

POLYLAC® PA-764B

Acrylonitrile Butadiene Styrene
CHI MEI CORPORATION

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

POLYLAC® PA-764B is an Acrylonitrile Butadiene Styrene (ABS) product. It is available in Africa & Middle East, Asia Pacific, Europe, Latin America, or North America.

Characteristics include:

- Flame Rated
- RoHS Compliant
- Weather Resistant

General

Material Status	• Commercial: Active
Literature ¹	• Processing (English) • Technical Datasheet - ASTM (Chinese) • Technical Datasheet - ASTM (English) • Technical Datasheet - ISO (English)
UL Yellow Card ²	• E56070-565075
Search for UL Yellow Card	• CHI MEI CORPORATION • POLYLAC®
Availability	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
Features	• Good Weather Resistance
RoHS Compliance	• RoHS Compliant
Resin ID (ISO 1043)	• >ABS-FR(17)<

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity			
-- ⁴	1.16	1.16 g/cm ³	ASTM D792
73°F (23°C)	1.16 g/cm ³	1.16 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	2.8 g/10 min	2.8 g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	28 cm ³ /10min	28 cm ³ /10min	ISO 1133
Molding Shrinkage	0.30 to 0.60 %	0.30 to 0.60 %	ISO 294-4
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			
Yield ⁵	5810 psi	40.1 MPa	ASTM D638
Yield	5510 psi	38.0 MPa	ISO 527-2/50
Break	4210 psi	29.0 MPa	ISO 527-2/50
Tensile Elongation			
Break ⁵	20 %	20 %	ASTM D638
Break	10 %	10 %	ISO 527-2/50
Flexural Modulus			
-- ⁶	320000 psi	2210 MPa	ASTM D790
-- ⁷	261000 psi	1800 MPa	ISO 178
Flexural Strength			
-- ⁶	9370 psi	64.6 MPa	ASTM D790
-- ⁷	8270 psi	57.0 MPa	ISO 178



Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F (-30°C)	3.3 ft·lb/in ²	7.0 kJ/m ²	
73°F (23°C)	6.2 ft·lb/in ²	13 kJ/m ²	
Notched Izod Impact			
73°F (23°C), 0.126 in (3.20 mm)	3.0 ft·lb/in	160 J/m	ASTM D256
73°F (23°C), 0.252 in (6.40 mm)	2.2 ft·lb/in	120 J/m	ASTM D256
-22°F (-30°C)	3.3 ft·lb/in ²	7.0 kJ/m ²	ISO 180/1A
73°F (23°C)	6.7 ft·lb/in ²	14 kJ/m ²	ISO 180/1A
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-Scale)	102	102	ASTM D785
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
264 psi (1.8 MPa), Unannealed	176 °F	80.0 °C	ASTM D648
264 psi (1.8 MPa), Unannealed	181 °F	83.0 °C	ISO 75-2/A
264 psi (1.8 MPa), Annealed	199 °F	93.0 °C	ASTM D648 ISO 75-2/A
Vicat Softening Temperature			
--	214 °F	101 °C	ASTM D1525 ⁸
--	194 °F	90.0 °C	ISO 306/B50
--	216 °F	102 °C	ISO 306/A50
CLTE - Flow	4.8E-5 in/in/°F	8.6E-5 cm/cm/°C	ISO 11359-2
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating			UL 94
0.22 in (5.5 mm)	V-0	V-0	
0.10 in (2.5 mm)	5VB	5VB	
0.12 in (3.0 mm)	5VA	5VA	

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 to 185 °F	80 to 85 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Rear Temperature	356 to 410 °F	180 to 210 °C
Middle Temperature	374 to 428 °F	190 to 220 °C
Front Temperature	374 to 428 °F	190 to 220 °C
Mold Temperature	104 to 158 °F	40 to 70 °C
Injection Pressure	711 to 1140 psi	4.90 to 7.85 MPa
Injection Rate	Slow-Moderate	Slow-Moderate
Holding Pressure	284 to 711 psi	1.96 to 4.90 MPa
Back Pressure	71.1 to 142 psi	0.490 to 0.981 MPa
Cushion	0.125 in	3.18 mm

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.

⁴ 23°C

⁵ 0.24 in/min (6.0 mm/min)

⁶ 0.11 in/min (2.8 mm/min)

⁷ 0.079 in/min (2.0 mm/min)

⁸ Rate A (50°C/h), Loading 1 (10 N)



Where to Buy

Supplier

CHI MEI CORPORATION
Tainan County, Taiwan
Telephone: +886-6-266-3000
Web: <http://www.chimeicorp.com/>

Distributor

A. Westensee und Partner Rohstoff GmbH
Telephone: +49-4171-8812-0
Web: <http://www.awp-rohstoffe.de/>
Availability: Germany

AMP FRANCE
Telephone: +33-3-8920-1390
Web: <http://www.amp.fr/>
Availability: France

AMP TUNISIA
Telephone: +216-52-27-21-73
Web: <http://www.amp.fr/>
Availability: Tunisia

Biesterfeld
Biesterfeld is a Pan European distribution company. Contact Biesterfeld for availability of individual products by country.
Telephone: +49-40-32008-0
Web: <http://www.biesterfeld-plastic.com/>
Availability: Algeria, Austria, Belgium, Bosnia and Herzegovina, Brazil, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Egypt, Faroe Islands, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Libyan Arab Jamahiriya, Luxembourg, Mauritania, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tunisia, Turkey

Calsak Polymers
Telephone: 800-743-2595
Web: <http://www.calsak.com/>
Availability: North America

Distrupol Ltd
Distrupol Ltd is a Pan European distribution company. Contact Distrupol Ltd for availability of individual products by country.
Telephone: 08452003040
Web: <http://www.distrupol.com/>
Availability: Ireland, United Kingdom

Entec Polymers
Telephone: 800-375-5440
Web: <http://www.entecpolymers.com/>
Availability: North America

M. Holland Canada Company
Telephone: 905-665-1168
Web: <http://www.mholland.com/>
Availability: Canada

M. Holland Company
Telephone: 855-497-1403
Web: <http://www.mholland.com/>
Availability: Mexico, United States

The Materials Group
Telephone: 616-863-6046
Web: <http://thematerialsgroup.com/>
Availability: North America