

KYDEX® 6565

Low heat release aviation sheet

Introduction

KYDEX® 6565 is a proprietary, high performance thermoplastic sheet with integral colour, specifically formulated to meet the safety needs of the aviation industry.

General Information

KYDEX® 6565 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
- Moulding strips
- Armrests
- Life vest shrouds
- Monitor shrouds
- Passenger service units
- Tray tables
- Kick panels

Features

- Meets the stringent requirements of FAR 25.853 paragraph (d) in all thicknesses and colors
- Available in over 200 integral colours, various textures and thicknesses ranging from 0.71mm (0.028") and up
- Excellent formability and fabrication characteristics allowing for crisp detail and minimal rejects
- Can be formed on all standard presses and cut on all standard die-cutting machines
- Easy to clean with aviation grade cleaners such as celeste® FSC and celeste® Interior Cleaner Complete. Avoid ammoniated cleaners.

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

Customer Service

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Technical Service

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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	94	
MECHANICAL			
Tensile Strength	ASTM D-638	45 MPa	6,500 psi
Tensile Modulus	ASTM D-638	66 MPa	9,600 psi
Tensile Modulus	ASTM D-638	0.39	
Flexural Strength	ASTM D-790	70 MPa	10,100 psi
Flexural Modulus	ASTM D-790	2,896 MPa	427,000 psi
Compressive Strength, yield	ASTM D-695	65 MPa	9,430 psi
Compressive Modulus	ASTM D-695	2,944 MPa	426,000 psi
Shear Strength	ASTM D-732	55 MPa	8,060 psi
Bearing Strength, 4% deflection	ASTM D-953	33 MPa	4,790 psi
Bearing Strength, max.	ASTM D-953	258.5 MPa	35,700 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	69.5 µm/m/°C	38.6 µin/in/°F
ELECTRICAL			
Dielectric Strength, oil	ASTM D-149	18.1 kV/mm	461 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	
¹ Values based upon 3.18mm (0.125") sheet unless otherwise specified. ² All Thicknesses and colours Not intended for specification purposes.			

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This information supersedes all previously published data.