



POLYLAC® PA-765
CHI MEI CORPORATION - Acrylonitrile Butadiene Styrene

Thursday, January 31, 2019

General Information

General

Material Status	• Commercial: Active
Features	• High Flow
RoHS Compliance	• RoHS Compliant
Resin ID (ISO 1043)	• >ABS-FR(17)<

ASTM and ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity ²	1.19	g/cm ³	ASTM D792
Density (23°C)	1.19	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	5.0	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	50.0	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)	38.1	MPa	ASTM D638
Tensile Stress (Yield)	37.0	MPa	ISO 527-2/50
Tensile Stress (Break)	28.0	MPa	ISO 527-2/50
Tensile Elongation ³ (Break)	15	%	ASTM D638
Tensile Strain (Break)	10	%	ISO 527-2/50
Flexural Modulus ⁴	2070	MPa	ASTM D790
Flexural Modulus ⁵	1800	MPa	ISO 178
Flexural Strength ⁴	60.7	MPa	ASTM D790
Flexural Stress ⁵	55.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-30°C	10	kJ/m ²	
23°C	23	kJ/m ²	
Notched Izod Impact			ASTM D256
23°C, 3.20 mm	210	J/m	
23°C, 6.40 mm	180	J/m	
Notched Izod Impact Strength			ISO 180/1A
-30°C	9.0	kJ/m ²	
23°C	22	kJ/m ²	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	100		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed	73.0	°C	
Heat Deflection Temperature (1.8 MPa, Unannealed)	74.0	°C	ISO 75-2/A
Deflection Temperature Under Load (1.8 MPa, Annealed)	83.0	°C	ASTM D648
Heat Deflection Temperature (1.8 MPa, Annealed)	83.0	°C	ISO 75-2/A

UL and the UL logo are trademarks of UL LLC © 2019. All Rights Reserved.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.

POLYLAC® PA-765
CHI MEI CORPORATION - Acrylonitrile Butadiene Styrene

Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	90.0	°C	ASTM D1525 ⁶
Vicat Softening Temperature			
--	91.0	°C	ISO 306/A50
--	78.0	°C	ISO 306/B50
CLTE - Flow	8.4E-5	cm/cm/°C	ISO 11359-2

Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
1.0 mm		V-1	
1.5 mm	•	V-0	
	•	5VB	
2.5 mm		5VA	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	80 to 85	°C
Drying Time	2.0 to 4.0	hr
Rear Temperature	180 to 210	°C
Middle Temperature	190 to 220	°C
Front Temperature	190 to 220	°C
Mold Temperature	40 to 70	°C
Injection Pressure	4.90 to 7.85	MPa
Injection Rate	Slow-Moderate	
Holding Pressure	1.96 to 4.90	MPa
Back Pressure	0.490 to 0.981	MPa
Cushion	3.18	mm

Notes

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

² 23°C

³ 6.0 mm/min

⁴ 2.8 mm/min

⁵ 2.0 mm/min

⁶ Rate A (50°C/h), Loading 1 (10 N)