

## SABIC Innovative Plastics LNP LUBRICOMP KP002 Acetal Copoly

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

### Material Notes:

LNP\* LUBRICOMP\* KP002 is a compound based on Acetal Copolymer resin containing 10% PTFE/Silicone. Added feature of this material is: Wear Resistant.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_SABIC-Innovative-Plastics-LNP-LUBRICOMP-KP002-Acetal-Copoly.php](http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-LNP-LUBRICOMP-KP002-Acetal-Copoly.php)

Physical Properties	Metric	English	Comments
Density	1.43 g/cc	0.0517 lb/in <sup>3</sup>	ASTM D792
	1.43 g/cc	0.0517 lb/in <sup>3</sup>	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	
Linear Mold Shrinkage, Transverse	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	
Linear Mold Shrinkage, Transverse	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
Tensile Strength, Yield	46.0 MPa	6670 psi	ASTM D638
	46.0 MPa	6670 psi	ISO 527
Elongation at Break	40.9 %	40.9 %	ASTM D638
Elongation at Yield	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 Modulus Mechanical Properties	2.00 GPa Metric	290 ksi English	ISO 178 Comments
	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 <sup>2</sup>	2.38 ft-lb/in <sup>2</sup>	80*10*4; ISO 180/1A
Izod Impact, Unnotched (ISO)	74.0 kJ/m <sup>2</sup>	35.2 ft-lb/in <sup>2</sup>	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 <sup>-8</sup> mm <sup>3</sup> /N-M	8.00 x 10 <sup>-10</sup> in <sup>3</sup> - min/ft-lb-hr	Washer; ASTM D3702 Modified

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	106 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	58.9 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E 831
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
	106 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	58.9 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	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	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 $\text{Å}^\circ\text{F}$	
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  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  unannealed; ASTM D648
	@Thickness 3.20 mm	@Thickness 0.126 in	

## **Contact Songhan Plastic Technology Co.,Ltd.**

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