LNP™ LUBRICOMP™ COMPOUND KL004L

FULTON 404 LE
REGION ASIA

DESCRIPTION

LNP LUBRICOMP KL004L is a compound based on Acetal Copolymer resin containing 20% PTFE. Added features of this material include: Wear Resistant, Low Extractible.

TYPICAL PROPERTY VALUES

Revision 20181219

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	47	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	47	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	11.4	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	22.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	2750	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	2070	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	48	MPa	ISO 527
Tensile Stress, break, 5 mm/min	47	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	10.8	%	ISO 527
Tensile Strain, break, 5 mm/min	20.4	%	ISO 527
Tensile Modulus, 1 mm/min	2340	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	59	MPa	ISO 178
Flexural Modulus, 2 mm/min	2100	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	672	J/m	ASTM D 4812
Izod Impact, notched, 23°C	42	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	4	J	ASTM D 3763
Multiaxial Impact	1	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	38	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	153	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	84	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.17E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.15E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.17E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.15E-04	1/°C	ISO 11359-2
CTE, 23°C to 60°C, flow	1.17E-04	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.15E-04	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	146	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	83	°C	ISO 75/Af
PHYSICAL			
Density	1.52	g/cm³	ASTM D 792

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow	3.4	%	SABIC method
Mold Shrinkage, xflow	2.5	%	SABIC method
Mold Shrinkage, flow, 24 hrs	2.0 – 2.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	2.0 – 3.0	%	ASTM D 955
Wear Factor Washer	10	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.24	-	ASTM D 3702 Modified: Manual
Static COF	0.13	-	ASTM D 3702 Modified: Manual
Density	1.51	g/cm³	ISO 1183
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	

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