

SABIC Innovative Plastics LNP LUBRICOMP KP004L Acetal Copoly

Category : Polymer , Thermoplastic , Acetal (POM) , Acetal Copolymer, Unreinforced

Material Notes:

LNP* LUBRICOMP* KP004L is a compound based on Acetal Copolymer resin containing 20% PTFE/Silicone. Added features of this material include: Wear Resistant, Low Extractible.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-LNP-LUBRICOMP-KP004L-Acetal-Copoly.php

Physical Properties	Metric	English	Comments
Density	1.48 g/cc	0.0535 lb/in ³	ASTM D792
	1.48 g/cc	0.0535 lb/in ³	ISO 1183
Moisture Absorption	0.200 %	0.200 %	50% RH, 24 hrs; ASTM D570
Linear Mold Shrinkage, Flow	0.028 - 0.030 cm/cm	0.028 - 0.030 in/in	ASTM D955
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Transverse	0.029 cm/cm	0.029 in/in	ISO 294
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Transverse	0.023 - 0.025 cm/cm	0.023 - 0.025 in/in	ASTM D955
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Transverse	0.024 cm/cm	0.024 in/in	ISO 294
	@Time 86400 sec	@Time 24.0 hour	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	46.0 MPa	6670 psi	ASTM D638
	46.0 MPa	6670 psi	ISO 527
Tensile Strength, Yield	47.0 MPa	6820 psi	ASTM D638
	47.0 MPa	6820 psi	ISO 527
Elongation at Break	34.3 %	34.3 %	ISO 527
	39.6 %	39.6 %	ASTM D638
Elongation at Yield	19.2 %	19.2 %	ISO 527
	20.2 %	20.2 %	ASTM D638
Tensile Modulus	2.06 GPa	299 ksi	50 mm/min; ASTM D638

Mechanical Properties	2.27 GPa Metric	329 ksi English	1 mm/min: ISO 527 Comments
Flexural Strength	119 MPa	17300 psi	ISO 178
Flexural Modulus	2.06 GPa	299 ksi	ASTM D790
	5.40 GPa	783 ksi	ISO 178
Izod Impact, Notched	0.530 J/cm	0.993 ft-lb/in	ASTM D256
Izod Impact, Unnotched	7.15 J/cm	13.4 ft-lb/in	ASTM D4812
Izod Impact, Notched (ISO)	5.00 kJ/m ²	2.38 ft-lb/in ²	80*10*4; ISO 180/1A
Izod Impact, Unnotched (ISO)	46.0 kJ/m ²	21.9 ft-lb/in ²	80*10*4; ISO 180/1U
Dart Drop, Total Energy	5.00 J	3.69 ft-lb	Instrumented Impact Energy @ peak; ASTM D3763
Impact Test	1.00 J	0.738 ft-lb	Multiaxial Impact; ISO 6603
Coefficient of Friction, Dynamic	0.27	0.27	ASTM D3702 Modified
Coefficient of Friction, Static	0.15	0.15	ASTM D3702 Modified
K (wear) Factor	18.1 x 10 ⁻⁸ mm ³ /N-M	9.00 x 10 ⁻¹⁰ in ³ - min/ft-lb-hr	Washer; ASTM D3702 Modified

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	117 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	65.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E 831
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
	118 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	65.6 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ISO 11359-2
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
CTE, linear, Transverse to Flow	117 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	65.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E 831
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
	117 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	65.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ISO 11359-2
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
Deflection Temperature at 0.46 MPa (66 psi)	145 $\text{Å}^\circ\text{C}$	293 $\text{Å}^\circ\text{F}$	Flatw 80*10*4 sp=64mm; ISO 75/Bf
	151 $\text{Å}^\circ\text{C}$	304 $\text{Å}^\circ\text{F}$	
	@Thickness 3.20 mm	@Thickness 0.126 in	unannealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	88.0 $\text{Å}^\circ\text{C}$	190 $\text{Å}^\circ\text{F}$	Flatw 80*10*4 sp=64mm; ISO 75/Af

Thermal Properties	Metric	English	Comments
	@Thickness 3.20 mm	@Thickness 0.126 in	unannealed; ASTM D648

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China