



POLYLAC® PA-765B

CHI MEI CORPORATION - Acrylonitrile Butadiene Styrene

Sunday, November 3, 2019

General Information

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
Features	• Medium Impact Resistance
RoHS Compliance	• RoHS Compliant
Resin ID (ISO 1043)	• >ABS-FR(17)<

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity ²	1.16		ASTM D792
Density (73°F)	1.16	g/cm ³	ISO 1183
Melt Mass-Flow Rate (200°C/5.0 kg)	4.2	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	38	cm ³ /10min	ISO 1133
Molding Shrinkage	0.30 to 0.60	%	ISO 294-4

Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ³ (Yield)	5670	psi	ASTM D638
Tensile Stress (Yield)	5510	psi	ISO 527-2/50
Tensile Stress (Break)	4210	psi	ISO 527-2/50
Tensile Elongation ³ (Break)	25	%	ASTM D638
Tensile Strain (Break)	10	%	ISO 527-2/50
Flexural Modulus ⁴	340000	psi	ASTM D790
Flexural Modulus ⁵	261000	psi	ISO 178
Flexural Strength ⁴	9200	psi	ASTM D790
Flexural Stress ⁵	8270	psi	ISO 178

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F	5.2	ft-lb/in ²	
73°F	12	ft-lb/in ²	
Notched Izod Impact			ASTM D256
73°F, 0.126 in	4.6	ft-lb/in	
73°F, 0.252 in	4.0	ft-lb/in	
Notched Izod Impact Strength			ISO 180/1A
-22°F	5.2	ft-lb/in ²	
73°F	11	ft-lb/in ²	

Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	102		ASTM D785

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed	169	°F	
Heat Deflection Temperature (264 psi, Unannealed)	171	°F	ISO 75-2/A
Deflection Temperature Under Load (264 psi, Annealed)	185	°F	ASTM D648

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Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Annealed)	185	°F	ISO 75-2/A
Vicat Softening Temperature	198	°F	ASTM D1525 ⁶
Vicat Softening Temperature			
--	201	°F	ISO 306/A50
--	176	°F	ISO 306/B50
CLTE - Flow	4.8E-5	in/in/°F	ISO 11359-2
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		V-2	
0.10 in	•	V-0	
	•	5VB	
0.12 in		5VA	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176 to 185	°F
Drying Time	2.0 to 4.0	hr
Rear Temperature	356 to 410	°F
Middle Temperature	374 to 428	°F
Front Temperature	374 to 428	°F
Mold Temperature	104 to 158	°F
Injection Rate	Slow-Moderate	
Back Pressure	71.1 to 142	psi

Injection Notes

Injection Pressure: 50 to 80%
Holding Pressure: 20 to 50%

Notes

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

² 23°C

³ 0.24 in/min

⁴ 0.11 in/min

⁵ 0.079 in/min

⁶ Rate A (50°C/h), Loading 1 (10 N)