

SABIC LEXAN™ PC LUX2619物性表

属性	典型值	UNITS	测试手段
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	57	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	50	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	6	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	74	%	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	2730	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	60	MPa	ISO 527
Tensile Stress, break, 50 mm/min	50	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6	%	ISO 527
Tensile Strain, break, 50 mm/min	75	%	ISO 527
Tensile Modulus, 1 mm/min	2500	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	90	MPa	ISO 178
Flexural Modulus, 2 mm/min	2500	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	2130	J/m	ASTM D4812
Izod Impact, notched, 23°C	640	J/m	ASTM D256
Izod Impact, notched, -30°C	135	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	69	J	ASTM D3763
Izod Impact, unnotched 80*10*3 +23°C	180	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80*10*3 -30°C	175	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*3 +23°C	64	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*3 -30°C	42	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	60	kJ/m ²	ISO 179/1eA

Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	10	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	140	kJ/m ²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm	140	kJ/m ²	ISO 179/1eU
THERMAL			
Vicat Softening Temp, Rate B/50	147	°C	ASTM D1525
HDT, 0.45 MPa, 3.2 mm, unannealed	141	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	129	°C	ASTM D648
CTE, -40°C to 40°C, flow	6.1E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	6.4E-05	1/°C	ASTM E831
Vicat Softening Temp, Rate B/50	147	°C	ISO 306
Vicat Softening Temp, Rate B/120	148	°C	ISO 306
HDT/Ae, 1.8 MPa Annealed 120°C, 2hrs	141	°C	ISO 75/Ae
PHYSICAL			
Specific Gravity	1.34	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.8-1	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	7.5	g/10 min	ASTM D1238
Density	1.34	g/cm ³	ISO 1183
Water Absorption, (23°C/saturated)	0.35	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62
FLAME CHARACTERISTICS			
UL Recognized, 94V-2 Flame Class Rating	1.5	mm	UL 94
Glow Wire Flammability Index 960°C, passes at	1-3	mm	IEC 60695-2-12
Glow Wire Ignitability Temperature, 1.0 mm	875	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 3.0 mm	850	°C	IEC 60695-2-13
Injection Molding			
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

Profile Extrusion

Drying Temperature	120	°C
Drying Time	2-4	Hrs
Barrel - Zone 1 Temperature	240-285	°C
Barrel - Zone 2 Temperature	240-285	°C
Barrel - Zone 3 Temperature	240-285	°C
Hopper Temperature	100-120	°C
Adapter Temperature	230-285	°C
Die Temperature	230-295	°C
Melt Temperature	240-295	°C
Calibrator Temperature	50-100	°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。