## **Technical Data Sheet**





### KYDEX® 100

High impact fire-rated sheet

#### Introduction

Super tough, durable KYDEX® 100, a proprietary alloy sheet, brings new dimensions to thermoformers in: formability, rigidity, breakage resistance, chemical resistance and fire retardancy.

#### General Information

KYDEX® 100 is available in a wide range of standard and custom colors, textures, and sheet sizes. It is Underwriter's Laboratories, Inc® recognized for UL Std 94 V-0, 5V and UL Std 746C and has 961 J/m (18 ft-lbs/in) Notched Izod impact resistance.

#### Suggested Applications

- \* Aircraft Interiors
- \* Mass Transit Vehicle Interior Components
- \* Equipment Housings
- \* Medical Products
- \* Miscellaneous Applications

#### Flammability Tests

Meets requirements for:

- \* UL 94 V-0, 5V
- \* BR 476, Part 6 & 7
- \* FAR 25.853a
- \* DIN 5510

# Environmental and Safety Considerations

#### Kleerdex Company, LLC

ISO 9001 and ISO 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@kleerdex.com

#### **Technical Service**

Phone: 800.682.8758 ext. 581 Fax: +1.570.387.8722 Outside the US: +1.570.387.6997 ext.581 Kleerdex 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: www.kydex.com. For Material Safety Data Sheets, please call 800.325.3133.

#### **Features**

- \* good for deep or hard to form parts
- \* more rigid, parts will deform less when loaded
- \* high Notched Izod impact resistance offers unsurpassed resistance to breakage
- \* meets highest standard for chemical resistance for thermoplastic materials
- \* recognized by Underwriter's Laboratories, Inc\* for Std 94 V-0, 5V and Std 746C in all thicknesses and colors
- \* uniform wall thickness and crisp detail
- \* easy machining and fabricating using conventional methods and equipment
- \* endorsed by the Royal Institute of Public Health for conformance to the standard of Hygenic Merit











www.kydex.com

Durability by Design®

### **Technical Data Sheet**





## KYDEX® 100 High impact fire-rated 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
Elongation %	ASTM D-638	160	
Flexural Strength	ASTM D-790	63 MPa	9,100 psi
Modulus of Elasticity	ASTM D-790	2,310 MPa	335,000 psi
Notched Izod Impact Resistance, @ 23°C (73°F)	ASTM D-256	953 J/m	18 ft-lbs/in
Rockwell Hardness (R Scale)	ASTM D-785	94	
Coefficient of Linear Thermal Expansion	ASTM D-696	7.56 x 10 <sup>-5</sup> °C	4.2 x 10 <sup>-5</sup> °F
Heat Deflection Temperature (HDT) @ 264 psi (1.8 MPa) annealed	ASTM D-648	78.3°C	173°F
Flammability: Underwriter's Laboratories., Inc® Component Recognition	UL Standard 94 <sup>2</sup> UL Standard 746C	V-0, 5V <sup>3</sup>	
Motor Vehicle Safety Standard	MVSS 302	Pass	
Federal Aviation Administration	FAR 25.853 (a)	Pass <sup>3</sup>	
BS 476 Part 7		Class 1 @ 3.20 mm Class 1Y @ 2.00mm	
EC 95 / 28 / EG		Pass (1.00 - 6.00mm)	
DIN 5510-2		0.90mm (S4, ST2, SR2) 6.50mm (S4, ST2, SR1)	

- 1 Values based upon 3.18mm (0.125") sheet unless otherwise specified.
- 2 Underwriter's Laboratories, Inc®, File E115252
- 3 All thicknesses 0.71mm (0.028") and above
- \* The thicknesses are added.
- Not intended for specification purposes.

#### Kleerdex Company, LLC

ISO 9001 and ISO 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@kleerdex.com

#### **Technical Service**

Phone: 800.682.8758 ext. 581 Fax: +1.570.387.8722 Outside the US: +1.570.387.6997 ext.581 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 or 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 products. 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.

www.kydex.com Durability by Design\*