

# A-Cast EG Acrylic Product Details

<b>PROPERTIES</b>	<b>UNIT</b>	
Specific Gravity (ASTM D792)		1.19
Hardness		HNC – 96
Water Absorption (ASTM D570)	%	0.35
Tensile Strength: (ASTM D638)		
Tensile strength at yield	Kg/cm <sup>2</sup>	709
Tensile strength of break	Kg/cm <sup>2</sup>	696
Tensile modulus	Kg/cm <sup>2</sup>	29,532
Elongation at break	%	8
Bending Strength: (ASTM D790)		
Flexual Strength	Kg/cm <sup>2</sup>	1.052
Flexual Modulus	Kg/cm <sup>2</sup>	31,264
Impact Strength (ASTM D256)	Kg/cm <sup>2</sup>	1.1
Shear Strength (ASTM D732)	Kg/cm <sup>2</sup>	600 – 650
Transmittancy: (ASTM D1003)		
Full rays	%	93.3
Parallel rays	%	HAZE= 0.27
Specific Heat	Cal/g/°C	0.35
Heat Distortion Temperature (4.6kg/cm) (ASTM D648)	°C	100
Coefficient of Heat Conductivity	Cal/s.cm <sup>2</sup>	4.5 X 10 <sup>-4</sup>
Coefficient of Linear Expansion (ASTM D696)	Cm/cm/°C	6.5 X 10 <sup>-5</sup>
Ultimate Temperature of Continuous Operation	°C	60 – 90
Flammability (ASTM D635)	Mm/ min	33
Surface Resistivity at 28°C	Ohm	> 10 <sup>16</sup>
Volume Resistivity (ASTM D257)	Ohm cm	> 10 <sup>15</sup>
Thermoforming Ranges	°C	140 – 180
Dielectric Strength (ASTM D149)	Kv/Mm	20

## Cast Acrylic Sheet Fire Rating

Cast Acrylic Sheet burn with little smoke generation. Its combustions gases are non toxic and non corrosive. It is classed as:

- Classification E according to Euro Norm (DIN EN SO 11925: 2: 2002-07)
- B2, with no burning droplets, according to DIN 4102
- M4 (no droplets) according to NF 92500+
- Class 3 classification according to BS476 part 7
- Category TP (b) according to BS 2782, method 508A for thermoplastics material as defined by Building Regulations
- UL 94HB



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