

## **Material Information Sheet**

Material Description: ColorCast Acrylics ™

Specifications	
Material:	Cell Cast Acrylic
Finish:	Matte   Gloss
Sheet Size:	24"x 48 3/4" (610 x 1238 mm)
Thickness: 2-Ply	1/8" (3.2mm)
-	1/4" (6.4mm)
Usage:	Architectural Signage   Corporate Awards
Engraving Method:	Laser

Physical Properties	Typical Values	ASTM Method	
Flexural Strength			
Load to stretch outer surface 5%	1050kg/cm squared	D-790	
Electrical – Arc Resistance	10^12 Ohms/Sq. Meter	D-495	
Rockwell Hardness	M45	D-785	
Specific Gravity	1.19 – 1.20	D-792	
<u>Deflection Temperature</u>			
Temperature at which material deflects .010" (.254mm) at 264 psi	212°F (100°C)	D-648	
Coefficient of Thermal Expansion			
Inch/inch/°F	6x10^5/cm/°C	D-696	

ColorCast Acrylics™ material softens sufficiently at approx. 180°F (82.22°C), which enables bending, should that be desired. It can also be drilled, sawed, sheared, and bonded to itself or other materials. Cast acrylics have thickness variations that may present difficulties in applications where thickness tolerance is important (i.e. fitting into extrusion, thermoforming application where walls must maintain uniform thickness and assembly of complex structures.) Remember to check gauge when non-contact engraving takes place and to periodically re-check focal lengths when laser engraving. In some cases, thickness variations may require the operator to make multiple passes during laser engraving.

Electrically non-conductive, Insulative. Meets 10<sup>12</sup> Ohms/square meter or higher in electrical resistivity, RoHS compliant (halogenfree), PVC-free, Formaldehyde and Phenol free, clean room compliant and rated UL 94 HB. Material was judged as not contributing to the combustion of the base material.

Restriction of Hazardous Substances (RoHS)/ U.L. Certification/Halogenated Materials Rowmark has investigated the Restriction of Hazardous Substances (RoHS 3) directive issued by the European Union (directive 2015/863/EU), through our on-line research. This RoHS directive prohibits the distribution of products after June 2015, which contain the following materials; lead, mercury, cadmium, hexavalent chromium, poly-brominated biphenyls and poly-brominated diphenyl ethers. The directive appears to apply to all products that operate on electrical power and contain electronic components. Rowmark complies with the use and disclosure of all halogenated materials and does not incorporate poly-brominated biphenyls or poly-brominated diphenyl ethers in any of its products. Based on our audit, Rowmark plastic sheet products are in compliance with this directive and do not contain any of the elements noted above or in the candidate list in accordance with the referenced directive. Our related MSDS documents may be found in the Rowmark website (http://www.rowmark.com/MARK/MSDS.asp) and can be referenced for further information.

## **Terms & Condition of Sale**

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**Note:** The above information is given in good faith, but no warranty, express or implied, is given.

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