

Material Information Sheet

Material Description: UltraGrave™

Specifications	
Material:	Polymer Capped Impact Acrylic
Finish:	Matte / Satin
Sheet Size:	24.125" x 49" (610 x 1219mm)
Thickness: 2-Ply	.010" (.025mm) .020" (0.5mm) 1/16" (1.6mm)
Usage:	Interior/Exterior Signage, Industrial Signage, Labeling & Legend Plates
Engraving Method:	Laser Rotary
Cutting Depth:	.003" (.08mm)

Physical Properties	Typical Values	ASTM Method
IZOD Impact Strength		
Notched at 73°F (22.78°C)	1.10ft lbs/in	D-256
Tensile Strength		
To break	5,500 psi	D-638
Elongation before break	50%	D-638
Flexural Strength		
Load to stretch outer surface 5%	10,300 psi	D-790
Specific Gravity		
	1.15	D-792
Rockwell Hardness		
	M45	D-785
Deflection Temperature		
Temperature at which material deflects .010" (.254mm) at 264 psi	175°F (79.44°C)	D-648
Coefficient of Thermal Expansion		
Inch/inch/°F	5.6 x 10 ⁻⁵	D-696
Vicat Softening Point		
Temperature for needle to penetrate 1mm (90°F/hr, 2.2 lbs)	208°F (97.78°C)	D-1525

UltraGrave™ softens at about 200°F (93.33°C) sufficiently so that it can be bent as needed. It can be sawed, drilled and bonded. UV stable polymer cap contributes to additional durability and extended service life.

This material recently received Underwriters Laboratories (UL) safety certification in the United States and Canada and was tested for flammability by Underwriters Laboratories. The materials are rated 94 HB on the UL 94 test. The 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 2) directive issued by the European Union (directive 2011/65/EU), through our on-line research.

This RoHS directive prohibits the distribution of products after July 1, 2006, 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

Rowmark's warranty is limited to replacement of product only, and such warranty does not extend to the costs of any repeat labor or incidental costs. **LIMITED WARRANTY, WARRANTY DISCLAIMERS AND LIMITATIONS OF REMEDIES AND LIABILITIES:** Except as set forth above, Seller makes NO OTHER WARRANTIES concerning the products whatsoever.

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