LNP™ LUBRILOY™ COMPOUND RX99650

PDX-R-99650
REGION EUROPE

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 20170816

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	

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.
Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.
SABIC as referred to herein means any legal entity belonging to the group of companies headed by Saudi Arabia Basic Industries Corporation.