

EAGLE PLASTIC ■ 100% NEW MMA CAST ACRYLIC

Cast Acrylic Sheet **Technical Data Sheet**



DESCRIPTION

Cast acrylic is manufactured by a process whereby MMA (Methyl Methacrylate monomer) liquid is pumped into a mould made from two sheets of glass. The mould/monomer is then submerged in warm water and the process of polymerization takes place. The result is a sheet of rigid PMMA (polymethyl methacrylate) or what is generically called Acrylic. Various trade names are applied to this sheet – in Europe it's called "Perspex", in the USA it's often referred to as "Plexi or Plexiglas" and many more.

APPLICATIONS

Widely used in building and construction, commercial and structural glazing, displays and point of sale, exhibit, trade show and convention displays, machine shops, plastic and metal fabrication, recreation, signage.

ADVANTAGES

- 1) Less low angle distortion;
- 2) Greater range of available thicknesses (available in thicknesses greater than 1.00");
- 3) Slightly better chemical resistance;
- 4) Less tendency to melt or chip during machining;
- 5) Slightly higher service temperature;
- 6) More suitable for use involving continuous contact with water;
- 7) Better capability to handle long-term mechanical loads.



EAGLE PLASTIC · CAST ACRYLIC

PROPERTIES	UNITS	VALUES
Flammability	–	HB
Tensile Strength	MPa	75
Elongation at Break	%	>4
Flexural Strength	MPa	>115
Flexural Modulus	MPa	3200
Izod Impact Strength	kJ.m ⁻²	2
Vicat Softening Point	°C	>105
Refractive Index	–	1.49
Surface Resistivity	Ω.m ⁻²	>10 ¹⁴
Electrical Strength	kV.mm ⁻¹	15

PROPERTIES	UNITS	VALUES
Specific gravity	g/cm ³	1.20
Water absorption	%	0.30
Light transmission (clear sheet)	%	92
Rockwell Hardness	M scale	100

Eagle Plastic cast acrylic sheet is distributed by **SiSupplies**.