

# KYDEX® FST2

Fully compliant aviation sheet

#### Introduction

KYDEX<sup>®</sup> FST2 is a proprietary, high performance non-PVC thermoplastic sheet specifically formulated to meet all Boeing and Airbus Flammability, OSU Heat Release, Smoke, and Toxicity requirements for aircraft interior components.

General Information

Suggested

**Applications** 

KYDEX<sup>®</sup> FST2 meets the flammability and smoke development requirements outlined in Federal Aviation Regulations (FAR) 25.853 paragraphs (a) and (d) and the toxicity requirements for Airbus (ABD0031) and Boeing (BSS7239). Its wide processing window and ease of thermoforming makes it ideal for complex parts.

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

### Features

- · Meets the stringent requirements of FAR 25.853(d) in all thicknesses and colors
- · Compliant to ABD0031 and BSS7239 toxicity specifications
- · Excellent formability and fabrication characteristics
- · Allows for tight tolerance control
- Low gloss
- Excellent UV resistance
- Excellent chemical resistance
- Lighter weight
- Available in P3 Velour Matte

### Environmental and Safety Considerations

## SEKISUI SPI

ISO 9001 and 14001 Certified

Customer Service 6685 Low St, Bloomsburg, PA 17815 USA

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#### Technical Service

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sekisui-spi.com

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.



Curbell Plastics is a proud supplier of SEKISUI SPI materials



## KYDEX<sup>®</sup> FST2

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Physical Properties

Property	Test Method	Typical Value <sup>1</sup>	
PHYSICAL		,	
Specific Gravity	ASTM D-792	1.30	
Water Absorption, 24hr	ASTM D-570	0.20%	
Rockwell Hardness, R-Scale	ASTM D-785	112	
MECHANICAL	Т	1	
Tensile Strength	ASTM D-638	58.6 MPa	8,500 psi
Tensile Modulus	ASTM D-638	2,868 MPa	416,000 psi
Flexural Strength	ASTM D-790	90.3 MPa	13,100 psi
Flexural Modulus	ASTM D-790	2,910 MPa	422,000 psi
Compressive Strength, yield	ASTM D-695	73.1 MPa	10,600 psi
Compressive Modulus	ASTM D-695	2,860 MPa	415,000 psi
Shear Strength	ASTM D-732	45.1 MPa	6,540 psi
Bearing Strength, 4% deflection	ASTM D-953	31.7 MPa	4,600 psi
Bearing Strength, max.	ASTM D-953	208.2 MPa	30,200 psi
Notched Izod Impact	ASTM D-256	254 J/m	4.75 ft-lb <sub>f</sub> / in
Gardner Drop Dart Impact, GE	ASTM D-5420	37.3 J	330 in-lb <sub>f</sub>
THERMAL	•		
Heat Deflection Temperature (HDT) @ 264psi (1.8 MPa) unannealed/annealed	ASTM D-648	121°C	250°F
Coefficient of Thermal Expansion	ASTM E-831	43.2 µm/m/ºC	24.0 µin/in/ºF
ELECTRICAL			
Dielectric Strength, oil	ASTM D149	> 23.8 kV/mm	> 605 V/mil
FLAMABILITY <sup>2</sup>			·
Vertical Burn, 60-second	FAR 25.853(a)(i)	Pass	
Vertical Burn, 12-second	FAR 25.853(a)(ii)	Pass	
OSU Heat Release	FAR 25.853(d) Part IV	Pass	
NBS Smoke Density	FAR 25.853(d) Part V	Pass	
Airbus Toxic Gas Generation	ABD0031	Pass	
Boeing Toxic Gas Generation	BSS 7239	Pass	

Not intended for specification purposes.

#### Note: Pre-drying of KYDEX® FST2 is required prior to thermoforming in order to remove moisture from the sheet.

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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 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 specimers under ideal laboratory conditions. Right to change physical property table technical porgress 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 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.