 - 2.5	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	2.31 - 2.52	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	2.31 - 2.52	%	ISO 294
Wear Factor Washer	10	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.3	-	ASTM D 3702 Modified
Static COF	0.16	-	ASTM D 3702 Modified
Density	1.12	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	1.18	%	ISO 62



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
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