

# SABIC XENOY™ PBT/PC 1105物性表

属性	典型值	UNITS	测试手段
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 50 mm/min	48	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	47	MPa	ASTM D638
Tensile Stress, yld, Type I, 5 mm/min	45	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	46	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	4.2	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	120	%	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	4.1	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	110	%	ASTM D638
Tensile Modulus, 50 mm/min	2010	MPa	ASTM D638
Tensile Modulus, 5 mm/min	1980	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	76	MPa	ASTM D790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	74	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	1900	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	52	MPa	ISO 527
Tensile Stress, break, 50 mm/min	50	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	4.5	%	ISO 527
Tensile Strain, break, 50 mm/min	116	%	ISO 527
Tensile Modulus, 1 mm/min	2070	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	78	MPa	ISO 178
Flexural Strain, break, 2 mm/min	7.3	%	ISO 178
Flexural Modulus, 2 mm/min	2010	MPa	ISO 178
Hardness, Shore D	79	-	ISO 868
<b>IMPACT</b>			
Izod Impact, notched, 23°C	755	J/m	ASTM D256

Izod Impact, notched, 0°C	715	J/m	ASTM D256
Izod Impact, notched, -10°C	695	J/m	ASTM D256
Izod Impact, notched, -20°C	687	J/m	ASTM D256
Izod Impact, notched, -30°C	489	J/m	ASTM D256
Izod Impact, notched, -40°C	372	J/m	ASTM D256
Izod Impact, notched 80*10*4 +23°C	63	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 - 30°C	51	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 - 40°C	34	kJ/m <sup>2</sup>	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	62	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	47	kJ/m <sup>2</sup>	ISO 179/1eA
<b>THERMAL</b>			
Vicat Softening Temp, Rate B/50	122	°C	ASTM D1525
HDT, 0.45 MPa, 6.4 mm, unannealed	115	°C	ASTM D648
HDT, 1.82 MPa, 6.4 mm, unannealed	97	°C	ASTM D648
Vicat Softening Temp, Rate B/50	122	°C	ISO 306
Vicat Softening Temp, Rate B/120	123	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	109	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	90	°C	ISO 75/Af
<b>PHYSICAL</b>			
Specific Gravity	1.2	-	ASTM D792
Specific Volume	1.2	cm <sup>3</sup> /g	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.8-1	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.8-1	%	SABIC method
Melt Flow Rate, 250°C/5.0 kgf	16	g/10 min	ASTM D1238
Density	1.2	g/cm <sup>3</sup>	ISO 1183
Melt Flow Rate, 250°C/5.0 kg	16	g/10 min	ISO 1133
<b>Injection Molding</b>			
Drying Temperature	110	°C	
Drying Time	4 - 6	Hrs	

Drying Time (Cumulative)	8	Hrs
Maximum Moisture Content	0.02	%
Melt Temperature	260 - 275	°C
Nozzle Temperature	255 - 270	°C
Front - Zone 3 Temperature	255 - 275	°C
Middle - Zone 2 Temperature	250 - 270	°C
Rear - Zone 1 Temperature	245 - 265	°C
Mold Temperature	65 - 90	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	50 - 80	rpm
Shot to Cylinder Size	50 - 80	%
Vent Depth	0.013 - 0.02	mm

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。