



## KYDEX<sup>®</sup> 1900

Mid-temperature grade thermoplastic sheet

### Introduction

KYDEX<sup>®</sup> 1900 is a proprietary thermoplastic sheet with improved heat distortion temperature for higher in-service temperatures.

### General Information

KYDEX<sup>®</sup> 1900 passes UL Std 94 V-0 and 5V and meets Federal Aviation Regulation (FAR) 25.853 (a) for vertical burn in all thicknesses and colors. It is available in a wide range of textures, colors, thicknesses and sheet sizes. Maximum recommended service temperature is approximately 76 - 78°C (168 - 173°F) depending on the thermoforming technique and application.

### Suggested Applications

- Aircraft Interiors
- Medical Applications
- Equipment Housings
- Miscellaneous Applications

### Features

- available in thicknesses from 1.02mm (0.040") to 6.35mm (0.250") and in a wide range of distinctive textures and colors
- meets the requirements of the Federal Aviation Administration paragraph 1ii and a1ii in all thickness for vertical burn
- passes UL Std 94 V-0 and 5V
- heat distortion temperature (HDT) is 76°C (168°F) unannealed and a high 78°C (173°F) after annealing
- excellent thermoforming properties, uniform wall thickness and crisp detail
- easy machining and fabricating using conventional methods and equipment

### Environmental and Safety Considerations

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.

**KYDEX**<sup>®</sup>

ISO 9001:2000 | ISO 14001:2004 Certified

#### Customer Service

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#### Technical Service

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[www.kydex.com](http://www.kydex.com)



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### Properties

Property	Test Method	Typical Value <sup>1</sup>	
Specific Gravity	ASTM D-792	1.35	
Tensile Strength	ASTM D-638	43 MPa	6,200 psi
Flexural Strength	ASTM D-790	69 MPa	10,000 psi
Modulus of Elasticity	ASTM D-790	2,517 MPa	365,000 psi
Notched Izod Impact Resistance, @ 23°C (73°F)	ASTM D-256	374 - 480 J/m	7 - 9 ft-lbs/in
Rockwell Hardness (R Scale)	ASTM D-785	108	
Heat Deflection Temperature (HDT) @ 264 psi (1.8 MPa)	ASTM D-648	78.3°C (annealed) 75.5°C (unannealed)	173°F (annealed) 168°F (unannealed)
Flammability: Federal Aviation Administration	FAR 25.853 (a)	Pass	
Flammability: Underwriter's Laboratories, Inc. <sup>®</sup> Component Recognition	UL Standard 94 <sup>2</sup>	V-0, 5V <sup>3</sup>	
Thermoforming Temperature		163 - 200°C	325 - 390°F
Mold Shrinkage %		0.40 - 0.60	
<p><sup>1</sup> Values based upon 3.18mm (0.125") sheet unless otherwise specified.  <sup>2</sup> Underwriter's Laboratories, Inc.<sup>®</sup>, File E115252  <sup>3</sup> All thicknesses 0.71mm (0.028") and above</p> <p>Not intended for specification purposes.</p>			



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This information supersedes all previously published data.

[www.kydex.com](http://www.kydex.com)