

SABIC Innovative Plastics LNP Thermocomp KF003 Acetal Copoly

Category : Polymer , Thermoplastic , Acetal (POM)

Material Notes:

LNP* Thermocomp* KF003 is a compound based on Acetal Copolymer resin containing Glass Fiber. 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-Thermocomp-KF003-Acetal-Copoly.php

Physical Properties	Metric	English	Comments
Density	1.52 g/cc	0.0549 lb/in ³	ASTM D 792
	1.52 g/cc	0.0549 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	0.011 - 0.013 cm/cm	0.011 - 0.013 in/in	ASTM D 955
	@Time 86400 sec	@Time 24.0 hour	
	0.012 cm/cm	0.012 in/in	ISO 294
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Transverse	0.019 - 0.021 cm/cm	0.019 - 0.021 in/in	ASTM D 955
	@Time 86400 sec	@Time 24.0 hour	
	0.020 cm/cm	0.020 in/in	ISO 294
	@Time 86400 sec	@Time 24.0 hour	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	79.0 MPa	11500 psi	ISO 527
	80.0 MPa	11600 psi	ASTM D 638
Tensile Strength, Yield	80.0 MPa	11600 psi	ASTM D 638
	80.0 MPa	11600 psi	ISO 527
Elongation at Break	1.9 %	1.9 %	ISO 527
	2.1 %	2.1 %	ASTM D 638
Elongation at Yield	1.9 %	1.9 %	ISO 527
	2.1 %	2.1 %	ASTM D 638
Tensile Modulus	7.14 GPa	1040 ksi	1 mm/min; ISO 527

Mechanical Properties	Metric 7.53 GPa	English 1100 ksi	Comments 50 mm/min; ASTM D 638
Flexural Strength	115 MPa	16700 psi	ISO 178
	117 MPa	17000 psi	ASTM D 790
Flexural Modulus	6.00 GPa	870 ksi	ISO 178
	6.20 GPa	899 ksi	ASTM D 790
Izod Impact, Notched	0.530 J/cm	0.993 ft-lb/in	ASTM D 256
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
Izod Impact, Unnotched	4.48 J/cm	8.39 ft-lb/in	ASTM D 4812
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
Izod Impact, Notched (ISO)	5.00 kJ/mÂ²	2.38 ft-lb/inÂ²	80*10*4; ISO 180/1A
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
Izod Impact, Unnotched (ISO)	27.0 kJ/mÂ²	12.8 ft-lb/inÂ²	80*10*4; ISO 180/1U
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
Impact Test	2.00 J	1.48 ft-lb	Multiaxial Impact; ISO 6603
	9.00 J	6.64 ft-lb	
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	Instrumented Impact Energy @ peak; ASTM D 3763

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	10.8 Âµm/m-Â°C	6.00 Âµin/in-Â°F	ASTM E 831
	@Temperature -40.0 - 40.0 Â°C	@Temperature -40.0 - 104 Â°F	
	113 Âµm/m-Â°C	62.8 Âµin/in-Â°F	ISO 11359-2
	@Temperature -40.0 - 40.0 Â°C	@Temperature -40.0 - 104 Â°F	
CTE, linear, Transverse to Flow	3.60 Âµm/m-Â°C	2.00 Âµin/in-Â°F	ASTM E 831
	@Temperature -40.0 - 40.0 Â°C	@Temperature -40.0 - 104 Â°F	
	44.3 Âµm/m-Â°C	24.6 Âµin/in-Â°F	ISO 11359-2
	@Temperature -40.0 - 40.0 Â°C	@Temperature -40.0 - 104 Â°F	

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (67 psi)	165 Â°C @Thickness 3.20 mm	323 Â°F @Thickness 0.126 in	Flatw 80*10*4 sp=64mm; ISO 75/Bf unannealed; ASTM D 648
Deflection Temperature at 1.8 MPa (264 psi)	157 Â°C @Thickness 3.20 mm	315 Â°F @Thickness 0.126 in	Flatw 80*10*4 sp=64mm; ISO 75/Af unannealed; ASTM D 648

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