

# SABIC CYCOLAC™ ABS X11物性表

属性	典型值	UNITS	测试手段
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 5 mm/min	42	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	33	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	2.6	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	27	%	ASTM D638
Tensile Modulus, 5 mm/min	2370	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	71	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2290	MPa	ASTM D790
Hardness, Rockwell R	104	-	ASTM D785
Tensile Stress, yield, 50 mm/min	46	MPa	ISO 527
Tensile Stress, break, 50 mm/min	35	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	2.6	%	ISO 527
Tensile Strain, break, 50 mm/min	18	%	ISO 527
Tensile Modulus, 1 mm/min	2350	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	69	MPa	ISO 178
Flexural Modulus, 2 mm/min	2170	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, notched, 23°C	300	J/m	ASTM D256
Izod Impact, notched, 23°C, 6.4mm	240	J/m	ASTM D256
Izod Impact, notched 80*10*4 +23°C	25	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	10	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	9	kJ/m <sup>2</sup>	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	25	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	11	kJ/m <sup>2</sup>	ISO 179/1eA

<b>THERMAL</b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	99	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	86	°C	ASTM D648
HDT, 1.82 MPa, 6.4 mm, unannealed	93	°C	ASTM D648
Vicat Softening Temp, Rate B/50	104	°C	ISO 306
Vicat Softening Temp, Rate B/120	106	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	85	°C	ISO 75/Af
Relative Temp Index, Elec	60	°C	UL 746B
Relative Temp Index, Mech w/impact	60	°C	UL 746B
Relative Temp Index, Mech w/o impact	60	°C	UL 746B
<b>PHYSICAL</b>			
Specific Gravity	1.04	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.5-0.8	%	SABIC method
Melt Flow Rate, 230°C/3.8 kg	3.5	g/10 min	ASTM D1238
Melt Flow Rate, 260°C/5.0 kgf	18	g/10 min	ASTM D1238
Melt Flow Rate, 220°C/10.0 kg	10	g/10 min	ISO 1133
<b>FLAME CHARACTERISTICS</b>			
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
<b>Injection Molding</b>			
Drying Temperature	90-95	°C	
Drying Time	2-4	Hrs	
Drying Time (Cumulative)	8	Hrs	
Maximum Moisture Content	0.1	%	
Melt Temperature	230-275	°C	
Nozzle Temperature	230-275	°C	
Front - Zone 3 Temperature	230-255	°C	
Middle - Zone 2 Temperature	210-225	°C	
Rear - Zone 1 Temperature	195-210	°C	
Mold Temperature	50-80	°C	
Back Pressure	0.3-0.7	MPa	

Screw Speed	30-60	rpm
Shot to Cylinder Size	50-70	%
Vent Depth	0.038-0.051	mm

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。