

SABIC Innovative Plastics LNP LUBRICOMP KP002 Acetal Copoly (Asia Pacific)

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

Material Notes:

LNP* Lubricomp* KP002 is a compound based on Acetal Copolymer resin containing PTFE, Silicone. Added features of this material include: Internally Lubricated.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-LNP-LUBRICOMP-KP002-Acetal-Copoly-Asia-Pacific.php

Physical Properties	Metric	English	Comments
Density	1.43 g/cc	0.0517 lb/in ³	ASTM D792
	1.43 g/cc	0.0517 lb/in ³	ISO 1183
Moisture Absorption	0.200 %	0.200 %	50% RH, 24 hrs; ASTM D570
Linear Mold Shrinkage, Flow	0.022 cm/cm	0.022 in/in	ASTM D955
	@Time 86400 sec	@Time 24.0 hour	
	0.022 cm/cm	0.022 in/in	ISO 294
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Transverse	0.022 cm/cm	0.022 in/in	ASTM D955
	@Time 86400 sec	@Time 24.0 hour	
	0.022 cm/cm	0.022 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
	48.0 MPa	6960 psi	Type I, 5 mm/min; ASTM D638
	48.0 MPa	6960 psi	5 mm/min; ISO 527
Tensile Strength, Yield	46.0 MPa	6670 psi	ASTM D638
	46.0 MPa	6670 psi	ISO 527
	49.0 MPa	7110 psi	5 mm/min; ISO 527
	49.0 MPa	7110 psi	Type I, 5 mm/min; ASTM D638
Elongation at Break	7.0 %	7.0 %	Flexural Strain, break, 2 mm/min; ISO 178
	28.4 %	28.4 %	5 mm/min; ISO 527

Mechanical Properties	Metric	English	Comments
	40.9 %	40.9 %	ASTM D638
Elongation at Yield	17.9 %	17.9 %	5 mm/min; ISO 527
	18.3 %	18.3 %	Type I, 5 mm/min; ASTM D638
	26.3 %	26.3 %	ASTM D638
	29 %	29 %	ISO 527
Tensile Modulus	2.33 GPa	338 ksi	1 mm/min; ISO 527
	2.75 GPa	399 ksi	50 mm/min; ASTM D638
Flexural Strength	61.0 MPa	8850 psi	ISO 178
Flexural Yield Strength	69.0 MPa	10000 psi	2 mm/min; ISO 178
Flexural Modulus	1.91 GPa	277 ksi	1.3 mm/min, 50 mm span; ASTM D790
	1.99 GPa	289 ksi	2 mm/min; ISO 178
	2.00 GPa	290 ksi	ISO 178
	2.06 GPa	299 ksi	ASTM D790
Izod Impact, Notched	0.530 J/cm	0.993 ft-lb/in	ASTM D256
Izod Impact, Unnotched	10.68 J/cm	20.01 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)	74.0 kJ/m ²	35.2 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	0.31	0.31	ASTM D3702 Modified
Coefficient of Friction, Static	0.18	0.18	ASTM D3702 Modified
K (wear) Factor	16.1 x 10 ⁻⁸ mm ³ /N-M	8.00 x 10 ⁻¹⁰ in ³ -min/ft-lb-hr	Washer; ASTM D3702 Modified

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	106 Âµm/m-Â°C	58.9 Âµin/in-Â°F	ASTM E 831
	@Temperature -40.0 - 40.0 Â°C	@Temperature -40.0 - 104 Â°F	

Thermal Properties	106 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$ Metric	58.9 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$ English	Comments 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	103 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	57.2 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E 831
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
	103 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	57.2 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	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)	146 $\text{Å}^\circ\text{C}$	295 $\text{Å}^\circ\text{F}$	Flatw 80*10*4 sp=64mm; ISO 75/Bf
	156 $\text{Å}^\circ\text{C}$	313 $\text{Å}^\circ\text{F}$	unannealed; ASTM D648
	@Thickness 3.20 mm	@Thickness 0.126 in	
Deflection Temperature at 1.8 MPa (264 psi)	87.0 $\text{Å}^\circ\text{C}$	189 $\text{Å}^\circ\text{F}$	Flatw 80*10*4 sp=64mm; ISO 75/Af
	92.0 $\text{Å}^\circ\text{C}$	198 $\text{Å}^\circ\text{F}$	unannealed; ASTM D648
	@Thickness 3.20 mm	@Thickness 0.126 in	

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