



# CHEMCAST CELL CAST ACRYLIC SHEET



# INTRODUCTION

What makes Chemcast® acrylic sheet notably different is:

Chemcast is the only high quality acrylic sheet that can provide you with short runs capability and color selection to fit your specific needs.

Chemcast is the end product of a vertically integrated industry that has been manufacturing cell-cast acrylic sheets for over 30 years in Mexico; this includes full control of raw material and distribution each step of the way.

Quality control and product reliability are also an integrated process. Both are scientifically applied and carefully monitored throughout the entire process under the direction of highly competent employee groups.

# PRODUCT OPTIONS

Chemcast® is available in different options that include:

#### SIZES

- 48"X72" (1220mm X 1830mm)
- 48"X96" (1220mm X 2440mm)
- 51"×100" (1295mm × 2540mm)
- 60"X96" (1524mm X 2440mm)
- 72"×96" (1830mm × 2440mm)
- 63''×100'' (1600mm × 2540mm)
- 75''X100'' (1905mm X 2540mm)
- 51"×125" (1295mm × 3175mm)
- 63"×125" (1600mm × 3175mm)
- 75"X125" (1905mm X 3175mm)



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### PRODUCT OPTIONS

#### THICKNESS

From 0.060" / I.5 mm (only in 48''x72'' clear) to 1.250" / 32 mm.

#### VERSATILITY

Due to their unique quality and flexibility Chemcast® cell cast acrylic sheets are ideally suited to a wide range of applications.

#### • COLORS

32 Standard colors, carefully matched to market specifications.

#### CUSTOM COLORS

Fluorescents, P-95, Marbles/Pearls and special colors are available

#### COLOR MATCHING

We offer color matching service for your new designs and ideas. Certain minimum quantity and other requirements may apply depending on specific needs.

#### CUSTOM COLOR POLICY

Plastiglas de Mexico has experienced a spiraling cost to develop colors for potential orders that do not occur. These costs occur for both new custom colors and existing colors in thickness not previously offered. Accordingly, Plastiglas is joining other acrylic sheet suppliers enabling us to continue our excellent color matching program to be available to our customers at very competitive prices on a shared cost basis.

#### CUSTOM COLOR MATCHING

I. Plastiglas de Mexico will initially search its color bank for identical or very close matches for customer approval to avoid development costs.

2. If a satisfactory existing color is unavailable, we will reproduce the particular color. The color development process requires approximately 3 to 4 weeks lead-time depending on our backlog. To initiate the color development process the minimum volume required is of 2,500 pounds (one standard pallet +/-10% batch production). For subsequent orders of the same item,i. e., the same color in the identical size and thickness will require minimum batch volume.



# PRODUCT OPTIONS

3. If a special project calls for a minimum number of sheets, an overrun is likely.

4. Please refer to your current Custom Colors Price List

5. Cancellation Policy. An approved matched custom color order cancellation is subject to a 100% cancellation charge.

### • EXISTING COLOR DEVELOPMENT

Each new thickness and/or size with an existing color is in effect a new custom color requiring different volumes of colorants to achieve the same appearance thus incurring additional development costs. The primary cost is in demonstrating that the item can actually be produced outside the color laboratory by the factory. Our policy is intended to avoid wasted investment on speculative inquiries that have a high probability of not occurring.

1) Minimum volume: For a color that requires factory demonstration is 2,500 pounds with production of +/- 10% batch production. Subsequent orders for the same item, i.e. the same color in the identical size and thickness will require minimum batch volume.

• MINIMUM RUNS PER PRODUC	Т
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THICKNESS (in)			SIZE		
	48"X72" 1220X1830	48"X96"  220X2440	51"X100" 1295X2540	60"X96"  524X2440	72"X96" 1830X2440
0.060" - 0.236"		2	0		26
0.3 5" - 0.472"	15				24
0.590" - 0.708"	15				10
0.944" - 1.250"	10				10



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### PRODUCT OPTIONS

THICKNESS (in)			SIZE		
	63"X100" 1600X2540	75"X100" 1905X2540	51"X125" 1295X3175	63"X125" 1600X3175	75"X125" 1905X3175
0.080-0.100	13	13	×	×	×
0.118"- 0.236"	13	13	10	10	10
0.315"- 0.472"	10	12	10	10	10
0.590"	×	×	×	10	×
0.708" - 1.250"	10	×	Х	×	×

2) Prices: For an initial order of an existing color development starting from 0.060" -.236" your price would be "regular color price" as per your current price list.

3) Cancellation Policy. an approved and demonstrated color order cancellation is subject to a 100% cancellation charge.

#### • PACKAGING AND DELIVERY

All Chemcast® cell cast acrylic sheets are offered with paper masking, film masking (EVA), poly masking and or adhesive film on both sides. All deliveries are made in standard pallets.



# SHEET SIZES & THICKNESS

THICKNESS mm (in)						SIZE				
	1220X1830 (48"X72")	1220X2440 (48"X96")	1295X2540 (51"X100")	1524X2440 (60"X96")	1600X2540 (63''X100'')	1830X2440 (72"X96")	1905X2540 (75''X100'')	1295X3175 (51"X125")	1600X3175 (63"X125")	1905X3175 (75"X125")
l.5 mm (0.060")	•	Х	X	Х	×	Х	Х	X	×	×
2.0 mm (0.080")	•	×	×	X	•	X	×	X	×	Х
2.5 mm (0.100")	•	•	×	X	•	X	•	X	×	Х
2.8 mm (0.110")	•	•	•	X	•	X	•	X	×	Х
3.0 mm (0.118")	•	•	•	•	•	•	•	•	•	•
4.0 mm (0.157")	•	•	•	•	•	•	•	×	×	X
4.5 mm (0.177 ")	•	•	•	•	•	•	•	•	•	•
5.0 mm ( 0.197")	•	•	•	•	•	•	•	X	×	×
5.6 mm ( 0.220")	•	•	•	•	•	•	•	•	•	•
6.0 mm ( 0.236")	•	•	•	•	•	•	•	•	•	•
8.0 mm ( 0.315")	•	•	•	•	•	•	•	X	×	Х
9.0 mm ( 0.354")	•	•	•	•	•	•	•	•	•	•
10.0 mm ( 0.394")	•	•	•	X	X	•	Х	X	×	Х
12.0 mm (0.472 ")	•	•	•	•	•	•	•	•	•	•
15.0 mm ( 0.590")	•	•	X	Х	X	•	Х	Х	•	X
18.0 mm (0.708 ")	•	•	•	•	×	•	Х	Х	×	×
24.0 mm ( 0.944")	•	•	•	•	•	•	Х	Х	×	X
32.0 mm (1.250")	×	•	×	•	×	×	×	×	×	×

• - Available X - Not available

Please contact us for thickness and sizes which are not included in this table.



# GUARANTEED THICKNESS

THICKNESS mm (in)	5				SIZE				
	1220X1830 1220X2440 (48"X72") (48"X96")	1295×2540 (51"×100")	1524X2440 (60"X96")	1600X2540 (63''X100'')	1830X2440 (72"X96")	1905X2540 (75"X100")		1600X3175 (63"X125")	1905X3175 (75"X125")
2.8 mm (0.110")	2.20 - 3.1 (0.086" -  0.1					Х			
3.0 mm (0.118")	2.24 - 3.5 (0.088"-0.13					1.98 - 3.50 078"-0.148			
4.0 mm (0.157")	3.09 - 4.5 (0.122"-0.17					2.73 - 4.74 107"-1.186			
4.5 mm (0.177 ")	3.53 - 5.0 (0.139"-0.19					3.41 - 5.18 134"-0.204			
5.0 mm ( 0.197")	4.03 - 5.6 (0.158"-0.22					3.90 - 5.70 153"-0.224			
5.6 mm ( 0.220")	4.46 - 6.2 (0.175"-0.24					4.43 - 6.34  70 "- 0.24			
6.0 mm ( 0.236")	4.86 - 6.6 (0.191"-0.26					4.73 - 6.50 186"-0.266			
8.0 mm ( 0.315")	6.65 - 8.6 (0.262"-0.34					6.53 - 8.81 257"-0.347	7")		
9.0 mm ( 0.354")	7.48 - 9.7 (0.294"-0.38					7.35 - 9.89 289"-0.389			
10.0 mm ( 0.394")	8.30 - 10.80 (0.327"-0.425")					3.00 - 10.70 315"-0.422			
12.0 mm (0.472 ")	10.22 - 12. (0.402"-0.50				0.09 -12.8 397"-0.507				
15.0 mm ( 0.590")	13.15 - 15. (0.518"-0.62					3.00 - 16.0 512 "-0.632			
18.0 mm (0.708 ")	5.97- 8.7 (0.629"-0.73					5.72-19.02 619"-0.749			
24.0 mm ( 0.944")	21.79-24.5 (0.858"-0.96					1.16 - 25.2 333" - 0.99			
32.0 mm (1.250")	29.61-33.3 (1.166"-1.31					9.61 - 33.3 166" - 1.31			

Please contact us for thickness and sizes which are not included in this table.



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# GUARANTEED SHEET SIZE

THICKNESS	NET SIZE GUARANTEED	MAXIMUM OVERSIZE TRIMMED mm ( in )
	220 ×  830 (48" × 72")	220 ×  830 (48" × 72")
	1220 × 2440 (48" × 96")	220 × 2440 (48" × 96")
	1295 × 2540(51" × 100")	1295 × 2540 (51" × 100")
	1524 × 2440 (60" × 96")	524 × 2440 (60" × 96")
l.5 mm - 6.0 mm (0.060" - 0.236")	1830 × 2440 (72" × 96")	1830 × 2440 (72" × 96" )
(0.000 - 0.250)	1600×2540 (63''×100'')	600 × 2540 (63''×100'')
	1905 × 2540 (75''×100'')	1905 × 2540 (75''×100'')
	1295 × 3175 (51''×125'')	1295 × 3175 (51"×125")
	600 × 3 75 (63"× 25")	1600 X 3175 (63''X125'')
	1905 × 3175 (75''×125)	1905 × 3175 (75''×125)

THICKNESS	NET SIZE GUARANTEED mm ( in )	MAXIMUM OVERSIZE TRIMMED mm ( in )
	220 ×  830 (48" × 72")	220 ×  830 (48" × 72")
	1220 × 2440 (48" × 96")	220 × 2440 (48" × 96")
	1295 × 2540 (51" × 100")	1295 × 2540 (51" × 100")
	1524 × 2440 (60" × 96")	524 × 2440 (60" × 96" )
8.0 mm - 32.0 mm ( 0.315" -1.250")	1830 × 2440 (72" × 96")	830 × 2440 (72" × 96")
(0.313 -1.230)	600 × 2540 (63"×100")	600 × 540 (63"× 00")
	1905 × 2540 (75''×100'')	905 × 2540 (75"× 00")
	1295 × 3175 (51''×125'')	1295 × 3175 (51''×125'')
	1600 × 3175 (63''×125'')	600 × 3 75 (63"× 25")
	1905 × 3175 (75''×125)	1905 × 3175 (75''×125)

Untrimmed size could be larger, but high quality guaranteed size remains the same. Please contact us for other sizes not included.



# PHYSICAL AND MECHANICAL PROPERTIES

PROPERTY	TYPICAL VALUE (I)	TEST METHOD
OPTICAL		
Specific Gravity	1.18	ASTM D 792
Optical Refractive Index	1.49	ASTM D542
Haze (%)	2.0	ASTM D542
Light Transmision (%)		
0.100" - 0.197"	92	ASTM 1003
0.220" - 0.472"	90	ASTM 1003
MECHANICAL		
Tensile Streght (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	M (90 - 100)	ASTM 785
Barcol Hardness	50	ASTM 2583
THERMAL		
Forming Temperature (°C)	40 –  80	
(°F)	284 – 356	
Deflection Temperature		
Under Load (264 psi) (°C)	91	ASTMD 648
(°F)	196	ASTMD 648
Maximum recommended		
continuos service temp (°C)	80	ASTM 1525
(°F)	176	ASTM 1525
MISCELLANEOUS		
Water absorption (24 hrs23°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 RESISTANCE OF CHEMCAST

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

The code is used to describe chemical resistance as follows:

- R = RESISTANT. Acrylic cast withstand this substance for long periods and at temperature up to 120°F (49°C).
- LR = LIMITED RESISTANCE. Acrylic only resists the action of this substance for short periods at room temperature.
- N = NOT RESISTANT. Acrylic is not resistant to this substance. It is either swelled, attacked, dissolved or damaged in some manner.

These values are typical and should not be taken as specifications.



# PACKAGING

All material is packaged in standard pallets, as shown in the following table. Shipments should be submitted to +/-10% of the quantity ordered.

Based on the customer's order the standard colors will be packaged in rainbow pallets of the same size. Proper identification with pallet labels will clearly show the colors included on each rainbow pallet.

### • SHEETS PER PALLET

THICKNESS mm (in)	NOMINAL SIZES						
	1220×1830 (48"×72")	I220X2440 (48"X96")	1330X2540 (51"X100")	I 524X2440 (60"X96")	1830X2440 (72"X96")		
2.5 (0.100")	160	125					
2.8 (0.110")	140	115	110				
3.0 (0.118")	140	115	110	50	50		
4.0 (0.157")	100	60	60	35	35		
4.5 (0.177")	90	60	60	35	35		
5.0 (0.197")	90	60	60	30	30		
5.6 (0.220")	70	50	50	25	30		
6.0 (0.236")	70	50	50	25	25		
8.0 (0.315")	50	32	32	22	22		
9.0 (0.354")	50	32	32	22	22		
10.0 (0.394")	50	32	25				
12.0 (0.472")	35	25	25	15	15		
15.0 (0.590")	20	18			10		
18.0 (0.708")	20	16	10	10	10		
24.0 (0.944")	15	12	10	9	7		
32.0 (1.250")		10		7			





#### STANDARD COLORS CHEMCAST®

For standard colors please consider the following categories and their minimums to order:

**Standard colors (S).-** The minimum quantity per order must be of 25 sheets per clear & color / size / thickness from 0.060" to 0.236". For thickness above 0.236" the minimum offer is of standard pallet quantities.

Standard color with minimum order (SM).- Please refer to chart "A" in page 5.

**Custom colors (C).** Please refer to the following chart for standard colors that pass to the category of Custom colors.

# CUSTOM COLORS

#### • FLUORESCENTS (INDOOR ONLY)

COLOR CODE	SHEET SIZE in (mm)	SHEET THICKNESS in (mm)
L-032 ORANGE L-043 YELLOW L-052 GREEN L-089 BLUE L-111 GREEN L-116 RED	48" × 96" (1220 × 2440) 51" × 100" (1295 × 2540)	0.118" (3.0) 0.177" (4.5) 0.220" (5.6) 0.236" (6.0)

#### • PEARLESCENTS (INDOORS ONLY)

COLOR CODE	SHEET SIZE in (mm)	SHEET THICKNESS in (mm)
L-400 WHITE	48" × 72" (1220 × 1830) 48" × 96" (1220 × 2440)	0.118" (3.0)
L-401 IVORY L-402 BROWN L-403 PINK L-404 BROWN L-412 BLUE L-450 GRAY	48" × 72" (1220 × 1830)	0.118" (3.0)



### • NON - GLARE (P-95)

COLOR CODE	SHEET SIZE in (mm)	SHEET THICKNESS in (mm)
CLEAR GREEN 3030	48" × 72" (1220 × 1830) 48" × 96" (1220 × 2440) 51" × 100" (1295 × 2540)	0.110 (2.8) 0.118" (3.0) 0.177" (4.5) 0.220" (5.6) 0.236" (6.0) 0.354" (9.0) 0.472" (12.0) 0.708''(18.0) 0.944''(24.0)
WHITE 2447 WHITE 7328 WHITE 7508 BLACK 2025	48" × 96" ( 1220 × 2440) 51" × 100" (1295 × 2540)	0.110"(2.8) 0.118" (3.0) 0.157"(4.0) 0.220" (5.6) 0.708'' (18.0)

For colors that are not included in this table are offered upon request considering the color and thickness.

#### • STANDARD COLORS EUROPE

COLOR CODE	SHEET SIZE in (mm)	SHEET THICKNESS in (mm)
WHITE LC-028 LC-040 LC-050 LC-069		
YELLOW LC-229 LC-252 LC-260 LC-261	48" × 96" (1220 × 2440) 51" × 100" (1295 × 2540) 72" × 96" (1830×2440)	0.118 (3.0) 0.197 (5.0 )
RED LC-431 LC-433 LC-440 LC-494		

For sizes, thickness or colors that are not included in this table are offered upon request considering the custom color and color matching policy.



# CUSTOM COLORS

COLOR CODE	SHEET SIZE in (mm)	SHEET THICKNESS in (mm)
BLUE LC-727 LC-743 LC-744 LC-751 OTHER COLORS 9T-30 BLACK LC-504 TINT LC-901 TINT LC-128 PEACH LC-133 IVORY LC-363 ORANGE LC-650 GREEN LC-923 NEUTRAL	48" × 96" (1220 × 2440) 51" × 100" (1295 × 2540) 72" × 96" (1830×2440)	0.118 (3.0) 0.197 (5.0 )

For sizes, thickness or colors that are not included in this table are offered upon request considering the custom color and color matching policy.

**IMPORTANT: Plastiglas de México, S.A. de C.V.** has prepared this document to provide information about the product but does not assume any legal responsibility for the suggestions and data provided which are based in information true and offered in good will without warranty.

This document in its form and content is a product catalogue and does not consider all the possible situations. Therefore any other condition of usage and application will be responsibility of the user.

For additional information and/or particular processing conditions please contact our:

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