

# SABIC XENOY™ PBT/PC X2500UV物性表

属性	典型值	UNITS	测试手段
<b>MECHANICAL</b>			
Tensile Stress, yield	53	MPa	ASTM D638
Tensile Stress, yld, Type I, 50 mm/min	56	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	55	MPa	ASTM D638
Tensile Strain, yield	5	%	ASTM D638
Tensile Strain, break	100	%	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	5	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	80	%	ASTM D638
Tensile Modulus, 50 mm/min	2200	MPa	ASTM D638
Flexural Stress	79	MPa	ASTM D790
Flexural Stress, yld, 1.3 mm/min, 50 mm span	79	MPa	ASTM D790
Flexural Modulus	2100	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2150	MPa	ASTM D790
Taber Abrasion, CS-17, 1 kg	20	mg/1000cy	SABIC method
Tensile Stress, yield, 50 mm/min	57	MPa	ISO 527
Tensile Stress, break, 50 mm/min	56	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	5	%	ISO 527
Tensile Strain, break, 50 mm/min	70	%	ISO 527
Tensile Modulus, 1 mm/min	2200	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	80	MPa	ISO 178
Flexural Modulus, 2 mm/min	2150	MPa	ISO 178
Ball Indentation Hardness, H358/30	95	MPa	ISO 2039-1
<b>IMPACT</b>			
Izod Impact, notched, 23°C	600	J/m	ASTM D256
Izod Impact, notched, 0°C	450	J/m	ASTM D256
Izod Impact, notched, -30°C	200	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	60	J	ASTM D3763

Izod Impact, unnotched 80*10*4 - 30°C	NB		kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	40		kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 - 30°C	25		kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 - 40°C	15		kJ/m <sup>2</sup>	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	50		kJ/m <sup>2</sup>	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	30		kJ/m <sup>2</sup>	ISO 179/1eA
Charpy -30°C, Unnotch Edgew 80*10*4 sp=62mm	NB		kJ/m <sup>2</sup>	ISO 179/1eU
<b>THERMAL</b>				
Vicat Softening Temp, Rate B/50	135		°C	ASTM D1525
HDT, 1.82 MPa, 3.2mm, unannealed	108		°C	ASTM D648
CTE, -40°C to 40°C, flow	8.E-05		1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	8.5E-05		1/°C	ASTM E831
Thermal Conductivity	0.18		W/m-°C	ISO 8302
CTE, 23°C to 80°C, flow	8.2E-05		1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	8.7E-05		1/°C	ISO 11359-2
Ball Pressure Test, 125°C +/- 2°C	PASSES		-	IEC 60695-10-2
Vicat Softening Temp, Rate A/50	145		°C	ISO 306
Vicat Softening Temp, Rate B/50	135		°C	ISO 306
Vicat Softening Temp, Rate B/120	136		°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	108		°C	ISO 75/Af
<b>PHYSICAL</b>				
Specific Gravity	1.21		-	ASTM D792
Mold Shrinkage on Tensile Bar, flow	0.5-0.8		%	SABIC method
Mold Shrinkage, flow, 3.2 mm	0.5-0.8		%	SABIC method
Mold Shrinkage on Tensile Bar, xflow	0.5-0.8		%	SABIC method
Melt Flow Rate, 265°C/2.16kgf	9		g/10 min	ASTM D1238
Density	1.21		g/cm <sup>3</sup>	ISO 1183
Water Absorption, (23°C/saturated)	0.7		%	ISO 62-1

Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
Melt Volume Rate, MVR at 265°C/1.2 kg	4	cm <sup>3</sup> /10 min	ISO 1133
<b>ELECTRICAL</b>			
Volume Resistivity	>1.E+14	Ω.cm	IEC 60093
Surface Resistivity, ROA	>1.E+15	Ω	IEC 60093
Dielectric Strength, in oil, 3.2 mm	17	kV/mm	IEC 60243-1
Relative Permittivity, 1 MHz	3.1	-	IEC 60250
Dissipation Factor, 50/60 Hz	0.002	-	IEC 60250
Dissipation Factor, 1 MHz	0.02	-	IEC 60250
Relative Permittivity, 50/60 Hz	3.3	-	IEC 60250
<b>FLAME CHARACTERISTICS</b>			
UL Compliant, 94HB Flame Class Rating	1.5	mm	UL 94 by SABIC-IP
Glow Wire Flammability Index 750°C, passes at	2.7	mm	IEC 60695-2-12
<b>Injection Molding</b>			
Drying Temperature	110 - 120	°C	
Drying Time	4 - 6	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	265 - 275	°C	
Nozzle Temperature	260 - 275	°C	
Front - Zone 3 Temperature	260 - 280	°C	
Middle - Zone 2 Temperature	250 - 275	°C	
Rear - Zone 1 Temperature	240 - 270	°C	
Hopper Temperature	60 - 80	°C	
Mold Temperature	60 - 100	°C	

此数据由我们从该材料的生产商处获得。我们尽最大努力确保此数据的准确性，但是我们对这些数据值不承担任何责任，并强烈建议在最终选料前，就数据值与材料供应商进行验证。