

SABIC Innovative Plastics LNP Lubricomp KCL22 Acetal Copoly

Category : Polymer , Thermoplastic , Acetal (POM) , Acetal Copolymer, Carbon Fiber Filled

Material Notes:

LNP* Lubricomp* KCL22 is a compound based on Acetal Copolymer resin containing PTFE, Carbon Fiber. Added features of this material include: Internally Lubricated, Electrically Conductive. 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-KCL22-Acetal-Copoly.php

Physical Properties	Metric	English	Comments
Density	1.49 g/cc	0.0538 lb/in ³	ASTM D 792
	1.49 g/cc	0.0538 lb/in ³	ISO 1183
Moisture Absorption at Equilibrium	0.20 %	0.20 %	50% RH; ASTM D 570
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Flow	0.0099 cm/cm	0.0099 in/in	ISO 294
	@Time 86400 sec	@Time 24.0 hour	
	0.0090 - 0.011 cm/cm	0.0090 - 0.011 in/in	ASTM D 955
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Transverse	0.015 cm/cm	0.015 in/in	ISO 294
	@Time 86400 sec	@Time 24.0 hour	
	0.014 - 0.016 cm/cm	0.014 - 0.016 in/in	ASTM D 955
	@Time 86400 sec	@Time 24.0 hour	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	102 MPa	14800 psi	ISO 527
	104 MPa	15100 psi	ASTM D 638
Tensile Strength, Yield	103 MPa	14900 psi	ISO 527
	104 MPa	15100 psi	ASTM D 638
Elongation at Break	2.0 %	2.0 %	ISO 527
	2.1 %	2.1 %	ASTM D 638
Elongation at Yield	2.0 %	2.0 %	ISO 527
	2.1 %	2.1 %	ASTM D 638
Tensile Modulus	8.91 GPa	1290 ksi	1 mm/min; ISO 527

Mechanical Properties	Metric 8.96 GPa	English 1300 ksi	Comments 50 mm/min; ASTM D 638
Flexural Strength	146 MPa	21200 psi	ISO 178
	151 MPa	21900 psi	ASTM D 790
Flexural Modulus	7.58 GPa	1100 ksi	ASTM D 790
	7.60 GPa	1100 ksi	ISO 178
Izod Impact, Notched	0.420 J/cm @Temperature 23.0 Â°C	0.787 ft-lb/in @Temperature 73.4 Â°F	ASTM D 256
Izod Impact, Unnotched	4.48 J/cm @Temperature 23.0 Â°C	8.39 ft-lb/in @Temperature 73.4 Â°F	ASTM D 4812
Izod Impact, Notched (ISO)	5.00 kJ/mÂ² @Temperature 23.0 Â°C	2.38 ft-lb/inÂ² @Temperature 73.4 Â°F	80*10*4; ISO 180/1A
Izod Impact, Unnotched (ISO)	25.0 kJ/mÂ² @Temperature 23.0 Â°C	11.9 ft-lb/inÂ² @Temperature 73.4 Â°F	80*10*4; ISO 180/1U
Impact Test	2.00 J	1.48 ft-lb	Multiaxial Impact; ISO 6603
	9.00 J @Temperature 23.0 Â°C	6.64 ft-lb @Temperature 73.4 Â°F	Instrumented Impact Energy @ peak; ASTM D 3763
Coefficient of Friction, Dynamic	0.36	0.36	ASTM D 3702 Modified
K (wear) Factor	179 x 10 ⁻⁸ mmÂ³/N-M	89.0 x 10 ⁻¹⁰ inÂ³- min/ft-lb-hr	Washer; ASTM D 3702 Modified

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	79.0 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	43.9 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ISO 11359-2
	79.2 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	44.0 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ASTM E 831
CTE, linear, Transverse to Flow	66.6 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	37.0 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ASTM E 831

Thermal Properties	67.0 Åm/m-Å°C Metric	37.2 Åm/in-Å°F English	Comments
	@Temperature -40.0 - 40.0 Å°C	@Temperature -40.0 - 104 Å°F	ISO 11359-2
Deflection Temperature at 0.46 MPa (66 psi)	163 Å°C	325 Å°F	Flatw 80*10*4 sp=64mm; ISO 75/Bf
	162 Å°C	324 Å°F	unannealed; ASTM D 648
	@Thickness 3.20 mm	@Thickness 0.126 in	
Deflection Temperature at 1.8 MPa (264 psi)	158 Å°C	316 Å°F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	161 Å°C	322 Å°F	unannealed; ASTM D 648
	@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