

LNPT[™] LUBRICOMP[™] COMPOUND RA004

RA-1004

DESCRIPTION

LNP LUBRICOMP RA004 compound is based on Nylon 6/6 resin containing 20% aramid fiber. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant, No PFAS intentionally added
Fillers	Aramid Fiber
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 Strain, break, 5 mm/min	3.6	%	ISO 527
Tensile Stress, break, 5 mm/min	85	MPa	ISO 527
Flexural Modulus, 2 mm/min	4000	MPa	ISO 178
Flexural Stress, break, 2 mm/min	122	MPa	ISO 178
Tensile Stress, break	88	MPa	ASTM D638
Tensile Strain, break	4.5	%	ASTM D638
Flexural Stress	137	MPa	ASTM D790
Flexural Modulus	4410	MPa	ASTM D790
IMPACT ⁽¹⁾			
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	40	kJ/m ²	ISO 180/1U
Izod Impact, notched, 23°C	32	J/m	ASTM D256
Izod Impact, unnotched, 23°C	368	J/m	ASTM D4812
THERMAL ⁽¹⁾			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	199	°C	ISO 75/Af
CTE, 23°C to 60°C, flow	6.00E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	9.00E-05	1/°C	ISO 11359-2
HDT, 1.82 MPa, 3.2mm, unannealed	171	°C	ASTM D648
PHYSICAL ⁽¹⁾			
Density	1.2	g/cm ³	ISO 1183
Density	1.23	g/cm ³	ASTM D792

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 24 hrs ⁽²⁾	1.5	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	2	%	ASTM D955
Dynamic COF	0.52	-	ASTM D3702 Modified: Manual
Static COF	0.66	-	ASTM D3702 Modified: Manual
Wear Factor Washer	59	10 ⁻⁴ -10 ⁻⁵ in ³ -min/ft-lb-hr	ASTM D3702 Modified: Manual
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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