

LG MABS TR580

Methyl Methacrylate / ABS

LG Chem Ltd.

PROSPECTOR®

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Technical Data

Product Description

Description

- Transparency, chemical resistance

Application

- medical products

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet (English)
Search for UL Yellow Card	• LG Chem Ltd.
Availability	• Asia Pacific • Europe • Latin America • North America
Features	• Chemical Resistant • Good Clarity
Uses	• Medical/Healthcare Applications
Appearance	• Clear/Transparent
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity ³	1.06	1.06 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	2.5 g/10 min	2.5 g/10 min	ASTM D1238
Molding Shrinkage - Flow			ASTM D955
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	4.0E-3 to 7.0E-3 in/in	0.40 to 0.70 %	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus ⁴			ASTM D638
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	232000 psi	1600 MPa	
Tensile Strength ⁴			ASTM D638
Yield, 73°F (23°C), 0.126 in (3.20 mm), Injection Molded	5660 psi	39.0 MPa	
Tensile Elongation ⁴			ASTM D638
Break, 73°F (23°C), 0.126 in (3.20 mm), Injection Molded	> 15 %	> 15 %	
Flexural Modulus ⁵			ASTM D790
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	261000 psi	1800 MPa	
Flexural Strength ⁵			ASTM D790
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	9280 psi	64.0 MPa	

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
-22°F (-30°C), 0.126 in (3.20 mm), Injection Molded	0.37 ft·lb/in	20 J/m	
-22°F (-30°C), 0.252 in (6.40 mm), Injection Molded	0.37 ft·lb/in	20 J/m	
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	1.5 ft·lb/in	80 J/m	
73°F (23°C), 0.252 in (6.40 mm), Injection Molded	1.5 ft·lb/in	80 J/m	



Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load ⁶ 264 psi (1.8 MPa), Unannealed, 0.252 in (6.40 mm), Injection Molded	174 °F	79.0 °C	ASTM D648
Vicat Softening Temperature	189 °F	87.0 °C	ASTM D1525 ⁷

Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Light Transmittance (0.126 mil (3.2 µm))	90.0 %	90.0 %	ASTM D1003
Haze	1.20 %	1.20 %	ASTM D1003

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 to 194 °F	80 to 90 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Rear Temperature	410 to 446 °F	210 to 230 °C
Middle Temperature	428 to 464 °F	220 to 240 °C
Front Temperature	446 to 482 °F	230 to 250 °C
Nozzle Temperature	446 to 500 °F	230 to 260 °C
Processing (Melt) Temp	428 to 482 °F	220 to 250 °C
Mold Temperature	122 to 158 °F	50 to 70 °C
Back Pressure ⁸	4270 to 8530 psi	29.4 to 58.8 MPa
Screw Speed	30 to 80 rpm	30 to 80 rpm

Injection Notes

Minimum Moisture Content: 0.01%

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

³ 23°C

⁴ 2.0 in/min (50 mm/min)

⁵ 0.59 in/min (15 mm/min)

⁶ Edgewise

⁷ Rate A (50°C/h), Loading 2 (50 N)

⁸ Hydraulic Type



Where to Buy

Supplier

LG Chem Ltd.

Englewood Cliffs, NJ USA
Telephone: 201-816-2302
Web: <http://www.chemwide.com/>

Distributor

CCC Plastics

Telephone: 800-465-6917
Web: <https://www.ccc-group.com/>
Availability: Canada

Channel Prime Alliance

Telephone: 800-247-8038
Web: <http://www.channelpa.com/>
Availability: North America

Chase Plastic Services, Inc.

Chase Plastics Services is a North American distributor with representatives throughout the region. Please find your rep here: <http://www.chaseplastics.com/contact/locations>
Telephone: 800-232-4273
Web: <http://www.chaseplastics.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: Belgium, Denmark, Finland, Luxembourg, Netherlands, Norway, Sweden

Resin Resource, Inc.

Telephone: 877-652-3431
Web: <http://www.resinresourceinc.com/>
Availability: North America

RESINEX Group

RESINEX is a Pan European distribution company. Contact RESINEX for availability of individual products by country.
Telephone: +32-14-672511
Web: <http://www.resinex.com/>
Availability: Europe

