

KYDEX® FST

Fully compliant aviation sheet

INTRODUCTION

KYDEX® FST is a proprietary, high performance, opaque thermoplastic sheet formulated to meet all Boeing and Airbus toxicity requirements for aircraft interior components.

GENERAL INFORMATION

KYDEX® FST meets all flame, smoke, and heat release requirements set forth in Federal Aviation Regulations (FAR) 25.853 paragraphs (a) and (d) as well as toxicity requirements for Airbus (ABD003) and Boeing (BSS7239). Its excellent properties make it the ideal material to form two and three-dimensional aircraft components.

SUGGESTED APPLICATIONS

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

FEATURES

KYDEX® FST is an advanced polymer that has the colour creation capabilities of SEKISUI SPI's designLab®. Its wide processing window and ease of thermoforming makes it ideal for complex parts, and it is available in custom colours not typically available in high performance polycarbonate products. The addition of KYDEX® FST to SEKISUI SPI's aviation portfolio expands its offering of thermoplastic materials for every interior application.

- Meets the stringent requirements of FAR 25.853 (a) and (d) in all thicknesses and colours
- Meets toxicity smoke requirements of Airbus (ABD0031) and Boeing (BSS7239)
- Excellent fabrication and formability characteristics
- Allows for tight tolerance control
- Available in a wide range of integral colours

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 appLab™ at 800.682.8758 for resources or visit our website, www.sekisui-spi.com. For Safety Data Sheets, please call 800.325.3133.



Customer Service

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PHYSICAL PROPERTIES

Property	Test Method	Typical Value ¹	
PHYSICAL			
Specific Gravity	ASTM D792	1.34	
Water Absorption, 24hr	ASTM D570	0.15%	
Rockwell Hardness, R-Scale	ASTM D785	125	
MECHANICAL			
Tensile Strength	ASTM D638	71.7 MPa	10,400 psi
Tensile Modulus	ASTM D638	2,392 MPa	347,000 psi
Poisson's Ratio	ASTM D638	0.466	
Flexural Strength	ASTM D790	114.5 MPa	16,600 psi
Flexural Modulus	ASTM D790	2,496 MPa	362,000 psi
Compressive Strength, yield	ASTM D695	87.6 MPa	12,700 psi
Compressive Modulus	ASTM D695	2,813 MPa	408,000 psi
Shear Strength	ASTM D732	77.9 MPa	11,300 psi
Bearing Strength, 4% deflection	ASTM D953	26.9 MPa	3,900 psi
Bearing Strength, max.	ASTM D953	307.5 MPa	44,600 psi
Gardner Drop Dart Impact, GE	ASTM D5420	71.2 J	>630 in-lbr
THERMAL			
Heat Deflection Temperature (HDT) @ 264 psi (1.8 MPa), annealed	ASTM D648	120.5°C	249°F
Coefficient of Thermal Expansion	ASTM E831	57.8 µm/m/°C	32.1 µin/in/°F
Electrical			
Dielectric Strength, oil	ASTM D149	14.8 kV/mm	375 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	≤ 65/65	
NBS Smoke Density	FAR 25.853(d) Part V	≤ 200	
Airbus Smoke Toxicity	ABD0031	Pass	
Boeing Smoke Toxicity	BSS7239	Pass	
¹ Values based upon 3.20mm (0.125") sheet unless otherwise specified. ² All thicknesses and colours Not intended for specification purposes.			



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