



WONDERLITE® PC-110

CHI MEI CORPORATION - Polycarbonate

Monday, November 4, 2019

General Information

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Medium Viscosity		
RoHS Compliance	• RoHS Compliant		
Resin ID (ISO 1043)	• >PC<		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity ²	1.20		ASTM D792
Density (73°F)	1.20	g/cm ³	ISO 1183
Melt Mass-Flow Rate (300°C/1.2 kg)	10	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	10	cm ³ /10min	ISO 1133
Molding Shrinkage	0.50 to 0.70	%	ISO 294-4
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ³ (Yield)	8940	psi	ASTM D638
Tensile Stress (Yield)	9430	psi	ISO 527-2/50
Tensile Stress (Break)	10900	psi	ISO 527-2/50
Tensile Elongation ³ (Break)	110	%	ASTM D638
Tensile Strain (Break)	120	%	ISO 527-2/50
Flexural Modulus ⁴	340000	psi	ASTM D790
Flexural Modulus ⁵	348000	psi	ISO 178
Flexural Strength ⁴	13000	psi	ASTM D790
Flexural Stress ⁵	13100	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	36	ft-lb/in ²	ISO 179
Notched Izod Impact (73°F, 0.126 in)	16	ft-lb/in	ASTM D256
Notched Izod Impact Strength (73°F)	36	ft-lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	77		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load ⁶ (66 psi, Annealed)	295	°F	ASTM D648
Heat Deflection Temperature (264 psi, Unannealed)	262	°F	ISO 75-2/A
Heat Deflection Temperature (264 psi, Annealed)	289	°F	ISO 75-2/A
Vicat Softening Temperature	302	°F	ASTM D1525 ⁷
Vicat Softening Temperature			
--	302	°F	ISO 306/A50
--	293	°F	ISO 306/B50
CLTE - Flow	3.3E-5 to 4.4E-5	in/in/°F	ISO 11359-2

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Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		V-2	
0.10 in		V-2	

Processing Information			
Injection	Nominal Value	Unit	
Drying Temperature	248	°F	
Drying Time	4.0	hr	
Rear Temperature	446 to 572	°F	
Middle Temperature	482 to 608	°F	
Front Temperature	482 to 590	°F	
Mold Temperature	158 to 248	°F	

Notes

¹ Typical properties: these are not to be construed as specifications.

² 23°C

³ 0.24 in/min

⁴ 0.051 in/min

⁵ 0.079 in/min

⁶ 132°C x 8 hr

⁷ Rate A (50°C/h), Loading 1 (10 N)