

# SABIC CYCOLOY™ PC/ABS LG9000物性表

属性	典型值	UNITS	测试手段
<b>MECHANICAL</b>			
Taber Abrasion, CS-17, 1 kg	82	mg/1000cy	SABIC method
Tensile Stress, yield, 5 mm/min	50	MPa	ISO 527
Tensile Stress, break, 5 mm/min	40	MPa	ISO 527
Tensile Stress, yield, 50 mm/min	50	MPa	ISO 527
Tensile Stress, break, 50 mm/min	45	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4	%	ISO 527
Tensile Strain, break, 5 mm/min	10	%	ISO 527
Tensile Strain, yield, 50 mm/min	4	%	ISO 527
Tensile Strain, break, 50 mm/min	10	%	ISO 527
Tensile Modulus, 1 mm/min	2300	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	81	MPa	ISO 178
Flexural Modulus, 2 mm/min	2400	MPa	ISO 178
Ball Indentation Hardness, H358/30	93	MPa	ISO 2039-1
Hardness, Rockwell R	116	-	ISO 2039-2
<b>IMPACT</b>			
Izod Impact, notched 80*10*3 +23°C	45	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*3 -30°C	20	kJ/m <sup>2</sup>	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	45	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	20	kJ/m <sup>2</sup>	ISO 179/1eA
<b>THERMAL</b>			
Thermal Conductivity	0.2	W/m-°C	ISO 8302
CTE, -40°C to 40°C, flow	8.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	8.E-05	1/°C	ISO 11359-2
Ball Pressure Test, 75°C +/- 2°C	PASSES	-	IEC 60695-10-2
Ball Pressure Test, approximate maximum	110	°C	IEC 60695-10-2
Vicat Softening Temp, Rate B/50	122	°C	ISO 306
Vicat Softening Temp, Rate B/120	124	°C	ISO 306

HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	120	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	97	°C	ISO 75/Ae
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>			
Mold Shrinkage on Tensile Bar, flow	0.5-0.7	%	SABIC method
Density	1.13	g/cm <sup>3</sup>	ISO 1183
Water Absorption, (23°C/saturated)	0.6	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
Melt Volume Rate, MVR at 260°C/5.0 kg	20	cm <sup>3</sup> /10 min	ISO 1133
<b>ELECTRICAL</b>			
Hot Wire Ignition {PLC}	2	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	0	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	2	PLC Code	UL 746A
Volume Resistivity	>1.E+15	Ω.cm	IEC 60093
Surface Resistivity, ROA	>1.E+15	Ω	IEC 60093
Dielectric Strength, in oil, 0.8 mm	35	kV/mm	IEC 60243-1
Dielectric Strength, in oil, 1.6 mm	25	kV/mm	IEC 60243-1
Dielectric Strength, in oil, 3.2 mm	17	kV/mm	IEC 60243-1
Relative Permittivity, 1 MHz	2.6	-	IEC 60250
Dissipation Factor, 50/60 Hz	0.001	-	IEC 60250
Dissipation Factor, 1 MHz	0.009	-	IEC 60250
Comparative Tracking Index	275	V	IEC 60112
Relative Permittivity, 50/60 Hz	2.6	-	IEC 60250
<b>FLAME CHARACTERISTICS</b>			
UL Recognized, 94HB Flame Class Rating	1	mm	UL 94
UL Recognized, 94HB Flame Class Rating 2nd value	3	mm	UL 94

Glow Wire Flammability Index 650°C, passes at	3.2	mm	IEC 60695-2-12
FMVSS Burning Speed, thickness 1 mm	35	mm/min	FMVSS 302
<b>Injection Molding</b>			
Drying Temperature	95-105	°C	
Drying Time	2-4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	275-300	°C	
Nozzle Temperature	275-300	°C	
Front - Zone 3 Temperature	260-300	°C	
Middle - Zone 2 Temperature	255-295	°C	
Rear - Zone 1 Temperature	250-290	°C	
Hopper Temperature	60-80	°C	
Mold Temperature	60-90	°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。