

# SABIC VALOX™ PBT PDR4922物性表

属性	典型值	UNITS	测试手段
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 50 mm/min	85	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	81	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	2.4	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	3.3	%	ASTM D638
Tensile Modulus, 50 mm/min	5410	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	133	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	4580	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	85	MPa	ISO 527
Tensile Stress, break, 50 mm/min	81	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	3	%	ISO 527
Tensile Strain, break, 50 mm/min	3.6	%	ISO 527
Tensile Modulus, 1 mm/min	5230	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	130	MPa	ISO 178
Flexural Modulus, 2 mm/min	4860	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, notched, 23°C	102	J/m	ASTM D256
Izod Impact, notched, -30°C	58	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	8	J	ASTM D3763
Izod Impact, notched 80*10*4 +23°C	10	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	6	kJ/m <sup>2</sup>	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	8	kJ/m <sup>2</sup>	ISO 179/1eA
<b>THERMAL</b>			
Vicat Softening Temp, Rate B/50	200	°C	ASTM D1525

HDT, 0.45 MPa, 3.2 mm, unannealed	216	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	184	°C	ASTM D648
CTE, -40°C to 40°C, flow	4.18E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	1.14E-04	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	4.39E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.18E-04	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	195	°C	ISO 306
Vicat Softening Temp, Rate B/120	196	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	170	°C	ISO 75/Af
<b>PHYSICAL</b>			
Specific Gravity	1.4	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.16	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.94	%	SABIC method
Melt Flow Rate, 250°C/2.16 kgf	13.4	g/10 min	ASTM D1238
Density	1.4	g/cm <sup>3</sup>	ISO 1183
Water Absorption, (23°C/saturated)	0.03	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.03	%	ISO 62
Melt Volume Rate, MVR at 250°C/2.16 kg	12	cm <sup>3</sup> /10 min	ISO 1133
<b>Injection Molding</b>			
Drying Temperature	120	°C	
Drying Time	3 - 4	Hrs	
Drying Time (Cumulative)	12	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	250 - 265	°C	
Nozzle Temperature	245 - 260	°C	
Front - Zone 3 Temperature	250 - 265	°C	
Middle - Zone 2 Temperature	245 - 260	°C	
Rear - Zone 1 Temperature	240 - 255	°C	
Mold Temperature	50 - 75	°C	
Back Pressure	0.3 - 0.7	MPa	
Screw Speed	50 - 100	rpm	
Shot to Cylinder Size	40 - 80	%	

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Vent Depth

0.025 - 0.038

mm

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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。