LNP™ LUBRICOMP™ COMPOUND RX85514

PDX-R-85514
REGION AMERICAS

DESCRIPTION

LNP LUBRICOMP RX85514 compound is based on Nylon 6/6 resin containing10% aramid fiber,15% PTFE and proprietary lubricant. Added features of this grade include Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant
Fillers	Aramid Fiber, PTFE
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Under the Hood
Consumer	Sport/Leisure
Industrial	Electrical, Industrial General

TYPICAL PROPERTY VALUES

Revision 20240222

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, brk, Type I, 5 mm/min	79	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	7.2	%	ASTM D638
Tensile Modulus, 50 mm/min	3700	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	3320	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	78	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	7.3	%	ISO 527
Tensile Strain, break, 5 mm/min	7.4	%	ISO 527
Tensile Modulus, 1 mm/min	3820	MPa	ISO 527
Flexural Stress	109	MPa	ISO 178
Flexural Modulus, 2 mm/min	3560	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	516	J/m	ASTM D4812
Izod Impact, notched, 23°C	37	J/m	ASTM D256
Multiaxial Impact	1	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	6	J	ASTM D3763
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	247	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	117	°C	ASTM D648
CTE, -30°C to 30°C, flow	6.3E-05	1/°C	ASTM D696

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -30°C to 30°C, xflow	7.6E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	228	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	112	°C	ISO 75/Af
PHYSICAL (1)			
Density	1.28	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.61	%	ASTM D570
Mold Shrinkage, flow, 24 hrs (2)	1 – 3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs (2)	1 – 3	%	ASTM D955
Wear Factor Washer	3	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	0.38	-	ASTM D3702 Modified: Manual
Static COF	0.34	-	ASTM D3702 Modified: Manual
Density	1.28	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.93	%	ISO 62
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.

DISCLAIMER