LNP™ LUBRICOMP™ COMPOUND RX03643H

PDX-R-03643 HC
REGION ASIA

DESCRIPTION

LNP LUBRICOMP RX03643H is a compound based on Nylon 66 resin containing Proprietary Filler(s). Added feature of this material is: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20190801

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	96	MPa	ASTM D 638
Tensile Stress, break	96	MPa	ASTM D 638
Tensile Strain, yield	2.4	%	ASTM D 638
Tensile Strain, break	2.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	5510	MPa	ASTM D 638
Flexural Modulus	4820	MPa	ASTM D 790
Tensile Stress, yield	95	MPa	ISO 527
Tensile Stress, break	95	MPa	ISO 527
Tensile Strain, yield	2.3	%	ISO 527
Tensile Strain, break	2.3	%	ISO 527
Tensile Modulus, 1 mm/min	5310	MPa	ISO 527
Flexural Stress	149	MPa	ISO 178
Flexural Modulus	4500	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	421	J/m	ASTM D 4812
Izod Impact, notched, 23°C	32	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	6	J	ASTM D 3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	28	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	256	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	238	°C	ASTM D 648
CTE, -40°C to 40°C, flow	4.32E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.38E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	4.2E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.5E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	252	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	221	°C	ISO 75/Af
PHYSICAL			
Density	1.25	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.9	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	1 – 1.2	%	ASTM D 955

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, xflow, 24 hrs	0.7 – 0.9	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	1.1	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.79	%	ISO 294
Wear Factor Washer	158	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.46	-	ASTM D 3702 Modified: Manual
Static COF	0.37	-	ASTM D 3702 Modified: Manual
Density	1.24	g/cm³	ISO 1183
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	275 – 290	°C	
Front - Zone 3 Temperature	295 – 305	°C	
Middle - Zone 2 Temperature	280 – 295	°C	
Rear - Zone 1 Temperature	265 – 275	°C	
Mold Temperature	80 – 95	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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