SABIC CYCOLOY™ PC/ABS MC1300物性表

属性	典型值	UNITS	测试手段
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	50	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	44	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	8.6	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	150	%	ASTM D638
Tensile Modulus, 50 mm/min	2130	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	72	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2100	MPa	ASTM D790
IMPACT			
Izod Impact, notched, 23°C	534	J/m	ASTM D256
Izod Impact, notched, -30°C	427	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	41	J	ASTM D3763
Instrumented Dart Impact Total Energy, -30°C	33	J	ASTM D3763
THERMAL			
Vicat Softening Temp, Rate B/50	112	°C	ASTM D1525
HDT, 0.45 MPa, 3.2 mm, unannealed	115	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	99	°C	ASTM D648
CTE, -40°C to 40°C, flow	7.2E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	9.E-05	1/°C	ASTM E831
Thermal Conductivity	0.2	W/m-°C	ASTM C177
PHYSICAL			
Specific Gravity	1.1	-	ASTM D792
Water Absorption, (23°C/24hrs)	0.1	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm	0.5-0.8	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.5-0.7	%	SABIC method

Melt Flow Rate, 260°C/5.0 kgf	14	g/10 min	ASTM D1238
FLAME CHARACTERISTICS			
UL Yellow Card Link	E207780-228505	-	-
Injection Molding			
Drying Temperature	100-105	°C	
Drying Time	3-4	Hrs	
Drying Time (Cumulative)	8	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	260-290	°C	
Nozzle Temperature	260-290	°C	
Front - Zone 3 Temperature	255-290	°C	
Middle - Zone 2 Temperature	255-290	°C	
Rear - Zone 1 Temperature	250-280	°C	
Mold Temperature	75-100	°C	
Back Pressure	0.3-0.7	MPa	
Screw Speed	40-70	rpm	
Shot to Cylinder Size	30-80	%	
Vent Depth	0.038-0.076	mm	