

SABIC Innovative Plastics Cycloy® CX7110 PC+ABS

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

SABIC Innovative Plastics (GE Plastics)

产品说明

Cycloy® resin grade CX7110 is an injection moldable PC/ABS blend with non-brominated and non-chlorinated flame retardant systems. Excellent impact/flow balance together with a UL-94 V0 rating at 1.2mm makes it an ideal candidate for various applications including thin wall designs.

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	1.19 g/cc	0.0430 lb/in ³	ISO 1183
水分吸收	0.100 %	0.100 %	23°C / 50% RH; ISO 62
饱和吸水率	0.20 %	0.20 %	ISO 62
线性成型收缩率, Flow	0.0040 - 0.0060 cm/cm @ Thickness 3.20 mm	0.0040 - 0.0060 in/in @ Thickness 0.126 in	SABIC Method
熔体流动速率	22 g/10 min @ Load 2.16 kg, Temperature 260 °C	22 g/10 min @ Load 4.76 lb, Temperature 500 °F	ASTM D1238
化合物熔体指数	21 g/10 min @ Load 2.16 kg, Temperature 260 °C	21 g/10 min @ Load 4.76 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
抗张强度(断裂)	51.0 MPa	7400 psi	50 mm/min; ISO 527
	54.0 MPa	7830 psi	Type I, 50 mm/min; ASTM D638
抗张强度(屈服)	61.0 MPa	8850 psi	50 mm/min; ISO 527
	64.0 MPa	9280 psi	Type I, 50 mm/min; ASTM D638
伸长率 (断裂)	90 %	90 %	Type I, 50 mm/min; ASTM D638
	90 %	90 %	50 mm/min; ISO 527
屈服伸长率	4.0 %	4.0 %	Type I, 50 mm/min; ASTM D638
	4.0 %	4.0 %	50 mm/min; ISO 527
拉伸模量	2.70 GPa	392 ksi	1 mm/min; ISO 527
	2.90 GPa	421 ksi	50 mm/min; ASTM D638
弯曲强度	100 MPa	14500 psi	1.3 mm/min, 50 mm span; ASTM D790
	100 MPa	14500 psi	2 mm/min; ISO 178
弯曲模量	2.50 GPa	363 ksi	2 mm/min; ISO 178
	2.70 GPa	392 ksi	1.3 mm/min, 50 mm span; ASTM D790
悬臂梁缺口冲击强度	6.00 J/cm	11.2 ft-lb/in	ASTM D256
	1.20 J/cm @ Temperature -30.0 °C	2.25 ft-lb/in @ Temperature -22.0 °F	ASTM D256
	15.0 kJ/m ²	7.14 ft-lb/in ²	80*10*3; ISO 180/1A
	10.0 kJ/m ² @ Temperature -30.0 °C	4.76 ft-lb/in ² @ Temperature -22.0 °F	80*10*3; ISO 180/1A
简支梁缺口冲击强度	1.50 J/cm ²	7.14 ft-lb/in ²	Edgew 80*10*3 sp=62mm; ISO 179/1eA
	1.00 J/cm ² @ Temperature -30.0 °C	4.76 ft-lb/in ² @ Temperature -22.0 °F	Edgew 80*10*3 sp=62mm; ISO 179/1eA
落锤总能量	63.0 J @ Temperature 23.0 °C	46.5 ft-lb @ Temperature 73.4 °F	ASTM D3763
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	75.0 µm/m-°C @ Temperature -40.0 - 40.0 °C	41.7 µin/in-°F @ Temperature -40.0 - 104 °F	ASTM E 831
	75.0 µm/m-°C @ Temperature -40.0 - 40.0 °C	41.7 µin/in-°F @ Temperature -40.0 - 104 °F	ISO 11359-2
线性热膨胀系数, 横向流动	75.0 µm/m-°C @ Temperature -40.0 - 40.0 °C	41.7 µin/in-°F @ Temperature -40.0 - 104 °F	ASTM E 831
	75.0 µm/m-°C @ Temperature -40.0 - 40.0 °C	41.7 µin/in-°F @ Temperature -40.0 - 104 °F	ISO 11359-2
导热系数	0.200 W/m-K	1.39 BTU-in/hr-ft ² -°F	ISO 8302
Deflection Temperature at 0.46 MPa (66 psi)	94.0 °C @ Thickness 3.20 mm	201 °F @ Thickness 0.126 in	unannealed; ASTM D648
	98.0 °C @ Thickness 6.40 mm	208 °F @ Thickness 0.252 in	unannealed; ASTM D648
载荷下热变形温度(1.8 MPa)	84.0 °C	183 °F	Flatw 80*10*4 sp=64mm; ISO 75/4f

	84.0 °C @ Thickness 3.20 mm	183 °F @ Thickness 0.126 in	unannealed; ASTM D648
	90.0 °C @ Thickness 6.40 mm	194 °F @ Thickness 0.252 in	unannealed; ASTM D648
维卡软化温度	102 °C	216 °F	Rate B/50; ASTM D1525
	102 °C	216 °F	Rate B/50; ISO 306
	103 °C	217 °F	Rate B/120; ISO 306
可燃性(UL94)	V-2 @ Thickness 0.750 mm	V-2 @ Thickness 0.0295 in	UL 94
	V-1 @ Thickness 1.00 mm	V-1 @ Thickness 0.0394 in	UL 94
	V-0 @ Thickness 1.20 mm	V-0 @ Thickness 0.0472 in	UL 94
	5VB @ Thickness 1.80 mm	5VB @ Thickness 0.0709 in	UL 94
材料描述			测试方法
Ball Pressure Test, 75°C +/- 2°C	Pass		IEC 60695-10-2