

AZCRYL



AZCRYL BR Bullet Resistant Grade Cell Cast Acrylic Sheet

AZCRYL BR acrylic sheet is a 1.25" (32mm) thick, transparent cell cast acrylic sheet made from 100% virgin MMA (methyl methacrylate monomer) to exacting standards, offering light stability and low internal stress levels for consistent performance. The cell cast manufacturing technique produces sheets with unsurpassed optical clarity with a light transmission over 90%. Every sheet is inspected online to insure that the material meets AZ Polymers exacting visual specifications. Thickness tolerances are checked on a sheet-by-sheet basis to insure that the material will provide the required protection. Applications include banks, government buildings, convenience stores, kiosks, ATMs, drive-up windows, bus shelters, prisons, jails, detention centers & psychiatric hospitals.

- Underwriters Laboratories Bullet Resistant UL752 Level 1 Certified
Indoor & Outdoor Applications
- High Clarity with up to 90% Light transmission
- Rigid and Light Weight
Half the Weight of Glass
- Easily fabricated, can be custom cut to any size & is prepared and installed with conventional tools
- 100% Recyclable
- Paper masked to protect surface during shipping, fabricating & installation
- Standard sheet sizes: 48" x 96", 60" x 96", 72" x 96"
- Limited one (1) year warranty



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TYPICAL STANDARD PROPERTIES

PROPERTY	TEST METHOD	UNITS	VALUE
GENERAL			
Nominal Thickness for data unless otherwise noted		in.	1.250"
Specific Gravity/Relative Density	ASTM D792	-	1.19
OPTICAL PROPERTIES			
Refractive Index (ND @ 74 °F)	ASTM D542		1.49
Luminous transmittance ¹	ASTM D1003	%	90 min
Haze ¹	ASTM D1003	%	<1.0
Yellowness index ¹	ASTM E313	Y	<0.7
MECHANICAL PROPERTIES			
Tensile Strength, maximum	ASTM D638	psi	9,600
Tensile Modulus of Elasticity	ASTM D638	psi	450,000
Flexural Modulus of Elasticity	ASTM D790	psi	400,000
THERMAL PROPERTIES			
Coefficient of thermal expansion at 60 °F	ASTM E831	in/in/ °F x 10 ⁻⁵	3.9
U-value (summer gain)	N/A	Btu/(hr)(ft ²)(°F/in)	0.73
Indoor use temperature rating	UL752	°F	55°-95°
Outdoor use temperature rating	UL752	°F	-26°-120°
FLAMMABILITY² & SPECIFICATION COMPLIANCE PROPERTIES			
Self Ignition temperature	ASTM D1929	°F	992
Bullet- resistant glazing	UL 752 File BP8815		Level 1 - 1.25" (indoor/outdoor)

Note:

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

Conditioned for 24 hours at 122 °F

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

²Flammability tests are small scale tests and may not be indicative of how materials will perform in an actual situation.

The typical standard property values quoted are not always strictly equivalent and are based on tests on representative samples. The information given in this publication is based on our general experience and given in good faith. It is intended as a general guide and must not be considered as a binding specification. In no way does this information incur the liability of AZ Polymers LLC, especially in infringement of the rights of a third party.

AZCRYL Acrylic Sheet 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. The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, AZPolymers expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.

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