

## KYDEX® 510

Weatherable and decorative sheet

### Introduction

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

### General Information

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.

### 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

#### Customer Service

6685 Low St, Bloomsburg, PA 17815 USA

Phone: 800.325.3133, +1.570.389.5810

Outside the US: +1.570.389.5814

Fax: 800.452.0155, +1.570.387.7786

Email: [info@sekisui-spi.com](mailto:info@sekisui-spi.com)

#### Technical Service

Phone: 800.682.8758

Fax: +1.570.387.8722

Outside the US: +1.570.387.6997

[techservice@sekisui-spi.com](mailto:techservice@sekisui-spi.com)

[sekisui-spi.com](http://sekisui-spi.com)

## KYDEX® 510

Weatherable and decorative sheet

### Physical Properties

Property	Test Method	Typical Value <sup>1</sup>	
Specific Gravity	ASTM D-792	1.35	
Tensile Strength	ASTM D-638	42 MPa	6,100 psi
Flexural Strength	ASTM D-790	66 MPa	9,600 psi
Modulus of Elasticity	ASTM D-790	2,480 MPa	360,000 psi
Notched Izod Impact Resistance, @ 23°C (73°F)	ASTM D-256	801 J/m	15 ft-lbs/in
Rockwell Hardness (R Scale)	ASTM D-785	94	
Coefficient of Linear Thermal Expansion	ASTM D-696	6.9 x 10 <sup>-5</sup> / °C	3.83 x 10 <sup>-5</sup> / °F
Heat Deflection Temperature (HDT) @ 1.8 MPa (264 psi) annealed	ASTM D-648	75.6°C	168°F
Flammability: Underwriters Laboratories, Inc® Component Recognition	UL Standard 94 <sup>2</sup>	V-0, 5-V <sup>3</sup>	
Forming Temperature		163 - 200°C	325 - 390°F
BS 476 Part 7		Class 1 (1mm)	
<sup>1</sup> Values based upon 3.18mm (0.125") sheet unless otherwise specified. <sup>2</sup> Underwriters Laboratories, Inc® <sup>3</sup> Thicknesses ≥ 1.00mm (≥ 0.039") Not intended for specification purposes.			

#### SEKISUI SPI

ISO 9001 and 14001 Certified

#### Customer Service

6685 Low St, Bloomsburg, PA 17815 USA  
 Phone: 800.325.3133, +1.570.389.5810  
 Outside the US: +1.570.389.5814  
 Fax: 800.452.0155, +1.570.387.7786  
 Email: info@sekisui-spi.com

#### Technical Service

Phone: 800.682.8758  
 Fax: +1.570.387.8722  
 Outside the US: +1.570.387.6997  
 techservice@sekisui-spi.com

[sekisui-spi.com](http://sekisui-spi.com)

Because we cannot anticipate or control the many different conditions under which this information and our products may be used, we do not guarantee the applicability of the accuracy of this information or the suitability of our products in any given situation. Users should conduct their own tests to determine the suitability of each product for their particular purposes. Data in the physical property table represents typical values and are to serve only as a guide for engineering design. Results are obtained from specimens under ideal laboratory conditions. Right to change physical properties as a result of technical progress is reserved. THE PRODUCTS DISCUSSED ARE SOLD WITHOUT WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, EITHER EXPRESSED OR IMPLIED, EXCEPT AS PROVIDED IN OUR STANDARD TERMS AND CONDITIONS OF SALE. Buyer assumes all responsibility for loss or damage arising from the handling and use of our products, whether done in accordance with directions or not. In no event shall the supplier or the manufacturer be liable for incidental or consequential damages. Also, statements concerning the possible use of our products are not intended as recommendations to use our products in the infringement of any patent. Consult local code and regulatory agencies for specific requirements regarding code compliance, transporting, processing, recycling and disposal of our product. Product not intended for use as a heat resistant surface. Texture, product grade and other conditions may cause variations in appearance.

This information supersedes all previously published data.