

BASF Ultrason E 2010 G4 20% Glass Filled PES

Category : Polymer , Thermoplastic , Polyethersulfone (PES) , Polyethersulfone (PES), 20%Glass Fiber Filled

Material Notes:

Ultrason E 2010 G4 is a 20% glass reinforced, medium viscosity injection molding PES grade with high rigidity and strength.

Order this product through the following link:

http://www.lookpolymers.com/polymer_BASF-Ultrason-E-2010-G4-20-Glass-Filled-PES.php

Physical Properties	Metric	English	Comments
Density	1.50 g/cc	0.0542 lb/in ³	ISO 1183
Water Absorption	1.6 %	1.6 %	ISO 62
Moisture Absorption at Equilibrium	0.60 %	0.60 %	23°C/50% R.H.; ISO 62
Viscosity Test	56 cm ³ /g	56 cm ³ /g	Viscosity number
Linear Mold Shrinkage, Flow	0.0036 cm/cm	0.0036 in/in	ISO Data
Linear Mold Shrinkage, Transverse	0.0061 cm/cm	0.0061 in/in	ISO Data
Melt Flow	29 g/10 min @Load 10.0 kg, Temperature 360 °C	29 g/10 min @Load 22.0 lb, Temperature 680 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	205 MPa	29700 psi	ISO 2039-1
Tensile Strength at Break	125 MPa	18100 psi	5mm/min; ISO 527-2
Tensile Strength, Yield	125 MPa	18100 psi	50mm/min; ISO 527-2
Elongation at Break	2.5 %	2.5 %	5mm/min; ISO 527-2
Elongation at Yield	2.5 %	2.5 %	50mm/min; ISO 527-2
Tensile Modulus	7.30 GPa	1060 ksi	Elasticity; ISO 527-2
Shear Modulus	0.200 GPa @Temperature 225 °C	29.0 ksi @Temperature 437 °F	ISO 6721
	0.900 GPa @Temperature 200 °C	131 ksi @Temperature 392 °F	ISO 6721
	0.950 GPa @Temperature 100 °C	138 ksi @Temperature 212 °F	ISO 6721
	1.00 GPa	145 ksi	

Mechanical Properties	Metric @ Temperature 50.0 °C	English @ Temperature 122 °F	ISO 6721 Comments
Izod Impact, Notched (ISO)	6.50 kJ/m ²	3.09 ft-lb/in ²	ISO 180/A
	6.50 kJ/m ² @Temperature -30.0 °C	3.09 ft-lb/in ² @Temperature -22.0 °F	ISO 180/A
Charpy Impact Unnotched	4.70 J/cm ²	22.4 ft-lb/in ²	ISO 179/1eU
	4.50 J/cm ² @Temperature -30.0 °C	21.4 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eU
Charpy Impact, Notched	0.650 J/cm ²	3.09 ft-lb/in ²	ISO 179/1eA
	0.650 J/cm ² @Temperature -30.0 °C	3.09 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA
Tensile Creep Modulus, 1000 hours	5600 MPa	812000 psi	ISO 899-1

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	20.0 µm/m-°C @Temperature 23.0 - 80.0 °C	11.1 µin/in-°F @Temperature 73.4 - 176 °F	ISO 11359-1/-2
	23.0 µm/m-°C @Temperature 140 - 180 °C	12.8 µin/in-°F @Temperature 284 - 356 °F	ISO 180/A
Thermal Conductivity	0.190 W/m-K	1.32 BTU-in/hr-ft ² -°F	DIN 52612-1
Maximum Service Temperature, Air	220 °C	428 °F	
	220 °C	428 °F	short cycle operations
Deflection Temperature at 0.46 MPa (66 psi)	224 °C	435 °F	ISO 75-2
Deflection Temperature at 1.8 MPa (264 psi)	220 °C	428 °F	ISO 75-2
Glass Transition Temp, Tg	225 °C	437 °F	ISO 11357-1/-3
UL RTI, Electrical	180 °C	356 °F	50% decrease of tensile strength after 20000h; 746B
Flammability, UL94	V-0 @Thickness 1.60 mm	V-0 @Thickness 0.0630 in	
	V-0 @Thickness 3.20 mm	V-0 @Thickness 0.126 in	

Thermal Properties	Metric	English	Comments
Glow Wire Test	825 °C	1520 °F	Ignition Temperature; IEC 60695-2-13
	960 °C	1760 °F	Flammability Index; IEC 60695-2-12

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+13 ohm-cm	>= 1.00e+13 ohm-cm	IEC 60093
Surface Resistance	>= 1.00e+14 ohm	>= 1.00e+14 ohm	IEC 60093
Dielectric Constant	4.2	4.2	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	4.2	4.2	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Dielectric Strength	37.0 kV/mm	940 kV/in	IEC 60243-1
Dissipation Factor	0.0020	0.0020	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	0.010	0.010	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Comparative Tracking Index	125 V	125 V	Test Liquid A & B; IEC 60112

Processing Properties	Metric	English	Comments
Melt Temperature	350 - 390 °C	662 - 734 °F	Injection molding
Mold Temperature	150 - 190 °C	302 - 374 °F	Injection molding

Descriptive Properties	Value	Comments
Color	Natural	
Commercial Status	North America and Europe	
Impact Modified	No	
Primary Processing Technique	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