

SABIC VALOX™ PBT HX312C物性表

属性	典型值	UNITS	测试手段
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	51	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	30	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	6	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	25	%	ASTM D638
Tensile Modulus, 50 mm/min	2500	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	82	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2340	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	58	MPa	ISO 527
Tensile Stress, break, 50 mm/min	30	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6	%	ISO 527
Tensile Strain, break, 50 mm/min	25	%	ISO 527
Tensile Modulus, 1 mm/min	2500	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	85	MPa	ISO 178
Flexural Modulus, 2 mm/min	2400	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	53	J/m	ASTM D256
Izod Impact, notched, -30°C	53	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	40	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -30°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	3	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	3	kJ/m ²	ISO 179/1eA

Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	2	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	NB	kJ/m ²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*4 sp=62mm	NB	kJ/m ²	ISO 179/1eU

THERMAL

Vicat Softening Temp, Rate B/50	175	°C	ASTM D1525
HDT, 1.82 MPa, 3.2mm, unannealed	54	°C	ASTM D648
CTE, -40°C to 40°C, flow	1.E-04	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	1.E-04	1/°C	ASTM E831
CTE, 23°C to 80°C, flow	1.E-04	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	1.E-04	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	175	°C	ISO 306
Vicat Softening Temp, Rate B/120	165	°C	ISO 306
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	58	°C	ISO 75/Ae

PHYSICAL

Specific Gravity	1.31	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.9-1.6	%	SABIC method
Melt Flow Rate, 250°C/1.2 kgf	35	g/10 min	ASTM D1238
Density	1.31	g/cm ³	ISO 1183
Water Absorption, (23°C/saturated)	0.35	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.08	%	ISO 62
Melt Volume Rate, MVR at 250°C/1.2 kg	31	cm ³ /10 min	ISO 1133

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。