

CELL-CAST ACRYLIC SHEETS

TECHNICAL DATASHEET



GAREN



THE ACRYLIC SHEET is a polymer produced with MMA, (with the CELL CAST process) made with 100% virgin monomer of the highest quality offering durability, beauty and workability. We offer a wide variety of colors, as well as different sheet sizes.

Properties

MECHANICAL AND PHYSICAL

PROPRIETIE	VALUE	TEST METHOD (ASTM)
OPTICAL		
RefractionIndex	1.49	ASTM 542
Light transmisión (%)		ASTM 1003
<4.5 mm.	92	
>4.5 mm.	90	
Haze(%)	2.0	ASTM 1003
MECHANICAL		
Specific Weight	1.18	ASTMD 792
Tensile strength	10,400	ASTMD 638
Elongation break (%)	4.85	ASTMD 638
Tensile Modulus (lbf./plg.)	452,000	ASTMD 638
Bending strength(lbf./plg.)	18,000 - 19,000	ASTMD 790
Izod impact strength (ft.lb./plg.	0.3 - 0.4	ASTMD 256
Rockwell hardness	M 90 - 100	ASTMD 785
Barcol hardness	50	ASTMD 2583
THERMAL		
Forming temperature(°C)	140	
Maximum Service Temperature (°C)	80	
Deflection Temperature under load	101.5	ASTMD 648
DIVERS		
Water absortion(24hrs.,23°C)(%)	0.3	ASTMD 570

Sheets

SIZES AND THICKNESS

THICKNESS (IN MM)	SHEET SIZE (IN CM)			
	120 X 180	120 X 240	180 X 240	180 X 180
2	-	-	-	-
3	-	-	-	-
4	-	-	-	-
5	-	-	-	-
6	-	-	-	-
9	-	-	-	-
12	-	-	-	-
15	-	-	-	-
18	-	-	-	-
21	-	-	-	-
24	-	-	-	-

THICKNESS (IN MM)	SHEET SIZE (m x m)			
	120 X 180	120 X 240	180 X 240	180 X 180
2	1.29 - 2.55	-	-	-
2.5	1.76 - 3.03	-	1.50 - 3.03	-
3	2.24 - 3.50	-	1.98 - 3.50	-
3.2	2.42 - 3.68	-	2.16 - 3.94	-
4	2.87 - 4.34	-	2.51 - 4.52	-
5	3.78 - 5.35	-	3.65 - 5.45	-
6	4.46 - 6.24	-	4.43 - 6.34	-
9	7.48 - 9.76	-	7.35 - 9.89	-
12	10.22 - 12.76	-	10.09 - 12.88	-
15	13.15 - 15.90	-	13.00 - 16.05	-
18	15.97 - 18.76	-	15.72 - 19.02	-
21	19.05 - 21.84	-	18.42 - 22.48	-
24	21.79 - 24.58	-	21.16 - 25.22	-

Available COLORS

COLORS	ACRYLIC	CLEAR ACRYLIC	OPAQUE ACRYLIC	LUMINESCENT ACRYLIC	FLUORESCENT ACRYLIC
CRISTAL	-				
SMOKE	-				
DARK SMOKE		-			
OPAL	-				
GLASS GREEN	-				
WHITE	-				
OPAQUE WHITE	-				
RED		-	-	-	-
BLUE		-	-	-	
AMBER		-	-	-	
GREEN		-	-	-	-
YELLOW		-	-	-	-
ORANGE		-	-	-	
BLACK			-		

ACRYLIC CHARACTERISTICS

- Polymer produced with MMA (With CELL CAST process)
- Easy to mold (Thermoformed)
- Light (60% lighter than glass)
- Excellent light diffuser grade
- Wide variety of colors, sizes and thicknesses
- Long term weathering



New protection film that avoids scratches and polishing rework.

Chemical

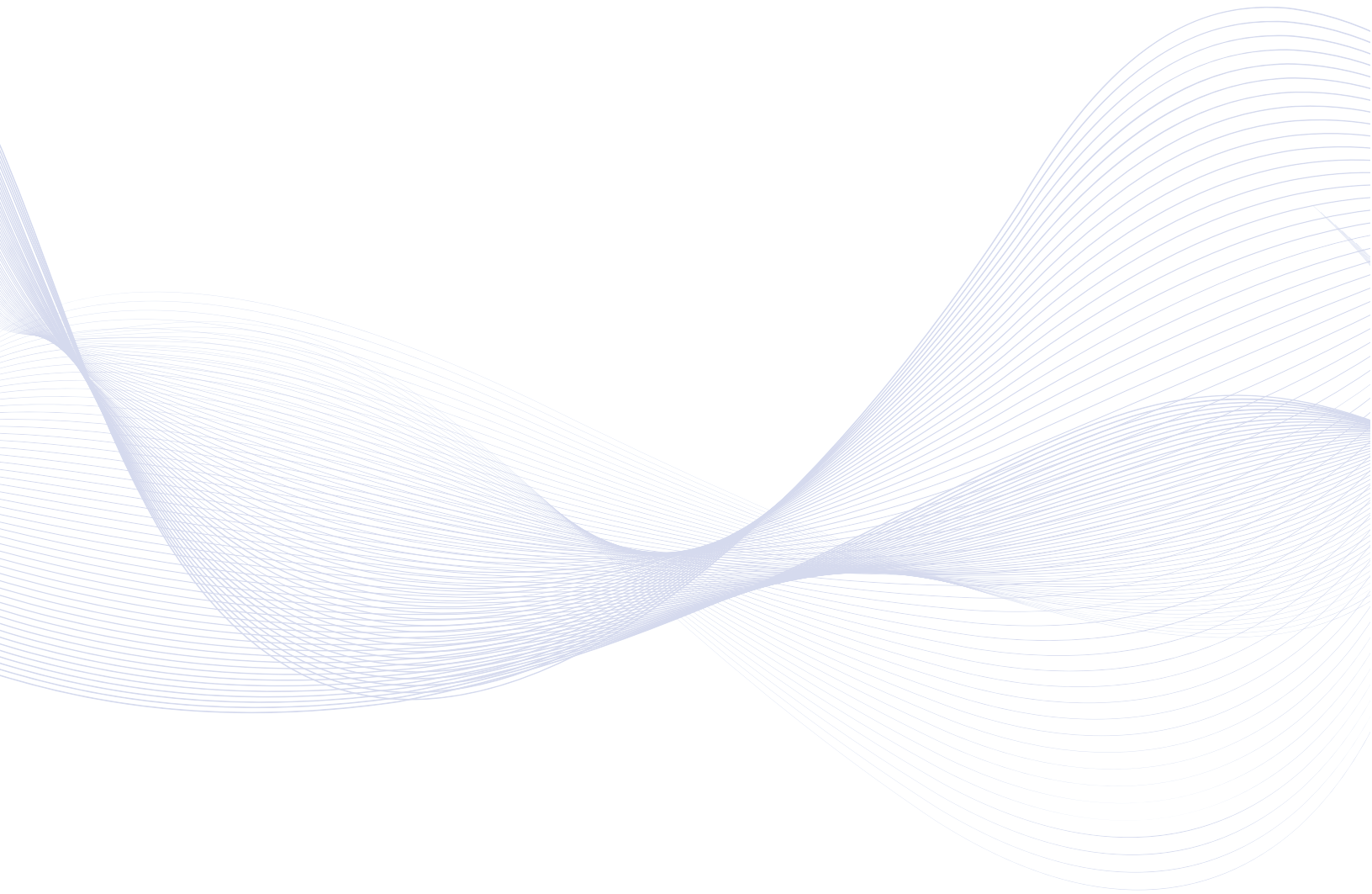
SHEET RESISTANCE

RESISTS 20°C

OLIVE OIL	SODIUM CHLORIDE
ACETIC ACID (CONCENTRATION 10)	FERRIC CHLORIDE (CONCENTRATION 10)
SEBACTIC ACID	POTASSIUM DICHROMATE
CITRUS ACID (SATURATED SOLUTION)	DIESEL
CHLORIDE ACID	PETROLEUM ETHER
FORMIC ACID (CONCENTRATION 10)	ETHYL GLYCOL
PHOSPHORIC ACID	FORMALDEHYDE
LACTIC ACID	DIBUTYL PHTHALATE (DBP)
NITRIC ACID (CONCENTRATION 10)	GLYCERINE
OXALIC ACID	HEXANO
TARTARIC ACID	POTASSIUM HYDROXIDE
WATER STILL WITH TYPICAL TREATMENT FOR POOLS	SODIUM HYDROXIDE (CAUSTIC SODA)
AMMONIA	SODIUM HYPOCHLORITE (10% CHLORINE)
SODIUM CARBONATE	LANOLINA
POTASSIUM CHLORATE	MERCURY
SODIUM CHLORATE	METIL QUINONA
AMMONIUM CHLORIDE (SATURATED SOLUTION)	METHYLAMINE
CALCIUM CHLORIDE (SATURATED SOLUTION)	POTASSIUM PERMANGANATE (SOLUTION TO 10)
MAGNESIUM CHLORIDE	HYDROGEN PEROXIDE (CONCENTRATION 10)
POTASSIUM CHLORIDE	POTASSIUM SULFATE

DOES NOT RESIST

ACETALDEHÍDO	ETHYLENE DIBROMIDE
METHYLENE CHLORIDE	ETHYLENE DICHLORIDE
AMYL ACETATE	METHYLENE DICHLORIDE
ACETATE OF BUTILO	CARBONATE DISULFIDE
ETHYL ACETATE	EPICLORHYDRIN
ACETOPHENONE	DIETHYL ETHER
BUTIROCO ACID (CONCENTRATE)	PHENOL
HYDROCYANIC ACID	METHYL CYCLOHEXANOL
HYDROFLUORIC ACID	METHYL ETHYL
AMYL ALCOHOL	KETONE
ETHYL ALCOHOL (CONCENTRATION 100)	NITRO BENCENO
METHYL ALCOHOL (CONCENTRATION 100)	PERCLORETILENE
ANILINE	PROPILCETONE
BENZENE	METHYL SALICYLATE
BENZALDEHIDO	CARBON TETRACHLORIDE
METHYL BENZOATE	TETRAHYDROFURAN
BUTIRALDEHIDO	THINNER
KETONE	TO LUENO
CYCLHEXAN	TO LUENO
CYCLHEXANOL	TRICLORETILENE
CICLOHEXANONA	TRICLOROETHANE
CHLOROFORM	XILOL
BUTILO CHLORIDE	



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