



GENERAL PRODUCT INFORMATION

PLASTIGLAS DE MEXICO. S.A. DE C.V.

CHEMCAST CELL CAST ACRYLIC SHEET

PHYSICAL AND MECHANICAL PROPERTIES

PROPERTY	TYPICAL VALUE (1)	TEST METHOD
OPTICAL		
Specific Gravity	1.18	ASTM D 792
Optical Refractive Index	1.49	ASTM D542
Haze (%)	2.0	ASTM D542
Light Transmission (%)		
0.100" – 0.197"	92	ASTM 1003
0.220" – 0.472	90	ASTM 1003
MECHANICAL		
Tensile Strength (psi)	9600	ASTM D638
Elongation at Rupture (%)	4.5	ASTM D638
Modulus of Elasticity (psi)	425,000	ASTM D798
Impact Strength (ft lb/in)	0.4 – 0.5	ASTM 256
Flexural Strength (psi)	15000 – 16000	ASTM D 798
Rockwell Hardness	M95	ASTM 785
Barcol Hardness	50	ASTM 2583
THERMAL		
• Forming Temperature (°C)	140 – 180	
(°F)	284 – 356	
• Deflection Temperature Under Load (264 psi) (°C)	91	ASTM D 648
(°F)	196	ASTM D 648
• Maximum recommended continuous service temp (°C)	80	ASTM 1525
(°F)	176	ASTM 1525
MISCELLANEOUS		
• Water absorption (24 hrs. -23°C -73°F) (%)	0.3%	ASTM 570

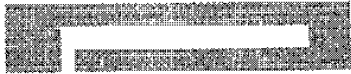
(1) All values referred to 3.0 mm (0.118") acrylic sheet. These values are typical and should not be taken as specifications.

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CHEMICAL RESISTENCE OF CHEMCAST

CHEMICAL	CODE	CHEMICAL	CODE
Acetic Acid (10%)	LR	Hydrogen Peroxid (3%)	R
Acetic Acid (glacial)	N	Isopropyl Alcohol	LR
Acetone	N	Kerosene	R
Ammonium Chloride	R	Lacquer Thinner	N
Ammonium Hydroxide	R	Methyl Alcohol (30%)	LR
Benzene	N	Methyl Alcohol (100%)	N
Calcium chloride	R	Methyl Ethyl Ketone	N
Carbon Tetrachloride	N	Methylene Chloride	N
Chloroform	LR	Nitric Acid (10%)	R
Chromic Acid (10%)	N	Nitric Acid (100%)	N
Chromic Acid (conc.)	N	Phenol (5%)	N
Diethyl Ether	LR	Sodium Chloride	R
Diocetyl Phthalate	LR	Sodium Hidroxide (10%)	R
Ethyl Alcohol (30%)	N	Sodium Hypochloride	R
Ethyl Alcohol (95%)	N	Sulfuric Acid (3%)	N
Ethylene Dichloride	N	Sulfuric Acid (conc.)	N
Ethylene Glycol	R	Toluene	N
Gasoline	LR	Trichloroethylene	N
Glycerine	R	Turpentine	R
Hexane	R	Water (distilled)	R
Hydrochloric Acid	R	Xilene	N

The code is used to describe chemical resistance is a follows:

R = RESISTANT

Acrylic cast withstand this substance for long periods and at temperatures up to 120°F (49°C).

LR = LIMITED RESISTANCE

Acrylic only resists the action of this substance for short periods at room temperatures.

N = NOT RESISTANT

Acrylic is not resistant to this substance. It is either swelled, attacked, dissolved or damaged in some manner.

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