

LG Chemical Lupox® GP1006FD PBT

Category : Polymer , Thermoplastic , Polyester, TP , Polybutylene Terephthalate (PBT)

Material Notes:

Description: Injection Molding, PBT, Flame Retardant, High Impact
Application: IT/OA, Automotive (Connector)
CAS No. 68928-70-1,
155123-66-3, 24968-12-5 and 1309-64-4
Information provided by LG Chemical

Order this product through the following link:

http://www.lookpolymers.com/polymer_LG-Chemical-Lupox-GP1006FD-PBT.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.42 g/cc	1.42 g/cc	ASTM D792
Maximum Moisture Content	0.020	0.020	Injection Molding
Linear Mold Shrinkage, Flow	0.012 - 0.020 cm/cm @Thickness 3.20 mm	0.012 - 0.020 in/in @Thickness 0.126 in	ASTM D955

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	118	118	ASTM D785
Tensile Strength, Yield	51.0 MPa @Thickness 3.20 mm	7400 psi @Thickness 0.126 in	50mm/min; ASTM D638
Elongation at Break	>= 50 % @Thickness 3.20 mm	>= 50 % @Thickness 0.126 in	50mm/min; ASTM D638
Flexural Yield Strength	71.6 MPa @Thickness 3.20 mm	10400 psi @Thickness 0.126 in	2.8mm/min; ASTM D790
Flexural Modulus	2.26 GPa @Thickness 3.20 mm	327 ksi @Thickness 0.126 in	2.8mm/min; ASTM D790
Izod Impact, Notched	0.588 J/cm @Thickness 3.20 mm, Temperature 23.0 Â°C	1.10 ft-lb/in @Thickness 0.126 in, Temperature 73.4 Â°F	ASTM D256

Thermal Properties	Metric	English	Comments
Melting Point	225 Â°C	437 Â°F	@ Break; ASTM D3418
Deflection Temperature at 0.46 MPa (66 psi)	165 Â°C @Thickness 6.40 mm	329 Â°F @Thickness 0.252 in	Unannealed; ASTM D648
Deflection Temperature at 1.8 MPa	62.0 Â°C	144 Â°F	Unannealed; ASTM D648

(264 psi) Thermal Properties	@Thickness 6.40 mm Metric	@Thickness 0.252 in English	Comments
UL RTI, Electrical	75.0 Â°C	167 Â°F	
	@Thickness >=0.550 mm	@Thickness >=0.0217 in	
	130 Â°C	266 Â°F	
	@Thickness >=0.710 mm	@Thickness >=0.0280 in	
	130 Â°C	266 Â°F	
	@Thickness >=1.50 mm	@Thickness >=0.0591 in	
	130 Â°C	266 Â°F	
	@Thickness >=3.00 mm	@Thickness >=0.118 in	
UL RTI, Mechanical with Impact	75.0 Â°C	167 Â°F	
	@Thickness >=0.550 mm	@Thickness >=0.0217 in	
	130 Â°C	266 Â°F	
	@Thickness >=0.710 mm	@Thickness >=0.0280 in	
	130 Â°C	266 Â°F	
	@Thickness >=1.50 mm	@Thickness >=0.0591 in	
	130 Â°C	266 Â°F	
	@Thickness >=3.00 mm	@Thickness >=0.118 in	
UL RTI, Mechanical without Impact	75.0 Â°C	167 Â°F	
	@Thickness >=0.550 mm	@Thickness >=0.0217 in	
	140 Â°C	284 Â°F	
	@Thickness >=0.710 mm	@Thickness >=0.0280 in	
	140 Â°C	284 Â°F	
	@Thickness >=1.50 mm	@Thickness >=0.0591 in	
	140 Â°C	284 Â°F	
	@Thickness >=3.00 mm	@Thickness >=0.118 in	
Flammability, UL94	V-0	V-0	
	@Thickness >=0.550 mm	@Thickness >=0.0217 in	

Thermal Properties	Metric	English	Comments
	@Thickness >=0.710 mm	@Thickness >=0.0280 in	
	V-0	V-0	
	@Thickness >=1.50 mm	@Thickness >=0.0591 in	
	V-0	V-0	
	@Thickness >=3.00 mm	@Thickness >=0.118 in	
	5VA	5VA	
	@Thickness >=3.00 mm	@Thickness >=0.118 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+13 ohm-cm	1.00e+13 ohm-cm	ASTM D257
Dielectric Strength	20.0 kV/mm	508 kV/in	ASTM D149
	@Thickness 1.00 mm	@Thickness 0.0394 in	
Arc Resistance	60 - 120 sec	60 - 120 sec	ASTM D495
Comparative Tracking Index	600 V	600 V	Solution A; IEC 60112
Hot Wire Ignition, HWI	7.0 - 15 sec	7.0 - 15 sec	
	@Thickness >=0.550 mm	@Thickness >=0.0217 in	
	7.0 - 15 sec	7.0 - 15 sec	
	@Thickness >=0.710 mm	@Thickness >=0.0280 in	
	15 - 30 sec	15 - 30 sec	
	@Thickness >=1.50 mm	@Thickness >=0.0591 in	
	15 - 30 sec	15 - 30 sec	
	@Thickness >=3.00 mm	@Thickness >=0.118 in	
High Amp Arc Ignition, HAI	15 - 30 arcs	15 - 30 arcs	
	@Thickness 0.550 mm	@Thickness 0.0217 in	
	>= 120 arcs	>= 120 arcs	
	@Thickness 0.710 mm	@Thickness 0.0280 in	
	>= 120 arcs	>= 120 arcs	

Electrical Properties	@Thickness 1.50 mm Metric	@Thickness 0.0591 in English	Comments
	>= 120 arcs	>= 120 arcs	
	@Thickness 3.00 mm	@Thickness 0.118 in	
High Voltage Arc-Tracking Rate, HVTR	80.0 - 150 mm/min	3.15 - 5.91 in/min	

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	230 - 235 Â°C	446 - 455 Â°F	Injection Molding
Middle Barrel Temperature	235 - 245 Â°C	455 - 473 Â°F	Injection Molding
Front Barrel Temperature	235 - 245 Â°C	455 - 473 Â°F	Injection Molding
Nozzle Temperature	240 - 250 Â°C	464 - 482 Â°F	Injection Molding
Melt Temperature	240 - 250 Â°C	464 - 482 Â°F	Injection Molding
Mold Temperature	40.0 - 80.0 Â°C	104 - 176 Â°F	Injection Molding
Drying Temperature	100 - 120 Â°C	212 - 248 Â°F	Injection Molding
Dry Time	3.00 - 5.00 hour	3.00 - 5.00 hour	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