

# SABIC LEXAN™ PC IR2840物性表

属性	典型值	UNITS	测试手段
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 50 mm/min	63	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	68	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	7	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	135	%	ASTM D638
Tensile Modulus, 5 mm/min	2310	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	97	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2300	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	63	MPa	ISO 527
Tensile Stress, break, 50 mm/min	70	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6	%	ISO 527
Tensile Strain, break, 50 mm/min	120	%	ISO 527
Tensile Modulus, 1 mm/min	2350	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	90	MPa	ISO 178
Flexural Modulus, 2 mm/min	2300	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, unnotched, 23°C	3204	J/m	ASTM D4812
Izod Impact, notched, 23°C	850	J/m	ASTM D256
Izod Impact, notched, -30°C	139	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	65	J	ASTM D3763
Izod Impact, notched 80*10*4 +23°C	65	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
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	95	kJ/m <sup>2</sup>	ISO 179/1eA
<b>THERMAL</b>			
Vicat Softening Temp, Rate B/50	154	°C	ASTM D1525

HDT, 0.45 MPa, 6.4 mm, unannealed	137	°C	ASTM D648
HDT, 1.82 MPa, 6.4 mm, unannealed	132	°C	ASTM D648
CTE, -40°C to 40°C, flow	6.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.E-05	1/°C	ISO 11359-2
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate B/50	144	°C	ISO 306
Vicat Softening Temp, Rate B/120	145	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	127	°C	ISO 75/Af
<b>PHYSICAL</b>			
Specific Gravity	1.2	-	ASTM D792
Density	1.19	g/cm <sup>3</sup>	ASTM D792
Water Absorption, (23°C/24hrs)	0.15	%	ASTM D570
Water Absorption, (23°C/Saturated)	0.35	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm	0.5-0.7	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	7	g/10 min	ASTM D1238
Density	1.2	g/cm <sup>3</sup>	ISO 1183
Water Absorption, (23°C/saturated)	0.35	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62
Melt Volume Rate, MVR at 300°C/1.2 kg	6	cm <sup>3</sup> /10 min	ISO 1133
<b>OPTICAL</b>			
Light Transmission, 2.54 mm	88	%	ASTM D1003
Haze, 2.54 mm	1	%	ASTM D1003
Refractive Index	1.586	-	ASTM D542
<b>FLAME CHARACTERISTICS</b>			
UL Yellow Card Link	E121562-220863	-	-
<b>Injection Molding</b>			
Drying Temperature	120	°C	
Drying Time	3-4	Hrs	
Drying Time (Cumulative)	48	Hrs	
Maximum Moisture Content	0.02	%	

Melt Temperature	310-330	°C
Nozzle Temperature	305-325	°C
Front - Zone 3 Temperature	310-330	°C
Middle - Zone 2 Temperature	300-320	°C
Rear - Zone 1 Temperature	290-310	°C
Mold Temperature	80-115	°C
Back Pressure	0.3-0.7	MPa
Screw Speed	40-70	rpm
Shot to Cylinder Size	40-60	%
Vent Depth	0.025-0.076	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。