KYDEX® 510
Weatherable and decorative sheet

Introduction

KYDEX® 510 is a weatherable sheet with superior performance for thermoforming and a decorative sheet for lamination.

KYDEX® 510 is available in many distinctive colors and textures. An acrylic cap protects the surface, providing excellent weatherability for outdoor use. This product is now available with decorative film (black/white granite). While excellent in thermoforming, KYDEX® 510 is also being used as damage resistant surface material.

General Information

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Suggested Applications

- Kiosk Housings
- Equipment Housings
- Medical Products
- Miscellaneous Applications

Features

- Offers same properties of KYDEX® sheet, but in a weatherable formula
- Highly impact resistant as measured by the Notched Izod Impact Resistance test
- Fire retardant (self-extinguishing) with UL Std 94 V-0 and 5V ratings
- Low moisture absorption, resistance to chipping and cracking, great fabrication and machining properties and flexibility
- Excellent forming properties, uniform wall thickness and crisp detail
- Can be drilled, punched and cut using standard woodworking or metal working tools
- Exhibits a Dielectric Constant of 2.76 @ 100 Hz, 2.53 @ 800 MHz and 2.51 @ 1.9 GHz

Environmental and Safety Considerations

SEKISUI SPI is committed to ensuring that its products can be manufactured, transported, stored, used, disposed and recycled with an appropriate regard for safety, health and environmental protection. We support the safe handling of our products. Please contact our Technical Service department at 800.682.8758 for resources or visit our website: http://www.sekisui-spi.com. For Material Safety Data Sheets, please call 800.325.3133.

SEKISUI SPI
ISO 9001 and 14001 Certified

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## KYDEX® 510
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### Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Typical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Gravity</td>
<td>ASTM D-792</td>
<td>1.35</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM D-638</td>
<td>42 MPa 6,100 psi</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>ASTM D-790</td>
<td>66 MPa 9,600 psi</td>
</tr>
<tr>
<td>Modulus of Elasticity</td>
<td>ASTM D-790</td>
<td>2,480 MPa 360,000 psi</td>
</tr>
<tr>
<td>Notched Izod Impact Resistance, @ 23°C (73°F)</td>
<td>ASTM D-256</td>
<td>801 J/m 15 ft-lb/in</td>
</tr>
<tr>
<td>Rockwell Hardness (R Scale)</td>
<td>ASTM D-785</td>
<td>94</td>
</tr>
<tr>
<td>Coefficient of Linear Thermal Expansion</td>
<td>ASTM D-696</td>
<td>6.9 x 10⁻⁵ / °C 3.83 x 10⁻⁵ / °F</td>
</tr>
<tr>
<td>Heat Deflection Temperature (HDT)</td>
<td>ASTM D-648</td>
<td>75.6°C 168°F</td>
</tr>
<tr>
<td>Flammability: Underwriters Laboratories, Inc° Component Recognition</td>
<td>UL Standard 94°</td>
<td>V-0, 5-V³</td>
</tr>
<tr>
<td>Forming Temperature</td>
<td>BS 476 Part 7</td>
<td>163 - 200°C 325 - 390°F</td>
</tr>
</tbody>
</table>

1 Values based upon 3.18mm (0.125") sheet unless otherwise specified.
2 Underwriters Laboratories, Inc°
3 Thicknesses ≥1.00mm (≥0.039")
   Not intended for specification purposes.

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