

## SABIC Innovative Plastics LNP Lubricomp KI001A Acetal

Category : Polymer , Thermoplastic , Acetal (POM) , Acetal Copolymer, Silicone Filled

### Material Notes:

LNP\* Lubricomp Fulton 441D is an Acetal based compound with Silicone. This data was supplied by SABIC-IP for the Americas region.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_SABIC-Innovative-Plastics-LNP-Lubricomp-KI001A-Acetal.php](http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-LNP-Lubricomp-KI001A-Acetal.php)

Physical Properties	Metric	English	Comments
Density	1.40 g/cc	0.0506 lb/in <sup>3</sup>	ASTM D 792
	1.40 g/cc	0.0506 lb/in <sup>3</sup>	ISO 1183
Moisture Absorption at Equilibrium	0.47 %	0.47 %	23 <sup>o</sup> C / 50% RH; ISO 62
	0.33 %	0.33 %	50% RH; ASTM D 570
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Flow	0.010 - 0.030 cm/cm	0.010 - 0.030 in/in	ASTM D 955
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Transverse	0.010 - 0.030 cm/cm	0.010 - 0.030 in/in	ASTM D 955
	@Time 86400 sec	@Time 24.0 hour	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	60.0 MPa	8700 psi	5 mm/min; ISO 527
	62.0 MPa	8990 psi	Type I, 5 mm/min; ASTM D 638
Tensile Strength, Yield	60.0 MPa	8700 psi	5 mm/min; ISO 527
	62.0 MPa	8990 psi	Type I, 5 mm/min; ASTM D 638
Elongation at Break	24.8 %	24.8 %	5 mm/min; ISO 527
	32 %	32 %	Type I, 5 mm/min; ASTM D 638
Elongation at Yield	22.3 %	22.3 %	Type I, 5 mm/min; ASTM D 638
	24.8 %	24.8 %	5 mm/min; ISO 527
Tensile Modulus	2.98 GPa	432 ksi	1 mm/min; ISO 527
	3.21 GPa	466 ksi	50 mm/min; ASTM D 638
Flexural Strength	69.0 MPa	10000 psi	ISO 178
	2.63 GPa	381 ksi	1.3 mm/min, 50 mm span; ASTM D

Flexural Modulus Mechanical Properties	Metric	English	790 Comments
	2.68 GPa	389 ksi	2 mm/min; ISO 178
Izod Impact, Notched	0.710 J/cm @Temperature 23.0 °C	1.33 ft-lb/in @Temperature 73.4 °F	ASTM D 256
Izod Impact, Unnotched	15.1 J/cm @Temperature 23.0 °C	28.3 ft-lb/in @Temperature 73.4 °F	ASTM D 4812
Izod Impact, Notched (ISO)	9.00 kJ/m <sup>2</sup> @Temperature 23.0 °C	4.28 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	80*10*4; ISO 180/1A
Izod Impact, Unnotched (ISO)	83.0 kJ/m <sup>2</sup> @Temperature 23.0 °C	39.5 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	80*10*4; ISO 180/1U
Impact Test	1.00 J	0.738 ft-lb	Multiaxial Impact; ISO 6603
	7.00 J @Temperature 23.0 °C	5.16 ft-lb @Temperature 73.4 °F	Instrumented Impact Total Energy; ASTM D 3763
Coefficient of Friction, Dynamic	0.41	0.41	ASTM D 3702 Modified
Coefficient of Friction, Static	0.30	0.30	ASTM D 3702 Modified
K (wear) Factor	220 x 10 <sup>-8</sup> mm <sup>3</sup> /N-M	109 x 10 <sup>-10</sup> in <sup>3</sup> - min/ft-lb-hr	Washer; ASTM D 3702 Modified

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	97.8 µm/m-°C @Temperature -30.0 - 30.0 °C	54.3 µin/in-°F @Temperature -22.0 - 86.0 °F	ASTM D 696
CTE, linear, Transverse to Flow	96.9 µm/m-°C @Temperature -30.0 - 30.0 °C	53.8 µin/in-°F @Temperature -22.0 - 86.0 °F	ASTM D 696
Deflection Temperature at 0.46 MPa (66 psi)	157 °C	315 °F	Flatw 80*10*4 sp=64mm; ISO 75/Bf
	162 °C @Thickness 3.20 mm	324 °F @Thickness 0.126 in	unannealed; ASTM D 648
Deflection Temperature at 1.8 MPa (264 psi)	93.0 °C	199 °F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	99.0 °C	210 °F	

Thermal Properties

Metric  
@ Thickness 3.20 mm

English  
@ Thickness 0.126 in

unannealed; ASTM D 648  
Comments

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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