LNP™ LUBRICOMP™ COMPOUND 9X06483

STN-L-4030 HS

DESCRIPTION

LNP LUBRICOMP 9X06483 compound is based on a Nylon 4/6 resin containing PTFE. Added features of this grade include: Wear Resistant, Heat Stabilized.

GENERAL INFORMATION	
Features	Heat Stabilized, Wear resistant
Fillers	Unreinforced, PTFE
Polymer Types	Polyamide 46 (Nylon 46)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Under the Hood
Consumer	Home Appliances, Commercial Appliance
Electrical and Electronics	Electronic Components, Mobile Phone - Computer - Tablets

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yld, Type I, 5 mm/min	80	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	74	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	5.8	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	5.9	%	ASTM D638
Tensile Modulus, 5 mm/min	3130	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	2960	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	78	MPa	ISO 527
Tensile Stress, break, 5 mm/min	76	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	6.5	%	ISO 527
Tensile Strain, break, 5 mm/min	6.6	%	ISO 527
Tensile Modulus, 1 mm/min	3000	MPa	ISO 527
Flexural Strength, 2 mm/min	101	MPa	ISO 178
Flexural Modulus, 2 mm/min	2800	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	924	J/m	ASTM D4812
Izod Impact, notched, 23°C	52	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	3	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	56	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	283	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	151	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -30°C to 30°C, xflow	9.3E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	276	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	92	°C	ISO 75/Af
PHYSICAL (1)			
Density	1.29	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	1.8	%	ASTM D570
Mold Shrinkage, flow, 24 hrs (2)	1 – 3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs (2)	2 – 4	%	ASTM D955
Wear Factor Washer	11	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Wear Factor Ring	-1	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.32	-	ASTM D3702 Modified: Manual
Static COF	0.32	-	ASTM D3702 Modified: Manual
Density	1.28	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	2.7	%	ISO 62
INJECTION MOLDING (3)			
Drying Temperature	80	°C	
Drying Time	40	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	310 – 320	°C	
Front - Zone 3 Temperature	310 – 320	°C	
Middle - Zone 2 Temperature	300 – 310	°C	
Rear - Zone 1 Temperature	280 – 295	°C	
Mold Temperature	80 – 120	°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.

DISCLAIMER