

SABIC LEXAN™ PC ML7647K物性表

属性	典型值	UNITS	测试手段
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	52	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	54	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	5	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	100	%	ASTM D638
Tensile Modulus, 50 mm/min	2180	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	87	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2130	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	52	MPa	ISO 527
Tensile Stress, break, 50 mm/min	50	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	5.3	%	ISO 527
Tensile Strain, break, 50 mm/min	94	%	ISO 527
Tensile Modulus, 1 mm/min	2150	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	86	MPa	ISO 178
Flexural Modulus, 2 mm/min	2160	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	770	J/m	ASTM D256
Izod Impact, notched, -30°C	720	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	69	J	ASTM D3763
Izod Impact, notched 80*10*4 +23°C	57	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	45	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	60	kJ/m ²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	138	°C	ASTM D1525

HDT, 1.82 MPa, 3.2mm, unannealed	118	°C	ASTM D648
CTE, -40°C to 40°C, flow	6.94E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.2E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	7.09E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.48E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	138	°C	ISO 306
Vicat Softening Temp, Rate B/120	138	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	119	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.19	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.5-0.8	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	12	g/10 min	ASTM D1238
Density	1.19	g/cm ³	ISO 1183
Water Absorption, (23°C/saturated)	0.26	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62
Melt Volume Rate, MVR at 300°C/1.2 kg	11	cm ³ /10 min	ISO 1133
Injection Molding			
Drying Temperature	120	°C	
Drying Time	3 - 4	Hrs	
Drying Time (Cumulative)	48	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	295 - 315	°C	
Nozzle Temperature	290 - 310	°C	
Front - Zone 3 Temperature	295 - 315	°C	
Middle - Zone 2 Temperature	280 - 305	°C	
Rear - Zone 1 Temperature	270 - 295	°C	
Mold Temperature	70 - 95	°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。