

**Physical Properties**

**ADA Alternative Physical Properties**

ADA Alternative<sup>®</sup> Substrate & Appliqué

Physical Properties	Typical Values	ASTM Method
<b><u>IZOD Impact Strength</u></b>		
Notched at 73°F (22.78°C)	1.10 ft lbs/in	D-256
<b><u>Tensile Strength</u></b>		
To break	5,500 psi	D-638
Elongation before break	50%	D-638
<b><u>Flexural Strength</u></b>		
Load to stretch outer surface 5%	10,300 psi	D-790
<b><u>Specific Gravity</u></b>	1.15	D-792
<b><u>Rockwell Hardness</u></b>	M45	D-785
<b><u>Deflection Temperature</u></b>		
Temperature at which material deflects .010" (.254mm) at 264 psi	175°F (79.44°C)	D-648
<b><u>Coefficient of Thermal Expansion</u></b>		
Inch/inch/°F	5.6 x 10 <sup>-5</sup>	D-696
<b><u>Vicat Softening Point</u></b>		
Temperature for needle to penetrate 1mm (90°F/hr, 2.2 lbs)	208°F (97.78°C)	D-1525
Temperature for needle to penetrate 1mm (90°F/hr, 11.0 lbs)	187°F (86.11°C)	D-1525

**ADA** Applique material softens sufficiently at about 200°F (93.33°C), which enables bending, should that be desired. It can also be drilled, sawed, sheared, nailed and bonded to itself or other materials.

The material 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.



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Under the ASTM Standard G-155, ADA engraving material was tested with a Xenon Arc Light Apparatus under specific, reproducible conditions. Testing resulted in no noticeable change in color after 300 hours of exposure to the Xenon Arc. Exposure to the Xenon Arc for 300 hours is supposedly the equivalent of approximately 3 years of exposure in a normal, mild climate, such as the Midwestern States of the United States.

*This is not intended as a statement of warranty, rather a statement of general comparison.*

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