

# POLYLAC® PA-757

Acrylonitrile Butadiene Styrene  
CHI MEI CORPORATION



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## Technical Data

### General

Material Status	• Commercial: Active
Literature <sup>1</sup>	• Processing (English) • Technical Datasheet - ASTM (English) • Technical Datasheet - ISO (English)
UL Yellow Card <sup>2</sup>	• E56070-565071
Search for UL Yellow Card	• CHI MEI CORPORATION • POLYLAC®
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America • South America
RoHS Compliance	• RoHS Compliant
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Specific Gravity			
--	1.05	1.05 g/cm <sup>3</sup>	ASTM D792
73°F (23°C)	1.05 g/cm <sup>3</sup>	1.05 g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR)			ASTM D1238
200°C/5.0 kg	1.6 g/10 min	1.6 g/10 min	
220°C/10.0 kg	22 g/10 min	22 g/10 min	
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	1.34 in <sup>3</sup> /10min	22.0 cm <sup>3</sup> /10min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress			
Yield	7830 psi	54.0 MPa	ISO 527-2/50
Break	5370 psi	37.0 MPa	ISO 527-2/50
0.118 in (3.00 mm) <sup>4</sup>	6540 psi	45.1 MPa	ASTM D638
Tensile Elongation			
Break, 0.118 in (3.00 mm) <sup>4</sup>	25 %	25 %	ASTM D638
Break	20 %	20 %	ISO 527-2/50
Flexural Modulus			
0.236 in (6.00 mm) <sup>5</sup>	384000 psi	2650 MPa	ASTM D790
-- <sup>6</sup>	319000 psi	2200 MPa	ISO 178
Flexural Strength			
0.236 in (6.00 mm) <sup>5</sup>	11200 psi	77.5 MPa	ASTM D790
-- <sup>6</sup>	11000 psi	76.0 MPa	ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength	9.5 ft·lb/in <sup>2</sup>	20 kJ/m <sup>2</sup>	ISO 179
Charpy Unnotched Impact Strength	No Break	No Break	ISO 179
Notched Izod Impact			
73°F (23°C), 0.118 in (3.00 mm)	3.9 ft·lb/in	210 J/m	ASTM D256
73°F (23°C), 0.236 in (6.00 mm)	3.3 ft·lb/in	180 J/m	ASTM D256
--	8.6 ft·lb/in <sup>2</sup>	18 kJ/m <sup>2</sup>	ISO 180/1A
Unnotched Izod Impact Strength	29 ft·lb/in <sup>2</sup>	60 kJ/m <sup>2</sup>	ISO 180/1U

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-Scale)	116	116	ASTM D785
Ball Indentation Hardness (H 358/30)	16000 psi	110 MPa	ISO 2039-1

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
264 psi (1.8 MPa), Unannealed	185 °F	85.0 °C	ASTM D648
264 psi (1.8 MPa), Unannealed	190 °F	88.0 °C	ISO 75-2/A
264 psi (1.8 MPa), Annealed	203 °F	95.0 °C	ASTM D648
264 psi (1.8 MPa), Annealed	208 °F	98.0 °C	ISO 75-2/A
Vicat Softening Temperature			
--	221 °F	105 °C	ASTM D1525 <sup>7</sup>
--	219 °F	104 °C	ISO 306/A50
--	212 °F	100 °C	ISO 306/B50
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.0630 in (1.60 mm))	HB	HB	UL 94
Injection	Nominal Value (English)	Nominal Value (SI)	
Drying Temperature	176 to 185 °F	80.0 to 85.0 °C	
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr	
Rear Temperature	356 to 428 °F	180 to 220 °C	
Middle Temperature	374 to 446 °F	190 to 230 °C	
Front Temperature	374 to 446 °F	190 to 230 °C	
Mold Temperature	86.0 to 158 °F	30.0 to 70.0 °C	

**Notes**

<sup>1</sup> 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.

<sup>2</sup> A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL IDES 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.

<sup>3</sup> Typical properties: these are not to be construed as specifications.

<sup>4</sup> 0.24 in/min (6.0 mm/min)

<sup>5</sup> 0.11 in/min (2.8 mm/min)

<sup>6</sup> 0.079 in/min (2.0 mm/min)

<sup>7</sup> Rate A (50°C/h)

## 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 Plastic GmbH**

*Biesterfeld Plastic GmbH is a Pan European distribution company. Contact Biesterfeld Plastic GmbH 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, 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.calsakpolymers.com/>  
**Availability:** North America

#### **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

#### **Plastribution**

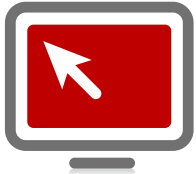
**Telephone:** +44-845-345-4560  
**Web:** <http://www.plastribution.co.uk/>  
**Availability:** United Kingdom

#### **The Materials Group**

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



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### Prospector Plastics Database - [www.ides.com/prospector](http://www.ides.com/prospector)

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– Birgit Elvardt Bader, Production Manager, Micotron

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**Automotive Plastics Search** – easily locate automotive approved plastics.

**Curve Data** – view, overlay and export curve data.



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– Kevin Chase, Owner & President, Chase Plastics



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