

ACRYREX® CM-205

Polymethyl Methacrylate Acrylic
CHI MEI CORPORATION

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

ACRYREX® CM-205 is a Polymethyl Methacrylate Acrylic product. It is available in Africa & Middle East, Asia Pacific, Europe, Latin America, or North America. Typical application: Automotive.

Characteristics include:

- Flame Rated
- RoHS Compliant

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet - ASTM (English) • Technical Datasheet - ISO (English)
UL Yellow Card ²	• E56070-455994 • E56070-245759
Search for UL Yellow Card	• CHI MEI CORPORATION • ACRYREX®
Availability	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
RoHS Compliance	• RoHS Compliant

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Specific Gravity			
--	1.19	1.19 g/cm ³	ASTM D792
73°F (23°C)	1.19 g/cm ³	1.19 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	1.8 g/10 min	1.8 g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	0.281 in ³ /10min	4.60 cm ³ /10min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress			
Yield	10600 psi	73.0 MPa	ISO 527-2/50
Break	10600 psi	73.0 MPa	ISO 527-2/50
0.125 in (3.18 mm) ⁴	10200 psi	70.6 MPa	ASTM D638
Tensile Elongation			
Break, 0.125 in (3.18 mm) ⁴	5.0 %	5.0 %	ASTM D638
Break	10 %	10 %	ISO 527-2/50
Flexural Modulus ⁵	406000 psi	2800 MPa	ISO 178
Flexural Strength			
0.250 in (6.35 mm) ⁶	15600 psi	108 MPa	ASTM D790
-- ⁵	14900 psi	103 MPa	ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength	0.95 ft·lb/in ²	2.0 kJ/m ²	ISO 179 ISO 179/2C
Charpy Unnotched Impact Strength			
--	12 ft·lb/in ²	26 kJ/m ²	ISO 179
--	10 ft·lb/in ²	22 kJ/m ²	ISO 179/2U
Notched Izod Impact			
73°F (23°C), 0.250 in (6.35 mm)	0.37 ft·lb/in	20 J/m	ASTM D256
--	0.95 ft·lb/in ²	2.0 kJ/m ²	ISO 180/1A
Unnotched Izod Impact Strength	10 ft·lb/in ²	21 kJ/m ²	ISO 180/1U

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness			
M-Scale, 0.250 in (6.35 mm)	97	97	ASTM D785
Ball Indentation Hardness (H 358/30)	22900 psi	158 MPa	ISO 2039-1



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Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm) ⁷	212 °F	100 °C	ASTM D648
264 psi (1.8 MPa), Unannealed	189 °F	87.0 °C	ISO 75-2/A
264 psi (1.8 MPa), Annealed	223 °F	106 °C	ISO 75-2/A
Vicat Softening Temperature			
--	235 °F	113 °C	ASTM D1525 ⁸
--	246 °F	119 °C	ISO 306/A50
--	241 °F	116 °C	ISO 306/A120
--	226 °F	108 °C	ISO 306/B50 ISO 306/B120
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.0625 in (1.59 mm))	HB	HB	UL 94
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Transmittance (125 mil (3180 µm))	92.0 %	92.0 %	ASTM D1003

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 0.24 in/min (6.0 mm/min)

⁵ 0.079 in/min (2.0 mm/min)

⁶ 0.11 in/min (2.8 mm/min)

⁷ 120°C/hr

⁸ Rate A (50°C/h)



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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, 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.calsakpolymers.com/>

Availability: North America

EnCom, Inc.

Telephone: 866-481-7700

Web: <http://www.encompolymers.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

The Materials Group

Telephone: 616-863-6046

Web: <http://thematerialsgroup.com/>

Availability: North America

