

# SABIC XENOY™ PBT/PC X4830物性表

属性	典型值	UNITS	测试手段
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 50 mm/min	60	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	60	MPa	ASTM D638
Tensile Stress, yld, Type I, 5 mm/min	56	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	60	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	4.1	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	140	%	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	4.5	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	150	%	ASTM D638
Tensile Modulus, 5 mm/min	3400	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	96	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	3100	MPa	ASTM D790
Taber Abrasion, CS-17, 1 kg	30	mg/1000cy	SABIC method
Tensile Stress, yield, 5 mm/min	55	MPa	ISO 527
Tensile Stress, break, 5 mm/min	60	MPa	ISO 527
Tensile Stress, yield, 50 mm/min	61	MPa	ISO 527
Tensile Stress, break, 50 mm/min	55	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4.1	%	ISO 527
Tensile Strain, break, 5 mm/min	120	%	ISO 527
Tensile Strain, yield, 50 mm/min	4.2	%	ISO 527
Tensile Strain, break, 50 mm/min	110	%	ISO 527
Tensile Modulus, 1 mm/min	3200	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	90	MPa	ISO 178
Flexural Modulus, 2 mm/min	2900	MPa	ISO 178
Ball Indentation Hardness, H358/30	105	MPa	ISO 2039-1

IMPACT			
Izod Impact, notched, 23°C	600	J/m	ASTM D256
Izod Impact, notched, 0°C	150	J/m	ASTM D256
Izod Impact, notched, -30°C	120	J/m	ASTM D256
Multiaxial Impact	110	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	70	J	ASTM D3763
Instrumented Impact Total Energy, -20°C	70	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m <sup>2</sup>	ISO 180/1U
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	45	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 0°C	15	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	9	kJ/m <sup>2</sup>	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	40	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	12	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	NB	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*4 sp=62mm	NB	kJ/m <sup>2</sup>	ISO 179/1eU
THERMAL			
Vicat Softening Temp, Rate B/50	133	°C	ASTM D1525
HDT, 0.45 MPa, 3.2 mm, unannealed	125	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	106	°C	ASTM D648
CTE, -40°C to 40°C, flow	6.E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	8.2E-05	1/°C	ASTM E831
Thermal Conductivity	0.2	W/m-°C	ISO 8302
CTE, -30°C to 80°C, flow	7.2E-05	1/°C	ISO 11359-2
CTE, -30°C to 80°C, xflow	9.E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	133	°C	ISO 306
Vicat Softening Temp, Rate B/120	135	°C	ISO 306

HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	119	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	97	°C	ISO 75/Af
<b>PHYSICAL</b>			
Specific Gravity	1.27	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.7-0.9	%	SABIC method
Melt Flow Rate, 266°C/5.0 kgf	7	g/10 min	ASTM D1238
Density	1.27	g/cm <sup>3</sup>	ISO 1183
Water Absorption, (23°C/saturated)	0.42	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.14	%	ISO 62
Melt Volume Rate, MVR at 265°C/5.0 kg	6	cm <sup>3</sup> /10 min	ISO 1133
<b>Injection Molding</b>			
Drying Temperature	90-100	°C	
Drying Time	2-4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	255-270	°C	
Nozzle Temperature	250-265	°C	
Front - Zone 3 Temperature	250-270	°C	
Middle - Zone 2 Temperature	240-265	°C	
Rear - Zone 1 Temperature	230-250	°C	
Hopper Temperature	40-60	°C	
Mold Temperature	60-80	°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。