LNP™ LUBRILOY™ COMPOUND RX99650

PDX-R-99650
REGION ASIA

DESCRIPTION

LNP LUBRILOY* RX99650 is a compound based on Nylon 66 resin containing Proprietary Lubricant. Added feature of this material is: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20170913

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	59	MPa	ASTM D 638
Tensile Stress, break	53	MPa	ASTM D 638
Tensile Strain, yield	5	%	ASTM D 638
Tensile Strain, break	31	%	ASTM D 638
Tensile Modulus, 50 mm/min	2220	MPa	ASTM D 638
Flexural Stress	80	MPa	ASTM D 790
Tensile Stress, yield	55	MPa	ISO 527
Tensile Stress, break	54	MPa	ISO 527
Tensile Strain, yield	16	%	ISO 527
Tensile Strain, break	64	%	ISO 527
Tensile Modulus, 1 mm/min	2160	MPa	ISO 527
Flexural Stress	74	MPa	ISO 178
Flexural Modulus	2000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D 4812
Izod Impact, notched, 23°C	427	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	76	J	ASTM D 3763
Multiaxial Impact	65	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	19	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	206	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	63	°C	ASTM D 648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, flow	1.21E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.12E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.21E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.13E-04	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	188	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	67	°C	ISO 75/Af
PHYSICAL			
Density	1.1	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.73	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	2.4 – 2.6	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	2.4 – 2.6	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	2.43 – 2.6	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	2.43 – 2.6	%	ISO 294
Wear Factor Washer	8	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.31	-	ASTM D 3702 Modified: Manual
Static COF	0.18	-	ASTM D 3702 Modified: Manual
Density	1.1	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	1.12	%	ISO 62
MECHANICAL PROPERTIES			
Flexural modulus	2080	MPa	ISO 178/1A
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	

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