



Exceptional Grade for  
Broad-Range Applications

**PLEXIGLAS**<sup>®</sup>  
BY ARKEMA

## Plexiglas<sup>®</sup> MC

ACRYLIC SHEET

Premium-grade Plexiglas<sup>®</sup> MC acrylic sheet satisfies the requirements of nearly all high performance applications. Colorless Plexiglas<sup>®</sup> MC acrylic sheet carries a 10-year limited warranty on light transmission. It is available in a broad range of colors and patterns. Many sign colors have excellent diffusion characteristics for LED hiding.

Plexiglas<sup>®</sup> MC acrylic sheet is a versatile material that has many residential, commercial, industrial and professional uses. Typical applications include:

- Architectural glazing
- POP displays
- Store fixtures
- Brochure holders
- Industrial and school glazing
- Skylights
- Furniture
- Outdoor signs

- **High Performance Acrylic Sheet**
- **Exceptional Optical Clarity**
- **Weather Resistant**
- **Lightweight – Half the weight of glass**
- **Can be easily fabricated and thermoformed**
- **Available in transparent, translucent, and opaque colors**
- **Thickness range from 0.060" - 0.472"**
- **Standard sheet sizes range from 48" x 96" to 72" x 120"**
- **Custom sheet sizes available upon request**

### COLOR OFFERING

Plexiglas<sup>®</sup> MC acrylic sheet is available in more than 28 different standard colors. Visit our chips gallery at [www.plexiglas.com/gallery](http://www.plexiglas.com/gallery) to see our wide range of color offerings.

### TYPICAL STANDARD PROPERTIES

PROPERTIES	TEST METHOD	UNIT	VALUE
<b>PHYSICAL</b>			
Nominal Thickness for data unless otherwise noted		in	0.236"
Specific Gravity	ASTM D-792	---	1.19
Rockwell Hardness	ASTM D-785	M scale	90
Poisson's Ratio	N/A	---	0.35
<b>OPTICAL</b>			
Refractive Index (ND @ 73°F)	ASTM D-542	---	1.49
Luminous Transmittance <sup>1</sup>	ASTM D-1003	%	92.0
Haze <sup>1</sup>	ASTM D-1003	%	< 2.0
<b>MECHANICAL</b>			
Tensile Strength, maximum	ASTM D-638	psi	10,200
Tensile Strength, yield	ASTM D-638	psi	10,200
Tensile Elongation	ASTM D-638	%	4.5
Tensile Modulus of Elasticity	ASTM D-638	psi	450,000
Flexural Strength, maximum	ASTM D-790	psi	15,000
Flexural Modulus of Elasticity	ASTM D-790	psi	450,000
Notched Izod Impact @ 73°F (23°C)	ASTM D-256	ft-lb / in	0.3
Un-notched Charpy @ 73°F (23°C)	ASTM D-256	ft-lb / 0.5"x1" section	7.0
<b>THERMAL</b>			
Deflection Temperature under Flexural Load @ 264psi – unannealed <sup>1</sup>	ASTM D-648	°F	200
Coefficient of Thermal Expansion at 60°F	ASTM E-831	in / in / °F x 10 <sup>-5</sup>	3.6
Coefficient of Thermal Conductivity	ASTM C-177	BTU / (hr)(ft <sup>2</sup> )(°F/in)	1.3
U-value (summer gain, winter loss)	N/A	BTU / (hr)(ft <sup>2</sup> )(°F/in)	0.89, 0.96
Specific Heat Capacity at 77°F	N/A	BTU / (lb °F)	0.35
Maximum Recommended Continuous Service Temperature	N/A	°F	170 – 190
Recommended Thermoforming Temperature	N/A	°F	275 – 350
<b>CRAZE RESISTANCE</b>			
Constant Stress Craze Resistance, IPA <sup>5</sup>	Modified ARTC Method – Mil P-6997	psi	1,300
Constant Stress Craze Resistance, Aromatic / Alcohol Blend <sup>5</sup>	Modified ARTC Method – Mil P-6997	psi	1,200
<b>FLAMMABILITY<sup>3</sup> &amp; SPECIFICATION COMPLIANCE</b>			
Horizontal Burn Rate <sup>1,2</sup>	ASTM D-635	in / min	1.1
Smoke Density	ASTM D-2843	%	1.2
Self Ignition Temperature	ASTM D-1929	°F	860
Surface Burning Characteristics – Flame Spread	CAN/ULC-S102.2-07 File R16788	---	100 (0.125" - 0.250")
Surface Burning Characteristics – Smoke Developed	CAN/ULC-S102.2-07 File R16788	---	> 500 (0.125" - 0.250")
Plastics Component – QMFZ2.E39437 - Flammability Classification	UL 94	---	94HB (≥ 0.060")
Plastics Component – QMFZ2.E39437 - Outdoor Suitability	UL 746C	---	f1 (≥ 0.060" Colorless) f2 (≥ 0.060" ALL)
International Building Code	IBC 2606.4	---	CC2 (0.080" – 0.354")
American National Standard for Safety Glazing	ANSI Z97.1	---	PASS (≥ 0.080")
FMVSS 205 – Federal Motor Vehicle Safety Glazing	ANSI Z26.1	---	AS-5, AS-6, AS-7
Standard Specification for PMMA Acrylic Plastic Sheet	ASTM D-4802	---	Category B-1, Finish 1

Data given are average values and should not be used for specification purposes.

1. This property will change with thickness. The value given is for the thickness indicated in the column heading unless otherwise noted.

2. Tests performed on 0.118" thickness.

3. Flammability tests are small scale tests and may not be indicative of how materials will perform in an actual situation.

4. Conditioned for 24 hours at 122°F

5. The values are after the material has been heated for forming.

For a complete listing of physical properties, go to [www.plexiglas.com](http://www.plexiglas.com) to download a copy of the Plexiglas® Acrylic Sheet General Information and Physical Properties brochure.

Plexiglas® acrylic plastic is a combustible thermoplastic. Observe fire precautions appropriate for comparable forms of wood and paper. For building uses, check code approvals. Impact resistance is a factor of thickness. Avoid exposure to heat or aromatic solvents. Clean with soap and water. Avoid abrasives.

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