

SABIC CYCOLOY™ PC/ABS XCY620S物性表

属性	典型值	UNITS	测试手段
MECHANICAL			
Flexural Stress, yld, 1.3 mm/min, 50 mm span	86	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2300	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	54	MPa	ISO 527
Tensile Stress, break, 50 mm/min	56	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	4.5	%	ISO 527
Tensile Strain, break, 50 mm/min	100	%	ISO 527
Tensile Modulus, 1 mm/min	2200	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	82	MPa	ISO 178
Flexural Modulus, 2 mm/min	2200	MPa	ISO 178
IMPACT			
Instrumented Dart Impact Total Energy, 23°C	55	J	ASTM D3763
Instrumented Dart Impact Total Energy, -30°C	65	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	55	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	40	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	60	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	45	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	129	°C	ASTM D1525

HDT, 0.45 MPa, 3.2 mm, unannealed	128	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	108	°C	ASTM D648
CTE, -40°C to 40°C, flow	7.E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.E-05	1/°C	ASTM E831
Ball Pressure Test, 75°C +/- 2°C	PASSES	-	IEC 60695-10-2
Ball Pressure Test, approximate maximum	100	°C	IEC 60695-10-2
Vicat Softening Temp, Rate B/120	130	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	126	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	106	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.14	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.5-0.7	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.5-0.7	%	SABIC method
Density	1.14	g/cm ³	ISO 1183
Water Absorption, (23°C/24hrs)	0.3	%	ISO 62-1
Water Absorption, (23°C/saturated)	0.4	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.13	%	ISO 62
Melt Volume Rate, MVR at 260°C/5.0 kg	20	cm ³ /10 min	ISO 1133
Melt Volume Rate, MVR at 265°C/5.0 kg	25	cm ³ /10 min	ISO 1133
ELECTRICAL			
Volume Resistivity	>1.E+16	Ω.cm	IEC 60093
Surface Resistivity, ROA	>1.E+16	Ω	IEC 60093
Dielectric Strength, in oil, 0.8 mm	39	kV/mm	IEC 60243-1
Dielectric Strength, in oil, 1.6 mm	25	kV/mm	IEC 60243-1
Dielectric Strength, in oil, 3.2 mm	17	kV/mm	IEC 60243-1
Injection Molding			
Drying Temperature	95-105	°C	
Drying Time	2-4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	260-290	°C	

Nozzle Temperature	240-280	°C
Front - Zone 3 Temperature	250-290	°C
Middle - Zone 2 Temperature	250-290	°C
Rear - Zone 1 Temperature	230-260	°C
Hopper Temperature	60-80	°C
Mold Temperature	60-90	°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。