

## Technical Data of ALANDS Plexiglass Sheet

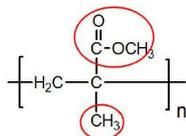
Jinan Alands Plastic Co., Ltd

### Product Description

Poly (methyl methacrylate) (PMMA), also known as acrylic, acrylic glass, or plexiglass sheet, is a transparent plastic material with outstanding strength, stiffness, and optical clarity. It is easy to fabricate, bonds well with adhesives and solvents, and is easy to thermoform. It has superior weathering properties compared to many other transparent plastics.

Plexiglass sheet exhibits glass-like qualities — clarity, brilliance, and transparency — but at half the weight and many times the impact resistance of glass. From durable signs and skylights, to eye-catching retail store fixtures, displays and shelves, acrylic plastics provide outstanding versatility, durability, and aesthetic qualities.

### Chemical Constitution



### General

• Raw Material	MMA	• Transmittance (parallel rays)	92%	
• Specific gravity	1.19-1.20 g/cm <sup>3</sup>	• Full rays	93%	
• Hardness	M - 100	• Color	Clear <input checked="" type="checkbox"/>	Colore <input checked="" type="checkbox"/>
• Absorptivity of Water (24h)	0.003	• Processing Method	Cast <input checked="" type="checkbox"/>	Extrusion <input checked="" type="checkbox"/>
• Coefficient of Rupture	700kg / cm <sup>2</sup>	• Heat Distortion Temperature	100 °C	
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• Thermoforming Ranges	140 - 180 °C	• Insulation Strength	20V/mm	

### Electrical Properties

• Volume Resistivity	> 10 <sup>16</sup> Ω · cm	• Dielectriv Strength	18 - 22 KV · mm-1
• Dielectriv Constant	2.5 - 3.5 X 10 <sup>6</sup> HZ	• Dielectriv Dissipation Factor	(3 - 4) * 10 <sup>-2</sup> X 10 <sup>6</sup> HZ

### Mechanical Properties

• Hardness (HRC)	79
• Tensile Strength	4 MPa
• Tensile Modulus	120 MPa
• Compression Strength	79 MPa
• Notch Impact Strength	4 KJ · m <sup>-2</sup>
• Bending Strength	120 MPa
• Fatigue Strength	3100 MPa

### Thermal Properties

• GTT Glass-transition Temperature	104 °C
• Thermal Degradation Temperature (Nitrogen)	>270 °C
• Distortion Temperature	90 - 100 °C
• Brittle Temperature	9.2 °C
• Coefficient of Linear Expansion	4.5 - 7 10-5k-1
• Oxygen Index	17.30%