LNP™ LUBRICOMP™ COMPOUND IL004

IL-4040
REGION ASIA

DESCRIPTION

LNP LUBRICOMP IL004 is a compound based on Nylon 6/12 resin containing 20% PTFE. Added features of this material include: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20191108

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	47	MPa	ASTM D 638
Tensile Stress, break	47	MPa	ASTM D 638
Tensile Strain, yield	13.6	%	ASTM D 638
Tensile Strain, break	14.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	2060	MPa	ASTM D 638
Flexural Modulus	2060	MPa	ASTM D 790
Tensile Stress, yield	49	MPa	ISO 527
Tensile Stress, break	49	MPa	ISO 527
Tensile Strain, yield	15.2	%	ISO 527
Tensile Strain, break	15.6	%	ISO 527
Tensile Modulus, 1 mm/min	2190	MPa	ISO 527
Flexural Stress	65	MPa	ISO 178
Flexural Modulus	2000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	571	J/m	ASTM D 4812
Izod Impact, notched, 23°C	37	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	3	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	39	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	157	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	61	°C	ASTM D 648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	155	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	64	°C	ISO 75/Af
PHYSICAL			
Density	1.18	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	1.7 – 1.9	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.7 – 1.9	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	1.8	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.8	%	ISO 294
Wear Factor Washer	18	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.24	-	ASTM D 3702 Modified: Manual

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Static COF	0.27	-	ASTM D 3702 Modified: Manual
Density	1.18	g/cm³	ISO 1183
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.12 – 0.2	%	
Melt Temperature	270 – 275	°C	
Front - Zone 3 Temperature	270 – 280	°C	
Middle - Zone 2 Temperature	260 – 270	°C	
Rear - Zone 1 Temperature	255 – 265	°C	
Mold Temperature	65 – 95	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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