

LNPT[™] LUBRICOMP[™] COMPOUND KFL23LH

KFL-4023 LE

REGION AMERICAS

DESCRIPTION

LNP LUBRICOMP KFL23LH compound is based on Acetal (POM) Copolymer resin containing 15% glass fiber, 10% PTFE. Added features of this grade include: Wear Resistant, Low Extractable.

GENERAL INFORMATION

Features	Wear resistant, Food contact, Healthcare/Formula lock
Fillers	Glass Fiber, PTFE
Polymer Types	Acetal (POM) Copolymer
Processing Techniques	Injection Molding

INDUSTRY

Building and Construction
Consumer
Hygiene and Healthcare
Packaging

SUB INDUSTRY

Water Management
Home Appliances
Pharmaceutical Packaging and Drug Delivery, Surgical devices, General Healthcare, Patient Testing
Industrial Packaging, Food & Beverage

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, brk, Type I, 5 mm/min	78	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	1.8	%	ASTM D638
Tensile Modulus, 50 mm/min	6720	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	119	MPa	ASTM D790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	107	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	5740	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	75	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.7	%	ISO 527
Tensile Modulus, 1 mm/min	6820	MPa	ISO 527
Flexural Stress	108	MPa	ISO 178
Flexural Modulus, 2 mm/min	5900	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	500	J/m	ASTM D4812
Izod Impact, notched, 23°C	50	J/m	ASTM D256
Multiaxial Impact	2	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	10	J	ASTM D3763
Izod Impact, unnotched 80°10°4 +23°C	22	kJ/m ²	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	4	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			

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CHEMISTRY THAT MATTERS[™]

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 0.45 MPa, 3.2 mm, unannealed	163	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	161	°C	ASTM D648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	163	°C	ISO 75 /Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	158	°C	ISO 75 /Af
PHYSICAL ⁽¹⁾			
Specific Gravity	1.58	-	ASTM D792
Density	1.58	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.21	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.9 – 2	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	1 – 3	%	ASTM D955
Moisture Absorption (23°C / 50% RH)	0.34	%	ISO 62
INJECTION MOLDING ⁽³⁾			
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) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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