

## KYDEX® T-LW

Light weight fire-rated sheet

### Introduction

KYDEX® T-LW is a fire-rated thermoplastic sheet that has the flammability characteristics of a PVC/PMMA alloy and features significant weight savings compared to standard KYDEX® T and is comparable to polycarbonate.

### General Information

KYDEX® T-LW is a light-weight alternative to heavier fire-rated thermoplastics. It meets a wide range of fire safety standards including FAR 25.853(a) vertical burn, Federal Motor Vehicle Safety Standard 302, and UL 94 V-0. It offers a significant weight reduction compared to other PVC/PMMA alloys. Its wide processing window and ease of thermoforming makes it ideal for three-dimensional parts requiring crisp detail.

### Suggested Applications

- Aircraft Interiors
- Equipment Housings
- Kiosk Housings
- Mass Transit Vehicle Interior Components
- Medical Products

### Features

- Offers a 10% weight savings compared to KYDEX® T and is comparable to polycarbonate
- Specific gravity of 1.21
- Meets flammability requirements listed in FAR 25.853(a)
- Compliant to Federal Motor Vehicle Safety Standard, FMVSS 302
- Recognized by Underwriter's Laboratories, Inc. as UL 94 V-0 rated in all thicknesses
- Excellent formability and fabrication characteristics
- Allows for tight tolerance control
- Easy machining using conventional methods and equipment
- Available in P-1, P-3, and P-C textures and thicknesses from 1.19mm (0.047") to 6.35mm (0.250")

### 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)

Distributed by:



**Piedmont Plastics®**  
where solutions take shape

Toll Free: 1.800.277.7898  
[www.piedmontplastics.com](http://www.piedmontplastics.com)

## KYDEX® T-LW

Light weight fire-rated sheet

### Physical Properties

Property	Test Method	Typical Value <sup>1</sup>	
<b>Physical</b>			
Specific Gravity	ASTM D792	1.21	
Water Absorption, 24hr	ASTM D570	0.15%	
Rockwell Hardness, R-Scale	ASTM D785	39	
<b>Mechanical</b>			
Tensile Strength	ASTM D638	27.2 MPa	3,950 psi
Tensile Modulus	ASTM D638	1,860 MPa	270,000 psi
Flexural Strength	ASTM D790	44.5 MPa	6,450 psi
Flexural Modulus	ASTM D790	1,800 MPa	261,000 psi
Compressive Strength, yield	ASTM D695	35.9 MPa	5,200 psi
Compressive Modulus	ASTM D695	1,635 MPa	237,000 psi
Shear Strength	ASTM D732	29.0 MPa	4,200 psi
Bearing Strength, 4% deflection	ASTM D953	21.0 MPa	3,050 psi
Bearing Strength, max.	ASTM D953	138.5 MPa	20,100 psi
Gardner Drop Dart Impact, GE	ASTM D5420	15.3 J	135 in-lb <sub>f</sub>
<b>Thermal</b>			
Heat Deflection Temperature @264 psi (1.8 MPa), annealed	ASTM D648	67.2°C	153°F
Coefficient of Thermal Expansion	ASTM E831	75.3 µm/m/°C	41.8 µin/in°F
<b>Electrical</b>			
Dielectric Strength, oil	ASTM D149	17.1 kV/mm	435 V/mil
<b>Flammability<sup>2</sup></b>			
Vertical Burn, 60-second	FAR 25.853(a)(i)	Pass	
Vertical Burn, 12-second	FAR 25.853(a)(ii)	Pass	
Federal Motor Vehicle Safety	FMVSS 302	Pass	
Underwriter's Laboratories, Inc Component Recognition	UL 94	V-0	
<sup>1</sup> Values based upon 0.125" (3.17mm) sheet unless otherwise specified <sup>2</sup> All Thicknesses Not intended for specification purposes.			

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.

#### 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)

Distributed by:



Toll Free: 1.800.277.7898  
[www.piedmontplastics.com](http://www.piedmontplastics.com)