

SABIC VALOX™ PBT 508物性表

属性	典型值	UNITS	测试手段
MECHANICAL			
Taber Abrasion, CS-17, 1 kg	50	mg/1000cy	SABIC method
Tensile Stress, break, 5 mm/min	115	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2	%	ISO 527
Tensile Modulus, 1 mm/min	9000	MPa	ISO 527
Flexural Stress, break, 2 mm/min	170	MPa	ISO 178
Flexural Modulus, 2 mm/min	8000	MPa	ISO 178
Ball Indentation Hardness, H358/30	122	MPa	ISO 2039-1
Hardness, Rockwell R	119	-	ISO 2039-2
IMPACT			
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	8	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	7	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	7	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	6	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	45	kJ/m ²	ISO 179/1eU
THERMAL			
CTE, 23°C to 80°C, flow	2.5E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	1.E-04	1/°C	ISO 11359-2
CTE, 23°C to 150°C, xflow	1.05E-04	1/°C	ISO 11359-2
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate A/50	217	°C	ISO 306
Vicat Softening Temp, Rate B/50	170	°C	ISO 306
Vicat Softening Temp, Rate B/120	175	°C	ISO 306

HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	206	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	160	°C	ISO 75/Ae
Relative Temp Index, Elec	125	°C	UL 746B
Relative Temp Index, Mech w/impact	110	°C	UL 746B
Relative Temp Index, Mech w/o impact	125	°C	UL 746B
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow	0.4-0.6	%	SABIC method
Mold Shrinkage on Tensile Bar, xflow	0.5-0.9	%	SABIC method
Density	1.5	g/cm ³	ISO 1183
Water Absorption, (23°C/saturated)	0.09	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.06	%	ISO 62
Melt Volume Rate, MVR at 250°C/2.16 kg	8	cm ³ /10 min	ISO 1133
ELECTRICAL			
Volume Resistivity	>1.E+15	Ω.cm	IEC 60093
Surface Resistivity, ROA	>1.E+15	Ω	IEC 60093
Dielectric Strength, shorttime, 1.0mm	24	kV/mm	IEC 60243-1
Dielectric Strength, in oil, 0.8 mm	30	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	16	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	0.001	-	IEC 60250
Dissipation Factor, 100 Hz	0.0014	-	IEC 60250
Dissipation Factor, 1 MHz	0.013	-	IEC 60250
Comparative Tracking Index	250	V	IEC 60112
Comparative Tracking Index, M	150	V	IEC 60112
Relative Permittivity, 50/60 Hz	3.3	-	IEC 60250
FLAME CHARACTERISTICS			
UL Yellow Card Link	E45329-236608	-	-

UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
UL Recognized, 94HB Flame Class Rating 2nd value	3	mm	UL 94
Glow Wire Flammability Index 750°C, passes at	1	mm	IEC 60695-2-12
Oxygen Index (LOI)	21	%	ISO 4589

Injection Molding

Drying Temperature	110-120	°C
Drying Time	2-4	Hrs
Maximum Moisture Content	0.02	%
Melt Temperature	250-270	°C
Nozzle Temperature	240-260	°C
Front - Zone 3 Temperature	245-265	°C
Middle - Zone 2 Temperature	240-255	°C
Rear - Zone 1 Temperature	230-245	°C
Hopper Temperature	40-60	°C
Mold Temperature	40-100	°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。