

SABIC CYCOLOY™ PC/ABS XCY630物性表

属性	典型值	UNITS	测试手段
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	54	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	53	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	4.5	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	120	%	ASTM D638
Tensile Modulus, 5 mm/min	2300	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	2300	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	54	MPa	ISO 527
Tensile Stress, break, 50 mm/min	53	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	4.5	%	ISO 527
Tensile Strain, break, 50 mm/min	120	%	ISO 527
Tensile Modulus, 1 mm/min	2250	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	82	MPa	ISO 178
Flexural Modulus, 2 mm/min	2200	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	590	J/m	ASTM D256
Izod Impact, notched, -30°C	430	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	55	J	ASTM D3763
Instrumented Dart Impact Total Energy, -30°C	67	J	ASTM D3763
Izod Impact, notched 80*10*3 +23°C	65	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*3 -30°C	30	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	65	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	30	kJ/m ²	ISO 179/1eA

THERMAL			
Vicat Softening Temp, Rate B/50	126	°C	ASTM D1525
HDT, 1.82 MPa, 3.2mm, unannealed	107	°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
Thermal Conductivity	0.2	W/m-°C	ISO 8302
CTE, -40°C to 40°C, flow	8.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	8.E-05	1/°C	ISO 11359-2
Ball Pressure Test, 75°C +/- 2°C	Pass	-	IEC 60695-10-2
Vicat Softening Temp, Rate B/50	126	°C	ISO 306
Vicat Softening Temp, Rate B/120	127	°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	105	°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
Melt Flow Rate, 260°C/5.0 kgf	26	g/10 min	ASTM D1238
Density	1.14	g/cm ³	ISO 1183
Water Absorption, (23°C/saturated)	0.4	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62
Melt Volume Rate, MVR at 260°C/5.0 kg	22	cm ³ /10 min	ISO 1133
Melt Viscosity, 260°C, 1500 sec-1	170	Pa-s	ISO 11443
ELECTRICAL			
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	35	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。