LNP™ LUBRICOMP™ COMPOUND RN001S

NYKON R- HS
REGION EUROPE

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 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield, 50 mm/min	92	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	3.5	%	ISO 527
Tensile Strain, break, 50 mm/min	30	%	ISO 527
Tensile Modulus, 1 mm/min	3900	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	120	MPa	ISO 178
Flexural Modulus, 2 mm/min	3300	MPa	ISO 178
Hardness, Rockwell R	119	-	ISO 2039-2
IMPACT [1]			
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -20°C	3	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	2	kJ/m²	ISO 180/1A
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	>50	kJ/m²	ISO 179/1eU
THERMAL [1]			
CTE, 23°C to 60°C, flow	7.8E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	7.8E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/120	252	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	230	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	90	°C	ISO 75/Ae
PHYSICAL [1]			

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage on Tensile Bar, flow [2]	1.6 – 2	%	SABIC method
Density	1.16	g/cm³	ISO 1183
Water Absorption, (23°C/saturated)	8.5	%	ISO 62-1
FLAME CHARACTERISTICS [1]			
UL Compliant, 94HB Flame Class Rating [3]	1.6	mm	UL 94 by SABIC-IP
Oxygen Index (LOI)	26	%	ISO 4589
INJECTION MOLDING [4]			
Drying Temperature	75 – 85	°C	
Drying Time	4 – 6	Hrs	
Maximum Moisture Content	0.2	%	
Melt Temperature	260 – 280	°C	
Nozzle Temperature	250 – 270	°C	
Front - Zone 3 Temperature	260 – 280	°C	
Middle - Zone 2 Temperature	260 – 280	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	70 – 90	°C	

(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) UL rating shown here is based on internal measurements.

(4) 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.

DISCLAIMER

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