

## KYDEX® 321

### Co-Extruded High Impact Fire Rated Sheet with Metallic-Coloured Cap

#### Introduction

KYDEX® 321 is a proprietary co-extruded high impact fire rated thermoplastic sheet that is cost competitive with fire retardant ABS (FR-ABS) formulations but with superior properties.

#### General Information

KYDEX® 321 is less hygroscopic than FR-ABS. KYDEX® 321 typically does not require pre-drying and offers excellent resistance to a broad range of corrosive chemicals and cleaning solutions. It is available in 10 metallic colours and is UL® recognized Std 94 V-0/5V.

#### Suggested Applications

- Exhibits and Displays
- Medical Products
- Miscellaneous Applications
- Store Fixture Components
- Machine Housings

#### Features

- Metallic cap with either a light (off-white), medium (grey), or dark (black) coloured substrate
- Offered in thicknesses from 3.18mm (0.125") to 8.9mm (0.350")
- Textures: P-3 Velour Matte and P-C Level Haircell
- Impact resistant
- Easy to form with good part definition
- Chemical resistant
- Fire retardant
- Excellent fabrication qualities

#### Flammability Tests

UL Standard 94 Recognized: V-0, 5V

#### 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, LLC

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@kydex.com](mailto:info@kydex.com)

#### Technical Service

Phone: 800.682.8758  
Fax: +1.570.387.8722  
Outside the US: +1.570.387.6997  
[techservice@kydex.com](mailto:techservice@kydex.com)

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

## KYDEX® 321

Co-Extruded High Impact Fire Rated Sheet with Metallic-Coloured Cap

### Physical Properties

Property	Test Method	Typical Value <sup>1</sup>	
Specific Gravity	ASTM D-792	1.33	
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	2,482 MPa	360,000 psi
Notched Izod Impact Resistance @73°F (23°C)	ASTM D-256	640 J/m	12 ft.-lbs./in
Heat Deflection Temperature (HDT) <sup>2</sup> @1.8 MPa (264psi) unannealed/annealed	ASTM D-648	64.4°C 72.9°C	148°F 163°F
Flammability: Underwriters Laboratories, Inc. Component Recognition	UL Standard 94 <sup>3</sup>	V-0, 5V	
<p><sup>1</sup> Values based upon 3.2mm (0.125") sheet unless otherwise specified.  <sup>2</sup> Annealed at 65.5°C (150°F) for 8 hours and cooled slowly  <sup>3</sup> Underwriters Laboratories, Inc File #E115252</p> <p>As a bi-layer sheet, users should conduct their own tests to determine the suitability of this product.                      Not intended for specification purposes.</p>			

### KYDEX, LLC

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@kydex.com

#### Technical Service

Phone: 800.682.8758  
 Fax: +1.570.387.8722  
 Outside the US: +1.570.387.6997  
 techservice@kydex.com

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