

SABIC Innovative Plastics Cycloy® CH6410 PC+ABS

Polymer, Thermoplastic, ABS
Polymer, Polycarbonate/ABS Alloy,
Unreinforced, Polycarbonate (PC)

SABIC Innovative Plastics (GE Plastics)

产品说明

CH6410 is a high heat, impact modified PC resin, with nonbrominated, nonchlorinated flame retardant system. Limited colors only.

物理性能	额定值 (公制)	额定值 (英制)	测试方法
比重	1.19 g/cc	1.19 g/cc	ASTM D792
密度	1.20 g/cc	0.0434 lb/in ³	ISO 1183
线性成型收缩率, Flow	0.00050 - 0.00070 cm/cm	0.00050 - 0.00070 in/in	on Tensile Bar; SABIC Method
	0.0040 - 0.0050 cm/cm @ Thickness 3.20 mm	0.0040 - 0.0050 in/in @ Thickness 0.126 in	SABIC Method
熔体流动速率	6.3 g/10 min @ Load 2.16 kg, Temperature 260 °C	6.3 g/10 min @ Load 4.76 lb, Temperature 500 °F	ASTM D1238
化合物熔体指数	16 g/10 min @ Load 5.00 kg, Temperature 260 °C	16 g/10 min @ Load 11.0 lb, Temperature 500 °F	MVR [cm ³ /10 min]; ISO 1133
机械性能	额定值 (公制)	额定值 (英制)	测试方法
硬度, H358/30	100 MPa	14500 psi	ISO 2039-1
抗张强度(断裂)	54.0 MPa	7830 psi	Type I, 50 mm/min; ASTM D638
	55.0 MPa	7980 psi	50 mm/min; ISO 527
抗张强度(屈服)	63.0 MPa	9140 psi	Type I, 50 mm/min; ASTM D638
	63.0 MPa	9140 psi	50 mm/min; ISO 527
伸长率 (断裂)	88 %	88 %	Type I, 50 mm/min; ASTM D638
	95 %	95 %	50 mm/min; ISO 527
屈服伸长率	5.0 %	5.0 %	50 mm/min; ISO 527
	5.5 %	5.5 %	Type I, 50 mm/min; ASTM D638
拉伸模量	2.30 GPa	334 ksi	1 mm/min; ISO 527
	2.54 GPa	368 ksi	50 mm/min; ASTM D638
弯曲强度	90.0 MPa	13100 psi	2 mm/min; ISO 178
	95.0 MPa	13800 psi	1.3 mm/min, 50 mm span; ASTM D790
弯曲模量	2.40 GPa	348 ksi	2 mm/min; ISO 178
	2.59 GPa	376 ksi	1.3 mm/min, 50 mm span; ASTM D790
悬臂梁缺口冲击强度	9.07 J/cm	17.0 ft-lb/in	ASTM D256
	50.0 kJ/m ²	23.8 ft-lb/in ²	80*10*4; ISO 180/1A
	15.0 kJ/m ² @ Temperature -30.0 °C	7.14 ft-lb/in ² @ Temperature -22.0 °F	80*10*4; ISO 180/1A
	19.0 kJ/m ² @ Temperature 0.000 °C	9.04 ft-lb/in ² @ Temperature 32.0 °F	80*10*4; ISO 180/1A
简支梁缺口冲击强度	5.50 J/cm ²	26.2 ft-lb/in ²	Edgew 80*10*4 sp=62mm; ISO 179/1eA
	1.50 J/cm ² @ Temperature -30.0 °C	7.14 ft-lb/in ² @ Temperature -22.0 °F	Edgew 80*10*4 sp=62mm; ISO 179/1eA
落锤总能量	72.0 J @ Temperature 23.0 °C	53.1 ft-lb @ Temperature 73.4 °F	ASTM D3763
电气性能	额定值 (公制)	额定值 (英制)	测试方法
体积电阻率	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	IEC 60093
表面电阻	>= 1.00e+15 ohm	>= 1.00e+15 ohm	ROA; IEC 60093
介电常数	2.7 @ Frequency 1.00e+6 Hz	2.7 @ Frequency 1.00e+6 Hz	IEC 60250
	2.7 @ Frequency 50.0 - 60.0 Hz	2.7 @ Frequency 50.0 - 60.0 Hz	IEC 60250
介电强度	18.0 kV/mm @ Thickness 3.20 mm	457 kV/in @ Thickness 0.126 in	in oil; IEC 60243-1

耗散因数	0.0010 @ Frequency 50.0 - 60.0 Hz	0.0010 @ Frequency 50.0 - 60.0 Hz	IEC 60250
	0.010 @ Frequency 1.00e+6 Hz	0.010 @ Frequency 1.00e+6 Hz	IEC 60250
相比耐漏电起痕指数(CTI)	225 V	225 V	IEC 60112
热性能	额定值 (公制)	额定值 (英制)	测试方法
线形热膨胀系数 - 流动	70.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$ @ Temperature 23.0 - 60.0 $^\circ\text{C}$	38.9 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$ @ Temperature 73.4 - 140 $^\circ\text{F}$	ISO 11359-2
	77.4 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$ @ Temperature -40.0 - 40.0 $^\circ\text{C}$	43.0 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$ @ Temperature -40.0 - 104 $^\circ\text{F}$	ASTM E 831
线性热膨胀系数, 横向流动	59.4 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$ @ Temperature -40.0 - 40.0 $^\circ\text{C}$	33.0 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$ @ Temperature -40.0 - 104 $^\circ\text{F}$	ASTM E 831
	70.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$ @ Temperature 23.0 - 60.0 $^\circ\text{C}$	38.9 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$ @ Temperature 73.4 - 140 $^\circ\text{F}$	ISO 11359-2
载荷下热变形温度(0.46 MPa)	126 $^\circ\text{C}$	259 $^\circ\text{F}$	Edgew 120*10*4 sp=100mm; ISO 75/Be
	127 $^\circ\text{C}$ @ Thickness 3.20 mm	261 $^\circ\text{F}$ @ Thickness 0.126 in	unannealed; ASTM D648
载荷下热变形温度(1.8 MPa)	113 $^\circ\text{C}$	235 $^\circ\text{F}$	Edgew 120*10*4 sp=100mm; ISO 75/Ae
	118 $^\circ\text{C}$ @ Thickness 3.20 mm	244 $^\circ\text{F}$ @ Thickness 0.126 in	unannealed; ASTM D648
维卡软化温度	134 $^\circ\text{C}$	273 $^\circ\text{F}$	Rate B/50; ISO 306
	135 $^\circ\text{C}$	275 $^\circ\text{F}$	Rate B/120; ISO 306
可燃性(UL94)	V-1 @ Thickness 0.990 mm	V-1 @ Thickness 0.0390 in	UL 94
	V-0 @ Thickness 1.49 mm	V-0 @ Thickness 0.0587 in	UL 94
材料描述			测试方法
球压试验, 125 $^\circ\text{C}$ +/-2 $^\circ\text{C}$	PASSES		IEC 60695-10-2