

## 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.

### 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
- Easy machining and fabrication 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 & SAFETY CONSIDERATIONS

SEKISUI KYDEX, LLC 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.kydex.com>. For Material Safety Data Sheets, please call 800.325.3133.



#### Customer Collaboration

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PROPERTY	TEST METHOD	TYPICAL VALUE <sup>1</sup>	
<b>PHYSICAL</b>			
Specific Gravity	ASTM D792	1.21	
Rockwell Hardness, R-scale	ASTM D785	39	
Moisture Absorption, 24 hrs. @ 50°C	ASTM D570	0.15%	
<b>MECHANICAL</b>			
Tensile Strength	ASTM D638	27.2 MPa	3,950 psi
Tensile Modulus	ASTM D638	1,860 MPa	270,000 psi
Poisson's Ratio	ASTM D638	0.375	
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 MPa	4,200 psi
Bearing Strength, 4% deflection	ASTM D953	21 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 (HDT) @ 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</b>			
Underwriters Laboratories, Inc.® Component Recognition	UL Standard 94 <sup>2</sup>	V-0, 5V <sup>3</sup>	
Federal Motor Vehicle Safety	FMVSS 302	Pass	
Vertical Burn, 60-second	FAR 25.853(a)(i)	Pass	
Vertical Burn, 12-second	FAR 25.853(a)(ii)	Pass	
<sup>1</sup> Values based upon 3.18mm (0.125") sheet unless otherwise specified. <sup>2</sup> Underwriters Laboratories, Inc.®, File Number E115252 <sup>3</sup> All thicknesses 1.20mm (0.047") and above Not intended for specification purposes.			



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