Solvay Specialty Polymers KalixÂ® 3950 Polyamide, High Performance (HPPA), 50% Glass Fiber

Category : Polymer , Renewable/Recycled Polymer , Thermoplastic , Polyphthalamide (PPA) , Polyphthalamide (PPA), 50% Glass Fiber Reinforced

Material Notes:

KalixÂ® 3950 is a 16% bio-sourced, amorphous polyphthalamide (PPA)-based compound with 50% by weight glass fiber reinforcement. This material is uniquely formulated to prevent warpage and flash in parts produced using the injection molding process. Its high stiffness, strength, and impact resistance in comparison to other highly reinforced grades of polyamide characterize the material. The material has been specifically developed to provide a high quality surface finish and fill thin-wall section parts such as those used in mobile electronic devices. The material also provides excellent stain resistance in comparison to other polyamide-based materials.Features: Good Dimensional Stability; Good Impact Resistance; Good Surface Finish; High Flow; High Stiffness; High Strength; Hot Water Moldability; Low Warpage; Minimal Flash; Paintable; Platable; Stain ResistantUses: Cell Phones; Electrical Parts; Electrical/Electronic Applications; Thin-walled PartsInjection Molding Notes: KalixÂ® compounds are shipped in moisture-resistant packages at moisture levels according to specifications. Sealed, undamaged bags should be preferably stored in a dry room at a maximum temperature of 50Â°C (122Â°F) and should be protected from possible damage. If only a portion of a package is used, the remaining material should be transferred into a sealable container. It is recommended that KalixÂ® resins be dried prior to molding.Additional Properties: Biobased Content - ASTM D6866 16 %; Flexural Elongation at Break - 2.5 %Information provided by Solvay Specialty Polymers.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Kalix-3950-Polyamide-High-Performance-HPPA-50-Glass-Fiber.php

Physical Properties	Metric	English	Comments
Density	1.58 g/cc	0.0571 lb/inÂ³	ASTM D792
Filler Content	50 %	50 %	Glass Fiber
Water Absorption	0.16 % @Time 86400 sec	0.16 % @Time 24.0 hour	ISO 62
Linear Mold Shrinkage, Flow	0.00010 cm/cm	0.00010 in/in	ISO 294-4
Linear Mold Shrinkage, Transverse	0.0014 cm/cm	0.0014 in/in	ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	239 MPa	34700 psi	ISO 527-2
Elongation at Break	2.2 %	2.2 %	ISO 527-2
Tensile Modulus	16.7 GPa	2420 ksi	ISO 527-2
Flexural Strength	346 MPa	50200 psi	ISO 178
Flexural Modulus	16.1 GPa	2340 ksi	ISO 178
Izod Impact, Notched (ISO)	15.0 kJ/mÂ²	7.14 ft-lb/inÂ²	Type 1, Notch A; ISO 180

Mechanical Properties	Metric	English	Comments
Izod Impact, Unnotched (ISO)	70.0 kJ/mÂ²	33.3 ft-lb/inÂ²	ISO 180

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	145 Â°C	293 Â°F	HDT B; Unannealed; ISO 75-2/B
Deflection Temperature at 1.8 MPa (264 psi)	137 Â°C	279 Â°F	Unannealed; ISO 75-2/A
Glass Transition Temp, Tg	144 Â°C	291 Â°F	DSC
Flammability, UL94	HB @Thickness >=0.600 mm	HB @Thickness >=0.0236 in	

Electrical Properties	Metric	English	Comments
Dielectric Constant	4.18 @Frequency 2.40e+9 Hz	4.18 @Frequency 2.40e+9 Hz	ASTM D2520
Dissipation Factor	0.012 @Frequency 2.40e+9 Hz	0.012 @Frequency 2.40e+9 Hz	Method B; ASTM D2520

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	270 Â°C	518 Â°F	
Front Barrel Temperature	300 Â°C	572 Â°F	
Melt Temperature	310 - 330 Â°C	590 - 626 Â°F	
Mold Temperature	80.0 - 130 Â°C	176 - 266 Â°F	
Drying Temperature	80.0 Â°C @Time 14400 - 43200 sec	176 Â°F @Time 4.00 - 12.0 hour	
Moisture Content	<= 0.090 %	<= 0.090 %	

Descriptive Properties	Value	Comments
Availability	Asia Pacific	
	Europe	
	North America	
Color	Black; Natural; White	

Descriptive Properties	Value	Comments
Form	Pellets	
Part Marking Code	>PA10I/10T/X-GF50<	ISO 11469
Processing Technique	Injection Molding; Water-Heated Mold Injection Molding	

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