

POLYLAC® PA-746

Acrylonitrile Butadiene Styrene
CHI MEI CORPORATION

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

POLYLAC® PA-746 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
- High Flow
- Impact 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	• E56070-245714
Search for UL Yellow Card	• CHI MEI CORPORATION • POLYLAC®
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Features	• High Flow • Medium Impact Resistance
RoHS Compliance	• RoHS Compliant
Resin ID (ISO 1043)	• >ABS<

Physical

	Nominal Value Unit	Test Method
Density / Specific Gravity		
-- ⁴	1.03 g/cm ³	ASTM D792
23°C	1.03 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	3.0 g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	29 cm ³ /10min	ISO 1133
Molding Shrinkage	0.40 to 0.70 %	ISO 294-4

Mechanical

	Nominal Value Unit	Test Method
Tensile Strength		
Yield ⁵	40.6 MPa	ASTM D638
Yield	39.0 MPa	ISO 527-2/50
Break	29.0 MPa	ISO 527-2/50
Tensile Elongation		
Break ⁵	30 %	ASTM D638
Break	30 %	ISO 527-2/50
Flexural Modulus		
-- ⁶	2140 MPa	ASTM D790
-- ⁷	1800 MPa	ISO 178
Flexural Strength		
-- ⁶	63.4 MPa	ASTM D790
-- ⁷	60.0 MPa	ISO 178



Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179
-30°C	14 kJ/m ²	
23°C	30 kJ/m ²	
Notched Izod Impact		
23°C, 3.20 mm	320 J/m	ASTM D256
23°C, 6.40 mm	260 J/m	ASTM D256
-30°C	12 kJ/m ²	ISO 180/1A
23°C	28 kJ/m ²	ISO 180/1A
Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (R-Scale)	118	ASTM D785
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
1.8 MPa, Unannealed	85.0 °C	ASTM D648
1.8 MPa, Unannealed	82.0 °C	ISO 75-2/A
1.8 MPa, Annealed	95.0 °C	ASTM D648
1.8 MPa, Annealed	96.0 °C	ISO 75-2/A
Vicat Softening Temperature		
--	105 °C	ASTM D1525 ⁸
--	94.0 °C	ISO 306/B50
--	103 °C	ISO 306/A50
CLTE - Flow	9.2E-5 cm/cm/°C	ISO 11359-2
Flammability	Nominal Value Unit	Test Method
Flame Rating (1.8 mm)	HB	UL 94
Injection	Nominal Value Unit	
Drying Temperature	80 to 85 °C	
Drying Time	2.0 to 3.0 hr	
Rear Temperature	180 to 220 °C	
Middle Temperature	190 to 230 °C	
Front Temperature	190 to 230 °C	
Mold Temperature	30 to 60 °C	

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 6.0 mm/min

⁶ 2.8 mm/min

⁷ 2.0 mm/min

⁸ Rate A (50°C/h), Loading 1 (10 N)



Where to Buy

Supplier

CHI MEI CORPORATION

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

Distributor

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

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: 833-319-0299
Web: https://www.entecpolymers.com/?utm_source=ul&utm_medium=paid%20association&utm_campaign=entec%20%7C%20entec%201&utm_term=ul%20%7C%20where%20to%20buy
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

