

# Cast Acrylic Sheet Product Information

#### **Benefits**

Light transmittance of 93%

Excellent resistance to weather, U.V., and temperature conditions

Surface hardness equivalent to aluminum

Easily thermoformed with limited reversion

Wide range of stock colours

#### **Colours**

Clear, Opal, Blue, Black, Orange, Red, Grey, White, Yellow, Fluro Orange, Fluro Green, Fluro Pink.

### **Dimensions**

Clear and Opal available in 2540 x 1280, 2490 x 1880, 3050 x 2030 Black and White available in 2480 x 1280 All other colours available in 2440 x 1220 Thicknesses range from 1 .5mm through to 25mm

		3mm Thickness	
Physical Properties		Value	Units
Specific Gravity		1.19	
Hardness (Brinell)		20 - 24	
Water Absorption (24 hour)		0.3	%
Compression Strength		1260	kg/cm <sup>2</sup>
	Modulus of Elasticity	25000	kg/cm <sup>2</sup>
Tensile Strength:	Rupture	560	kg/cm <sup>2</sup>
· ·	Modulus of Elasticity	25000	kg/cm <sup>2</sup>
Elongation		3 - 7	%
Flexural Strength:	Rupture	1003	kg/cm <sup>2</sup>
•	Modulus of Elasticity	24700	kg/cm <sup>2</sup>
Shear Strength		443	kg/cm <sup>2</sup>
Impact Strength (200 gr. Steel ball)		0.4	m
Refractive Index		1.49	
Light Transmittance		93	%
Heat Distortion Temp.		85	°C
Coefficient of Thermal Conductivity		4 - 6 x 10 <sub>-4</sub>	cal/sec/cm <sup>2</sup> /°C/cm
Coefficient of Thermal linear Expansion		7 x 10 ₅	°C
Max Recommended Continuous Service Temp.		80	°C
Hot Forming Temperature		140 - 160	°C
Specific Heat		0.35	cal/qr. °C
Dielectric Strength		20f	kv/mm
Volume Resistivity		10 <sub>15</sub> x 10 <sub>19</sub>	ohm - cm

The values above are average values and will be changed in accordance with thickness and colour

## **Applications**

Product displays Aquariums Skylights Furniture Partitions

Thickness	Tolerance	Thickness	Tolerance
1.0	.08 - 1.20	6	5.4 - 6.6
1.5	1.3 - 1.7	8	7.2 - 8.8
1. 8	1.5 - 2-1	10	9 - 11
2.0	1.7 - 2.3	13	12 - 14
2.3	2.2 - 2.8	15	13 - 17
2.8	2.5 - 3.4	18	16.7 - 10.3
3.0	2.6 - 3.4	20	18.5 - 21.5
4.0	3.6 - 4.4	25	23.3 - 26.7
4.5	4.0 - 5.0	30	28.2 - 31.8
4.76	4.3 - 5.2	40	38.2 - 41.8
5	4.5 - 5.5	50	48 - 52

These figures report reliable and accurate information to the best of our knowledge, however, guarantees cannot be given due to the conditions of use being beyond our control. Sheeting applications should be considered on their merits.

- Designing3D Printing
- Consulting
- Engineering
- 3D Scanning