

SABIC VALOX™ PBT HX215HP物性表

属性	典型值	UNITS	测试手段
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	60	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	26	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	3.7	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	10	%	ASTM D638
Tensile Modulus, 5 mm/min	2700	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	89	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2500	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	50	MPa	ISO 527
Tensile Stress, break, 50 mm/min	49	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	3.2	%	ISO 527
Tensile Strain, break, 50 mm/min	10	%	ISO 527
Tensile Modulus, 1 mm/min	2600	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	80	MPa	ISO 178
Flexural Modulus, 2 mm/min	2260	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	30	J/m	ASTM D256
Izod Impact, notched, -30°C	30	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	20	J	ASTM D3763
Izod Impact, notched 80*10*4 +23°C	2	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	2	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	6	kJ/m ²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	180	°C	ASTM D1525

HDT, 0.45 MPa, 3.2 mm, unannealed	150	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	54	°C	ASTM D648
CTE, -40°C to 40°C, flow	7.6E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.8E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	7.6E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.8E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	183	°C	ISO 306
Vicat Softening Temp, Rate B/120	180	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	49	°C	ISO 75/Af

PHYSICAL

Specific Gravity	1.31	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	1.5-2	%	SABIC method
Melt Flow Rate, 250°C/2.16 kgf	80	g/10 min	ASTM D1238
Density	1.31	g/cm ³	ISO 1183
Water Absorption, (23°C/saturated)	0.34	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.08	%	ISO 62
Melt Volume Rate, MVR at 250°C/2.16 kg	70	cm ³ /10 min	ISO 1133

Injection Molding

Drying Temperature	120	°C	
Drying Time	3-4	Hrs	
Drying Time (Cumulative)	12	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	245-260	°C	
Nozzle Temperature	240-255	°C	
Front - Zone 3 Temperature	245-260	°C	
Middle - Zone 2 Temperature	240-255	°C	
Rear - Zone 1 Temperature	230-250	°C	
Mold Temperature	50-75	°C	
Back Pressure	0.3-0.7	MPa	
Screw Speed	50-100	rpm	
Shot to Cylinder Size	40-80	%	
Vent Depth	0.013-0.025	mm	

Compounding Extrusion

Drying Temperature	110-120	°C
Drying Time	4-6	Hrs
Drying Time (Cumulative)	8	Hrs
Maximum Moisture Content	0	%
Melt Temperature	245-260	°C
Barrel - Zone 1 Temperature	200-230	°C
Barrel - Zone 2 Temperature	240-255	°C
Barrel - Zone 3 Temperature	240-275	°C
Barrel - Zone 4 Temperature	240-275	°C
Adapter Temperature	240-275	°C
Die Temperature	240-275	°C
Waterbath Temperature	25-35	°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。