



WONDERLITE® PC-110L

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
Uses	• Automotive Applications		
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• SAE J576	• SAE Unspecified	
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 180/4A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	77		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	261	°F	ISO 75-2/A
Heat Deflection Temperature (264 psi, Annealed)	342	°F	ISO 75-2/A
Vicat Softening Temperature	298	°F	ASTM D1525 ⁶
Vicat Softening Temperature			
--	298	°F	ISO 306/A50
--	289	°F	ISO 306/B50
CLTE - Flow	3.3E-5 to 4.4E-5	in/in/°F	ISO 11359-2
Heat Deflection Temperature - Unannealed	257	°F	ASTM D648

WONDERLITE® PC-110L

CHI MEI CORPORATION - Polycarbonate

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 Rate A (50°C/h), Loading 1 (10 N)