

SABIC VALOX™ PBT 8032U物性表

属性	典型值	UNITS	测试手段
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	115	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	115	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	2	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2	%	ASTM D638
Tensile Modulus, 5 mm/min	9950	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	165	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	8450	MPa	ASTM D790
Taber Abrasion, CS-17, 1 kg	30	mg/1000cy	SABIC method
Tensile Stress, yield, 5 mm/min	145	MPa	ISO 527
Tensile Stress, break, 5 mm/min	145	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.4	%	ISO 527
Tensile Strain, break, 5 mm/min	2.5	%	ISO 527
Tensile Modulus, 1 mm/min	9500	MPa	ISO 527
Flexural Stress, break, 2 mm/min	210	MPa	ISO 178
Flexural Modulus, 2 mm/min	8500	MPa	ISO 178
Ball Indentation Hardness, H358/30	110	MPa	ISO 2039-1
Hardness, Rockwell R	119	-	ISO 2039-2
IMPACT			
Izod Impact, unnotched, 23°C	480	J/m	ASTM D4812
Izod Impact, unnotched, -30°C	470	J/m	ASTM D4812
Izod Impact, notched, 23°C	57	J/m	ASTM D256
Izod Impact, notched, -30°C	48	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	8	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	45	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -30°C	40	kJ/m ²	ISO 180/1U

Izod Impact, notched 80*10*4 +23°C	9		kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 0°C	8		kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	8		kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	9		kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	9		kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	45		kJ/m ²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*4 sp=62mm	40		kJ/m ²	ISO 179/1eU
THERMAL				
Vicat Softening Temp, Rate A/50	220		°C	ASTM D1525
Vicat Softening Temp, Rate B/50	202		°C	ASTM D1525
HDT, 0.45 MPa, 3.2 mm, unannealed	208		°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	190		°C	ASTM D648
CTE, -40°C to 40°C, flow	2.5E-05		1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.5E-05		1/°C	ASTM E831
CTE, 23°C to 60°C, flow	2.2E-05		1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	8.1E-05		1/°C	ISO 11359-2
Ball Pressure Test, 125°C +/- 2°C	PASSES		-	IEC 60695-10-2
Vicat Softening Temp, Rate A/50	220		°C	ISO 306
Vicat Softening Temp, Rate B/50	202		°C	ISO 306
Vicat Softening Temp, Rate B/120	204		°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	217		°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	195		°C	ISO 75/Ae
PHYSICAL				
Specific Gravity	1.58		-	ASTM D792
Mold Shrinkage on Tensile Bar, flow	0.4-0.8		%	SABIC method
Mold Shrinkage, flow, 3.2 mm	0.4-0.8		%	SABIC method
Mold Shrinkage on Tensile Bar, xflow	0.6-1		%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.6-1		%	SABIC method

Melt Flow Rate, 265°C/2.16kgf	15	g/10 min	ASTM D1238
Density	1.53	g/cm ³	ISO 1183
Water Absorption, (23°C/saturated)	0.16	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.05	%	ISO 62
Melt Volume Rate, MVR at 265°C/2.16 kg	15	cm ³ /10 min	ISO 1133
ELECTRICAL			
Comparative Tracking Index (UL {PLC})	2	PLC Code	UL 746A
Volume Resistivity	>1.E+15	Ω.cm	IEC 60093
Surface Resistivity, ROA	>1.E+15	Ω	IEC 60093
Dielectric Strength, in oil, 0.8 mm	27	kV/mm	IEC 60243-1
Dielectric Strength, in oil, 1.6 mm	23	kV/mm	IEC 60243-1
Dielectric Strength, in oil, 3.2 mm	15	kV/mm	IEC 60243-1
Relative Permittivity, 100 Hz	3.6	-	IEC 60250
Relative Permittivity, 1 MHz	3.2	-	IEC 60250
Dissipation Factor, 50/60 Hz	0.0008	-	IEC 60250
Dissipation Factor, 1 MHz	0.013	-	IEC 60250
Comparative Tracking Index	300	V	IEC 60112
Relative Permittivity, 50/60 Hz	3.3	-	IEC 60250
FLAME CHARACTERISTICS			
UL Compliant, 94HB Flame Class Rating	1.6	mm	UL 94 by SABIC-IP
Injection Molding			
Drying Temperature	110 - 120	°C	
Drying Time	4 - 6	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	260 - 285	°C	
Nozzle Temperature	265 - 275	°C	
Front - Zone 3 Temperature	260 - 280	°C	
Middle - Zone 2 Temperature	255 - 280	°C	
Rear - Zone 1 Temperature	240 - 260	°C	
Hopper Temperature	40 - 60	°C	
Mold Temperature	60 - 110	°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。