

LNP™ LUBRICOMP™ COMPOUND FL004

FL-4040

REGION AMERICAS

DESCRIPTION

LNP* LUBRICOMP* FL004 is a compound based on Polyethylene resin containing 20% PTFE. Added feature of this material is: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	25	MPa	ASTM D 638
Tensile Stress, yld, Type I, 5 mm/min	23	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	12	MPa	ASTM D 638
Tensile Strain, break	42	%	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	8.2	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	148	%	ASTM D 638
Tensile Modulus, 50 mm/min	1240	MPa	ASTM D 638
Flexural Stress	20	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	930	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	23	MPa	ISO 527
Tensile Stress, break, 5 mm/min	6	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	7.9	%	ISO 527
Tensile Strain, break, 5 mm/min	78	%	ISO 527
Tensile Modulus, 1 mm/min	1000	MPa	ISO 527
Flexural Stress	19	MPa	ISO 178
Flexural Modulus, 2 mm/min	930	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1030	J/m	ASTM D 4812
Izod Impact, notched, 23°C	37	J/m	ASTM D 256
Multiaxial Impact	7	J	ISO 6603
Instrumented Impact Total Energy, 23°C	13	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	100	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m ²	ISO 180/1A

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	74	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	53	°C	ASTM D 648
CTE, -30°C to 30°C, flow	1.37E-04	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	1.21E-04	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	82	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	59	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.08	-	ASTM D 792
Density	1.08	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	3 – 5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1 – 3	%	ASTM D 955
Wear Factor Washer	9	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified: Manual
Wear Factor Ring	-1	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.17	-	ASTM D 3702 Modified: Manual
Static COF	0.11	-	ASTM D 3702 Modified: Manual
Moisture Absorption (23°C / 50% RH)	0	%	ISO 62
MECHANICAL PROPERTIES			
Flexural modulus	1000	MPa	ISO 178/1A
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	2 – 4	hrs	
Melt Temperature	230	°C	
Front - Zone 3 Temperature	220 – 230	°C	
Middle - Zone 2 Temperature	210 – 220	°C	
Rear - Zone 1 Temperature	195 – 205	°C	
Mold Temperature	40 – 55	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties. It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its



and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

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