

# ULTEM™ 2410R resin

Polyether Imide

SABIC Innovative Plastics

## Message:

40% Glass fiber filled, enhanced flow Polyetherimide (Tg 217C) with internal mold release. Resin is RoHS compliant. UL94 V0 and 5VA listing.

General Information			
Filler / Reinforcement	Glass fiber reinforced material, 40% filler by weight		
Additive	demoulding		
RoHS Compliance	RoHS compliance		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.61	g/cm <sup>3</sup>	ASTM D792, ISO 1183
Melt Volume-Flow Rate (MVR) (360°C/5.0 kg)	7.00	cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage - Flow <sup>1</sup>	0.10 - 0.30	%	Internal method
Water Absorption			
24 hr	0.12	%	ASTM D570
Saturated, 23°C	0.80	%	ISO 62
Equilibrium, 23°C, 50% RH	0.40	%	ISO 62
Hardness	Nominal Value	Unit	Test Method
Ball Indentation Hardness (H 358/30)	170	MPa	ISO 2039-1
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	11500	MPa	ISO 527-2/1
Tensile Stress (Break)	180	MPa	ISO 527-2/5
Tensile Strain (Break)	2.0	%	ISO 527-2/5
Flexural Modulus <sup>2</sup>	10000	MPa	ISO 178
Flexural Stress	240	MPa	ISO 178
Taber Abrasion Resistance (1000 Cycles, 1000 g, CS-17 Wheel)	20.0	mg	Internal method
Impact	Nominal Value	Unit	Test Method
Charpy Unnotched Impact Strength <sup>3</sup>			ISO 179/1eU
-30°C	40	kJ/m <sup>2</sup>	ISO 179/1eU
23°C	40	kJ/m <sup>2</sup>	ISO 179/1eU
Notched Izod Impact (23°C)	110	J/m	ASTM D256
Unnotched Izod Impact			
23°C	430	J/m	ASTM D4812
-30°C <sup>4</sup>	35	kJ/m <sup>2</sup>	ISO 180/1U
23°C <sup>5</sup>	35	kJ/m <sup>2</sup>	ISO 180/1U
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature <sup>6</sup>			

0.45 MPa, unannealed, 100 mm span	215	°C	ISO 75-2/Be
1.8 MPa, unannealed, 100 mm span	210	°C	ISO 75-2/Ae
Vicat Softening Temperature			
--	234	°C	ASTM D1525 <sup>7</sup>
--	230	°C	ISO 306/A50
--	217	°C	ISO 306/B50
--	225	°C	ISO 306/B120
Ball Pressure Test (125°C)	Pass		IEC 60695-10-2
Linear thermal expansion coefficient			ISO 11359-2
Flow: 23 to 150°C	1.5E-5	cm/cm/°C	ISO 11359-2
Horizontal: 23 to 150°C	4.5E-5	cm/cm/°C	ISO 11359-2
Thermal Conductivity	0.33	W/m/K	ISO 8302
RTI Elec	105	°C	UL 746
RTI Imp	105	°C	UL 746
RTI	105	°C	UL 746
<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	1.0E+15	ohms·cm	IEC 60093
Dielectric Strength			IEC 60243-1
0.800mm, in oil	35	kV/mm	IEC 60243-1
1.60mm, in oil	26	kV/mm	IEC 60243-1
3.20mm, in oil	16	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
50 Hz	3.50		IEC 60250
60 Hz	3.50		IEC 60250
1 MHz	3.10		IEC 60250
Dissipation Factor			IEC 60250
50 Hz	2.5E-3		IEC 60250
60 Hz	2.5E-3		IEC 60250
1 kHz	2.0E-3		IEC 60250
1 MHz	1.9E-3		IEC 60250
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating			UL 94
0.250 mm	V-0		UL 94
1.50 mm	5VA		UL 94
Glow Wire Flammability Index (3.20 mm)	960	°C	IEC 60695-2-12
Oxygen Index	48	%	ISO 4589-2
<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>	
Drying Temperature	150	°C	
Drying Time	4.0 - 6.0	hr	
Suggested Max Moisture	0.020	%	
Hopper Temperature	80.0 - 100	°C	

Rear Temperature	350 - 390	°C
Middle Temperature	370 - 410	°C
Front Temperature	380 - 420	°C
Nozzle Temperature	370 - 410	°C
Processing (Melt) Temp	370 - 410	°C
Mold Temperature	140 - 180	°C

**NOTE**

1.	Tensile Bar
2.	2.0 mm/min
3.	80*10*4 sp=62mm
4.	80*10*4
5.	80*10*4
6.	120*10*4 mm
7.	标准 B (120°C/h), 载荷2 (50N)

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

**Recommended distributors for this material**

## Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

