



# Plexiglas® II - UVA

CELL CAST ACRYLIC SHEET

**PLEXIGLAS®**  
BY ARKEMA

Plexiglas® II-UVA cell cast acrylic sheet is produced by Altuglas International. It is manufactured to meet the requirements of MIL-PRF-5425E. Typical markets include general aviation and military aircraft. Applications include low altitude aircraft windshields, instrument panels, and lens covers. It is available in thicknesses ranging from 0.125" to 1.000".

- A Premium grade, heat-resistant cell-cast acrylic sheet
- Sheet is pre-shrunk during manufacturing resulting in <1% internal strain
- Can be used alone or as a laminate
- Lightweight – Half the weight of glass
- Weather resistant
- Excellent light transmission and optical clarity
- Easily fabricated and thermoformed

## PLEXIGLAS® II-UVA CELL CAST ACRYLIC SHEET (COLORLESS)

Sheet Size	Thickness (Inches)						
	0.125	0.187	0.250	0.375	0.500	0.750	1.000
36" x 48"	Standard	Standard	Standard	Standard	Standard	Standard	Standard
40" x 50"	Standard	Standard	Standard	Standard	Standard	Standard	Standard
48" x 72"	Standard	Standard	Standard	Standard	Standard	Standard	Standard
48" x 96"	Standard	Standard	Standard	Standard	Standard	Standard	Standard
60" x 72"	Standard	Standard	Standard	Standard	Standard	Standard	Standard
60" x 96"	Standard	Standard	Standard	Standard	Standard	Standard	Standard
72" x 72"	Standard	Standard	Standard	Standard	Standard	Standard	Standard
72" x 96"	Standard	Standard	Standard	Standard	Standard	Standard	Standard

Standard

Made to Order

Other sheets sizes may be available. If required please check with your local sales person to confirm availability.

**ALTUGLAS**  
INTERNATIONAL  
ARKEMA GROUP

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## Typical Standard Properties

PROPERTIES	TEST METHOD	UNITS	VALUE
<b>Physical</b>			
Nominal Thickness for data unless otherwise noted	N/A	in	0.250"
Specific Gravity	ASTM D-792	N/A	1.19
Water Absorption (24 hours) <sup>2</sup>	ASTM D-570	%	< 0.30
<b>Optical</b>			
Refractive index @ 72°F	ASTM D-542	N/A	1.49
Luminous Transmittance <sup>1</sup>	ASTM D-1003	%	92.6
Luminous Transmittance – After 1000 hrs accelerated weathering <sup>1</sup>	ASTM D-1003	%	92.6
Haze – Initial <sup>1</sup>	ASTM D-1003	%	< 1.0
Haze – After 1000 hrs accelerated weathering <sup>1</sup>	ASTM D-1003	%	< 1.0
UV Transmission (290-330 nm) <sup>1</sup>	MIL-PRF-5425E	%	< 0.5
Angular Deviation (Primary)	ASTM F-733	Minutes	3
Effect of Accelerated Weathering on Appearance (crazing, discoloration, warping)	MIL-PRF-5425E	Visual	None
<b>Mechanical</b>			
Tensile Strength, yield	ASTM D-638	psi	11,000
Tensile Elongation, break	ASTM D-638	%	5.6
Residual Shrinkage (Internal Strain)	MIL-PRF-5425E	%	< 1.0
<b>Thermal</b>			
Deflection Temperature Under Flexural Load @ 264 psi <sup>4</sup>	ASTM D-648	°F	227
Coefficient of Thermal Expansion	ASTM D-696	in / in °C	0.00006
Maximum Recommended Continuous Service Temperature	N/A	°F	180
Recommended Thermoforming Temperature	N/A	°F	290-360
<b>Flammability<sup>3</sup> &amp; Specification Compliance</b>			
Horizontal Burn Rate <sup>1</sup>	ASTM D-635	in / min	< 1.2
Military Performance Specification	MIL-PRF-5425E	---	PASS

- Data given are typical average values and should not be used for specification purposes
- All samples conditioned for at least 40 hours at 23°C +/- 2°C and 50% RH +/- 10%

1. This property will change with thickness. The value given is for the thickness indicated in the column heading unless otherwise noted.
2. Water absorption samples conditioned for 24 hours at 50°C.
3. Flammability tests are small scale tests and may not be indicative of how materials will perform in an actual situation.
4. Reported for thicknesses ≥ 0.500".

Distributed by:



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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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