

KYDEX® FST2

Fully compliant aviation sheet

Introduction

KYDEX® 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

KYDEX® 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.

Suggested Applications

- 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 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

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Physical Properties

Property	Test Method	Typical Value ¹	
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			
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 _f /in
Gardner Drop Dart Impact, GE	ASTM D-5420	37.3 J	330 in-lb _f
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/°C	24.0 μin/in/°F
ELECTRICAL			
Dielectric Strength, oil	ASTM D149	> 23.8 kV/mm	> 605 V/mil
FLAMABILITY²			
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	
¹ Values based upon 0.125" (3.17mm) sheet unless otherwise specified ² All Thicknesses 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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This information supersedes all previously published data.