

KYDEX® 6513

Integral "Frost" low heat release aviation sheet

Introduction

KYDEX® 6513 is a proprietary, innovative, high performance thermoplastic sheet specifically formulated to meet the safety needs of the aviation industry while elevating aviation interior aesthetic. Color is filtered through frost-like finish to extend luxe design. Hues shift with movement of passenger or part, defining geometry and plane. KYDEX® 6513 is ideal to use with LED lighting, yet dynamic on its own.

Color and degree of effect may be customized extensively with a unique blend of special-effect pigments and specialized extrusion process. Our designLab™ team collaborates on each project's customization.

General Information

KYDEX® 6513 meets all fire retardancy requirements set forth in Federal Aviation Regulations 25.853 paragraphs (a) and (d) (old (c)) including low heat release (65 / 65) in the OSU rate of heat release test. Its excellent properties make it the ideal material to form two and three-dimensional aircraft components.

Suggested Applications

- Seat parts
- Bulkhead laminates
- Window shades
- Armrests
- Life vest shrouds
- Moulding strips
- Passenger service units
- Tray tables
- Monitor shrouds
- Kick panels
- Accent pieces

Features

- Available in P-3 texture and thicknesses from 0.71mm (0.028") to 3.18mm (0.125")
- Meets the stringent requirements of FAR 25.853 paragraph (d) in all thicknesses and colors
- Easy to fabricate with crisp detail, minimal rejects, and effect integrity
- Can be formed on all standard presses and cut on all standard die-cutting machines
- Easy to clean with aggressive cleaners such as Soft Scrub®, Fantastic®, and citrus-based cleaners such as Citri Kleen® (avoid ammoniated cleaners)
- Secondary operations include: machining, sawing, blanking, punching, etc., are easily performed

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

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

Distributed by:



Toll Free: 1.800.277.7898

www.piedmontplastics.com

KYDEX® 6513

Integral "Frost" low heat release aviation sheet

Physical Properties

Property	Test Method	Typical Value ¹	
Physical			
Specific Gravity	ASTM D-792	1.48	
Water Absorption, 24hr	ASTM D-570	0.08%	
Rockwell Hardness, R-Scale	ASTM D-785	108	
Mechanical			
Tensile Strength	ASTM D-638	53.3 MPa	7,730 psi
Tensile Modulus	ASTM D-638	3,358 MPa	487,000 psi
Flexural Strength	ASTM D-790	82.7 MPa	12,000 psi
Flexural Modulus	ASTM D-790	3,358 MPa	487,000 psi
Compressive Strength, yield	ASTM D-695	75.8 MPa	11,000 psi
Compressive Modulus	ASTM D-695	3,303 MPa	479,000 psi
Shear Strength	ASTM D-732	56.5 MPa	8,190 psi
Bearing Strength, 4% deflection	ASTM D-953	53.3 MPa	7,730 psi
Bearing Strength, max.	ASTM D-953	256.5 MPa	37,200 psi
Thermal			
Heat Deflection Temperature (HDT) @ 1.8 MPa (264 psi) annealed	ASTM D-648	78.3°C	173°F
Coefficient of Thermal Expansion	ASTM E-831	58.3 $\mu\text{m}/\text{m}/^\circ\text{C}$	32.4 $\mu\text{in}/\text{in}/^\circ\text{F}$
Electrical			
Dielectric Strength, oil	ASTM D-149	22.4 kV/mm	570 V/mil
Flammability²			
Vertical Burn, 60-second	FAR 25.853(a)(i)	Pass	
Vertical Burn, 12-second	FAR 25.853(a)(ii)	Pass	
OSU Heat Release, 2-min total	FAR 25.853(d) Part IV	<65 kW.min/m ²	
OSU Heat Release, peak		<65 kW/m ²	
NBS Smoke Density	FAR 25.853(d) Part V	D _{max} <200	
¹ Values based upon 3.18mm (0.125") sheet unless otherwise specified. ² All Thicknesses Not intended for specification purposes.			

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

Distributed by:



Toll Free: 1.800.277.7898
www.piedmontplastics.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.