

SABIC LEXAN™ PC 153R物性表

属性	典型值	UNITS	测试手段
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	62	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	65	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	7	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	110	%	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	93	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2340	MPa	ASTM D790
Hardness, Rockwell M	70	-	ASTM D785
Hardness, Rockwell R	118	-	ASTM D785
Taber Abrasion, CS-17, 1 kg	10	mg/1000cy	ASTM D1044
IMPACT			
Izod Impact, unnotched, 23°C	3204	J/m	ASTM D4812
Izod Impact, notched, 23°C	747	J/m	ASTM D256
Tensile Impact Strength, Type S	630	kJ/m ²	ASTM D1822
Falling Dart Impact (D 3029), 23°C	169	J	ASTM D3029
THERMAL			
Vicat Softening Temp, Rate B/50	157	°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 95°C, flow	6.84E-05	1/°C	ASTM E831
Specific Heat	1.25	J/g-°C	ASTM C351
Thermal Conductivity	0.19	W/m-°C	ASTM C177
PHYSICAL			
Specific Gravity	1.2	-	ASTM D792
Specific Volume	0.83	cm ³ /g	ASTM D792
Density	1.19	g/cm ³	ASTM D792

Water Absorption, (23°C/24hrs)	0.15	%	ASTM D570
Water Absorption, (23°C/Saturated)	0.35	%	ASTM D570
Water Absorption, equilibrium, 100°C	0.58	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm	0.5-0.7	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	2.5	g/10 min	ASTM D1238
OPTICAL			
Light Transmission, 2.54 mm	88	%	ASTM D1003
Haze, 2.54 mm	1	%	ASTM D1003
Refractive Index	1.586	-	ASTM D542
ELECTRICAL			
Volume Resistivity	>1.E+16	Ω.cm	ASTM D257
Dielectric Strength, in air, 3.2 mm	14.9	kV/mm	ASTM D149
Relative Permittivity, 50/60 Hz	3.17	-	ASTM D150
Relative Permittivity, 1 MHz	2.96	-	ASTM D150
Dissipation Factor, 50/60 Hz	0.0009	-	ASTM D150
Dissipation Factor, 1 MHz	0.01	-	ASTM D150
FLAME CHARACTERISTICS			
UL Yellow Card Link	E207780-228385	-	-
Injection Molding			
Drying Temperature	120	°C	
Drying Time	3-4	Hrs	
Drying Time (Cumulative)	48	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	320-345	°C	
Nozzle Temperature	315-340	°C	
Front - Zone 3 Temperature	320-345	°C	
Middle - Zone 2 Temperature	310-330	°C	
Rear - Zone 1 Temperature	300-320	°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	

Extrusion Blow Molding

Drying Temperature	120	°C
Drying Time	2-4	Hrs
Maximum Moisture Content	0.02	%
Minimum Moisture Content	0.01	%
Melt Temperature (Parison)	265-280	°C
Barrel - Zone 1 Temperature	260-290	°C
Barrel - Zone 2 Temperature	260-290	°C
Barrel - Zone 3 Temperature	260-290	°C
Barrel - Zone 4 Temperature	260-290	°C
Adapter - Zone 5 Temperature	260-290	°C
Mold Temperature	60-100	°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。