Ultrason® E 2010 G4

Polyether Sulfone

BASF Corporation

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

General			
Material Status	• Commercial: Active		
Availability	• Europe	• North America	
Filler / Reinforcement	• Glass Fiber Reinforcement, 20% Filler by Weight		
Additive	• Ignition Resistant		
Features	• Flame Retardant • Good Flow	• Good Impact Resistance • High Rigidity	• High Strength • Medium Viscosity
Uses	• Automotive Applications • Automotive Electronics	• Electrical/Electronic Applications • Industrial Applications	
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		
Multi-Point Data	• Creep Modulus vs. Time (ISO 11403-1) • Isochronous Stress vs. Strain (ISO 11403-1) • Isothermal Stress vs. Strain (ISO 11403-1)	• Secant Modulus vs. Strain (ISO 11403-1) • Shear Modulus vs. Temperature (ISO 11403-2) • Specific Volume vs Temperature (ISO 11403-2)	• Viscosity vs. Shear Rate (ISO 11403-2)

Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.50	g/cm³	ASTM D792
--	1500	kg/m³	ISO 1183 [2]
Melt volume-flow rate (360°C/10.0 kg)	29.0	cm³/10min	ISO 1133 [2]
Molding Shrinkage			
Flow: 3.18 mm	0.50	%	ASTM D955
Across Flow	0.36	%	ISO 294-4
Flow	0.61	%	ISO 294-4
Water Absorption			
Saturation	1.6	%	ASTM D570 ISO 62 [2]
Equilibrium, 50% RH	0.60	%	ASTM D570
Equilibrium	0.60	%	ISO 62 [2]

Mechanical	Nominal Value	Unit	Test Method
Tensile modulus	7500	MPa	ISO 527-2 [2]
Tensile Strength			
Break, 23°C	130	MPa	ASTM D638
Break	125	MPa	ISO 527-2 [2]
Tensile Strain (Break)	2.5	%	ISO 527-2 [2]
Tensile Creep Modulus (1000 hr)	5600	MPa	ISO 899-1 [2]
Flexural Modulus (23°C)	7300	MPa	ASTM D790

Impact	Nominal Value	Unit	Test Method
Charpy notched impact strength (23°C)	6.50	kJ/m²	ISO 179/1eA [2]
Charpy impact strength			ISO 179/1eU [2]
-30°C	45.0	kJ/m²	
23°C	47.0	kJ/m²	
Notched Izod Impact			
23°C	70.0	J/m	ASTM D256
23°C	6.50	kJ/m²	ISO 180

Dongguan Yi-Ming Plastic Chemical Co., Ltd.

如需要更多物性资料请查阅 www.kedisujiao.com

备注：以上原料物性数据由厂家发布,我公司仅提供参考！数据如有变动，请联系原料生产厂家获知。我公司不承担任何法律责任！

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Tuesday, December 15, 2009

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	215	°C	ASTM D648
1.8 MPa, Unannealed	212	°C	ASTM D648
1.8 MPa	220	°C	ISO 75-2 [2]
Glass Transition Temperature	225	°C	ASTM D3418
CLTE - Flow	0.000020	cm/cm/°C	ISO 11359-2

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity			
1.50 mm	> 1.0E+14	ohms	ASTM D257
--	> 1.0E+14	ohms	IEC 60093 [2]
Volume Resistivity			
1.50 mm	> 1.0E+15	ohm·cm	ASTM D257
--	> 1.0E+13	ohm·m	IEC 60093 [2]
Relative Permittivity			IEC 60250 [2]
100 Hz	4.20		
1 MHz	4.20		
Dissipation Factor			IEC 60250 [2]
100 Hz	0.0020		
1 MHz	0.010		
Comparative tracking index	125		IEC 60112 [2]
Electric strength	37	kV/mm	IEC 60243-1 [2]

Flammability	Nominal Value	Unit	Test Method
Flame Rating - UL (1.50 mm)	V-0		UL 94

UL 746	Nominal Value	Unit	Test Method
RTI Str (1.50 mm)	190	°C	UL 746
RTI Imp (1.50 mm)	180	°C	UL 746
RTI Elec (1.50 mm)	180	°C	UL 746

Injection	Nominal Value	Unit
Drying Temperature	130 to 150	°C
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Processing (Melt) Temp	330 to 390	°C
Mold Temperature	120 to 160	°C
Injection Pressure	3.50 to 12.5	MPa
Injection Rate	Fast	

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.

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