LNP™ LUBRICOMP™ COMPOUND KL004

FULTON 404 & KL-4040
REGION ASIA

DESCRIPTION

LNP LUBRICOMP* KL004 is a compound based on Acetal Copolymer resin containing 20% PTFE. Added feature of this material is: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20191108

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	51	MPa	ASTM D 638
Tensile Stress, break	50	MPa	ASTM D 638
Tensile Strain, yield	11	%	ASTM D 638
Tensile Strain, break	18	%	ASTM D 638
Tensile Modulus, 50 mm/min	2130	MPa	ASTM D 638
Flexural Stress	75	MPa	ASTM D 790
Flexural Modulus	2060	MPa	ASTM D 790
Tensile Stress, yield	47	MPa	ISO 527
Tensile Stress, break	46	MPa	ISO 527
Tensile Strain, yield	10	%	ISO 527
Tensile Strain, break	23	%	ISO 527
Tensile Modulus, 1 mm/min	2400	MPa	ISO 527
Flexural Stress	79	MPa	ISO 178
Flexural Modulus	2600	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	640	J/m	ASTM D 4812
Izod Impact, notched, 23°C	42	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	6	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	45	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	99	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.1E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.11E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.1E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.11E-04	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	98	°C	ISO 75/Af
PHYSICAL			
Density	1.5	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.15	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	1.97 – 2.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.97 – 2.5	%	ASTM D 955

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Mold Shrinkage, flow, 24 hrs	1.97 – 2.5	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.97 – 2.5	%	ISO 294
Wear Factor Washer	15	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.29	-	ASTM D 3702 Modified: Manual
Static COF	0.15	-	ASTM D 3702 Modified: Manual
Density	1.5	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.26	%	ISO 62
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E207780-101281607	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Melt Temperature	200 – 215	°C	
Front - Zone 3 Temperature	210 – 220	°C	
Middle - Zone 2 Temperature	195 – 205	°C	
Rear - Zone 1 Temperature	175 – 190	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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