

# Ultrason® E 3010

## Polyether Sulfone

### BASF Corporation

Product Description				
Ultrason E 3010 is an unfilled, higher viscosity injection molding and extrusion PES grade, tougher and with improved chemical resistance.				
General				
Material Status	• Commercial: Active			
Availability	• Europe	• North America		
Additive	• Ignition Resistant			
Features	• Flame Retardant	• Good Flow	• Good Toughness	
	• Good Chemical Resistance	• Good Impact Resistance	• High Viscosity	
Uses	• Automotive Electronics	• Electrical Parts		
	• Bottles	• Film		
Agency Ratings	• FDA 21 CFR 177.2440	• NSF 14		
RoHS Compliance	• RoHS Compliant			
Appearance	• Natural Color			
Forms	• Pellets			
Processing Method	• Extrusion	• Injection Molding		
Multi-Point Data	• Creep Modulus vs. Time (ISO 11403-1)	• Secant Modulus vs. Strain (ISO 11403-1)	• Viscosity vs. Shear Rate (ISO 11403-2)	
	• Isochronous Stress vs. Strain (ISO 11403-1)	• Shear Modulus vs. Temperature (ISO 11403-2)		
	• Isothermal Stress vs. Strain (ISO 11403-1)	• Specific Volume vs. Temperature (ISO 11403-2)		
Physical		Nominal Value	Unit	Test Method
Density		1370	kg/m <sup>3</sup>	ISO 1183 <sup>2</sup>
Melt volume-flow rate (360°C/10.0 kg)		40.0	cm <sup>3</sup> /10min	ISO 1133 <sup>2</sup>
Molding Shrinkage				ISO 294-4
Across Flow		0.85	%	
Flow		0.91	%	
Water Absorption				ISO 62 <sup>2</sup>
Saturation		2.1	%	
Equilibrium		0.70	%	
Mechanical		Nominal Value	Unit	Test Method
Tensile modulus		2700	MPa	ISO 527-2 <sup>2</sup>
Tensile Stress (Yield)		90.0	MPa	ISO 527-2 <sup>2</sup>
Tensile Strain (Yield)		6.7	%	ISO 527-2 <sup>2</sup>
Nominal strain at break		40	%	ISO 527-2 <sup>2</sup>
Tensile Creep Modulus				ISO 899-1 <sup>2</sup>
1 hr		2800	MPa	
1000 hr		2700	MPa	
Flexural Modulus (23°C)		2800	MPa	ISO 178
Flexural Strength (23°C)		129	MPa	ISO 178
Impact		Nominal Value	Unit	Test Method
Charpy notched impact strength				ISO 179/1eA <sup>2</sup>
-30°C		7.50	kJ/m <sup>2</sup>	
23°C		7.50	kJ/m <sup>2</sup>	
Charpy Unnotched Impact Strength				ISO 179
-30°C		No Break		
23°C		No Break		
Thermal		Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa)		195	°C	ISO 75-2 <sup>2</sup>
CLTE - Flow		0.000055	cm/cm/°C	ISO 11359-2

Dongguan Yi-Ming Plastic Chemical Co., Ltd.

如需要更多物性资料请查阅 [www.kedisujiao.com](http://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！

**Ultrason® E 3010**  
**Polyether Sulfone**  
**BASF Corporation**

Tuesday, December 15, 2009

Electrical	Nominal Value	Unit	Test Method
Surface resistivity	1.0E+14	ohms	IEC 60093 <sup>2</sup>
Volume resistivity	> 1.0E+11	ohm·m	IEC 60093 <sup>2</sup>
Relative Permittivity			IEC 60250 <sup>2</sup>
100 Hz	3.90		
1 MHz	3.80		
Dissipation Factor			IEC 60250 <sup>2</sup>
100 Hz	17		
1 MHz	140		
Comparative tracking index	100		IEC 60112 <sup>2</sup>
Electric strength	38	kV/mm	IEC 60243-1 <sup>2</sup>
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**

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.

Dongguan Yi-Ming Plastic Chemical Co., Ltd.

如需要更多物性资料请查阅 [www.kedisujiao.com](http://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！