LNP™ LUBRICOMP™ Compound RN001S

NYKON R- HS
REGION AMERICAS

DESCRIPTION

LNP LUBRICOMP RN001S compound is based on Nylon 6/6 resin containing Molybdenum diSulfide (MoS2). Added features of this grade include: Wear Resistant, Heat Stabilized.

GENERAL INFORMATION	
Features	Heat Stabilized, Wear resistant, No PFAS intentionally added
Fillers	Molybdenum
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20261110

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield	84	MPa	ASTM D638
Tensile Stress, break	84	MPa	ASTM D638
Tensile Strain, yield	2.9	%	ASTM D638
Tensile Strain, break	3.8	%	ASTM D638
Tensile Modulus, 50 mm/min	4130	MPa	ASTM D638
Flexural Modulus	3440	MPa	ASTM D790
Tensile Stress, yield	69	MPa	ISO 527
Tensile Stress, break	69	MPa	ISO 527
Tensile Strain, yield	2	%	ISO 527
Tensile Strain, break	42.2	%	ISO 527
Tensile Modulus, 1 mm/min	3900	MPa	ISO 527
Flexural Stress	107	MPa	ISO 178
Flexural Modulus	3400	MPa	ISO 178
IMPACT [1]			
Izod Impact, Unnotched			
23°C	1110	J/m	ASTM D4812
80*10*4 +23°C	53	kJ/m²	ISO 180/1U
Izod impact, notched			
23°C	26	J/m	ASTM D256

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
80*10*4 +23°C	4	kJ/m²	ISO 180/1A
Instrumented Dart Impact Energy @ peak, 23°C	2	J	ASTM D3763
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	231	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	76	°C	ASTM D648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	223	°C	ISO 75/Bf
PHYSICAL [1]			
Density	1.16	g/cm³	ASTM D792
Mold Shrinkage, flow, 24 hrs [2]	1.01	%	ISO 294
Mold Shrinkage, xflow, 24 hrs [2]	1.03	%	ISO 294
Wear Factor Washer	103	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.75	-	ASTM D3702 Modified: Manual
Static COF	0.55	-	ASTM D3702 Modified: Manual
Density	1.16	g/cm³	ISO 1183
INJECTION MOLDING [3]			
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	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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