SABIC Innovative Plastics™



LNP* Lubriloy* Compound KL201 Americas: COMMERCIAL

Also known as: KL

Product Reorder Name: KL201

LNP LUBRILOY* KL201 is a compound based on Acetal resin containing PTFE, Proprietary Lubricant. Added features of this material include: Internally Lubricated.

Property

TYPICAL PROPERTIES (1)						
MECHANICAL	Value	Unit	Standard			
Tensile Stress, yield	51	MPa	ASTM D 638			
Tensile Strain, yield	20	%	ASTM D 638			
Tensile Modulus, 50 mm/min	2650	MPa	ASTM D 638			
Flexural Stress	68	MPa	ASTM D 790			
Flexural Modulus	2160	MPa	ASTM D 790			
Tensile Stress, yield	53	MPa	ISO 527			
Tensile Modulus, 1 mm/min	3050	MPa	ISO 527			
Flexural Modulus	2260	MPa	ISO 178			
IMPACT	Value	Unit	Standard			
Izod Impact, unnotched, 23°C	1367	J/m	ASTM D 4812			
Izod Impact, notched, 23°C	68	J/m	ASTM D 256			
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A			
THERMAL	Value	Unit	Standard			
HDT, 0.45 MPa, 3.2 mm, unannealed	157	°C	ASTM D 648			
HDT, 1.82 MPa, 3.2mm, unannealed	91	°C	ASTM D 648			
CTE, -40°C to 40°C, flow	8.89E-05	1/°C	ASTM E 831			
CTE, -40°C to 40°C, xflow	8.51E-05	1/°C	ASTM E 831			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	93	°C	ISO 75/Af			
PHYSICAL	Value	Unit	Standard			
Density	1.41	g/cm³	ASTM D 792			
Moisture Absorption, 50% RH, 24 hrs	0.97	%	ASTM D 570			
Mold Shrinkage, flow, 24 hrs	2.5 - 3	%	ASTM D 955			
Mold Shrinkage, xflow, 24 hrs	2.5 - 2.7	%	ASTM D 955			

Wear Factor Washer	12	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.3	-	ASTM D 3702 Modified
Static COF	0.09	-	ASTM D 3702 Modified
Density	1.4	g/cm³	ISO 1183

Source GMD, last updated:09/30/2004

Processing

Parameter					
Injection Molding	Value	Unit			
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			

Source GMD, last updated:09/30/2004

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

- (1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.
- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

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