

LNP™ LUBRICOMP™ COMPOUND KP004

KL-4540

REGION AMERICAS

DESCRIPTION

LNP LUBRICOMP* KP004 is a compound based on Acetal Copolymer resin containing 20% PTFE/Silicone. Added feature of this material is: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	43	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	43	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	13.7	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	30.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	1830	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	63	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2020	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	39	MPa	ISO 527
Tensile Stress, break, 5 mm/min	39	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	21.5	%	ISO 527
Tensile Strain, break, 5 mm/min	42.8	%	ISO 527
Tensile Modulus, 1 mm/min	2020	MPa	ISO 527
Flexural Stress	60	MPa	ISO 178
Flexural Modulus, 2 mm/min	2080	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	619	J/m	ASTM D 4812
Izod Impact, notched, 23°C	53	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	3	J	ASTM D 3763
Multiaxial Impact	1	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	42	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	87	°C	ASTM D 648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, flow	1.11E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.14E-04	1/°C	ASTM E 831
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	79	°C	ISO 75/Af
PHYSICAL			
Density	1.48	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.18	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	2.1 – 2.9	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	2.1 – 2.9	%	ASTM D 955
Wear Factor Washer	9	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.25	-	ASTM D 3702 Modified: Manual
Static COF	0.14	-	ASTM D 3702 Modified: Manual
Density	1.48	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.43	%	ISO 62
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	

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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