

## KYDEX® 5555

Low heat release aviation sheet

### Introduction

KYDEX® 5555 is a proprietary, integrally coloured, high performance, thermoplastic sheet specifically formulated to meet the fire safety needs of the aviation industry.

### General Information

KYDEX® 5555 is a proprietary, high performance acrylic/PVC thermoplastic sheet that 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. KYDEX® 5555 exceeds the heat release to a level of 55/55. 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

- Meets the stringent requirements of the FAR 25.853 paragraph (d) (replaces para.c), in all thicknesses and colours.
- Available in over 200 integral colours, various surface patterns and eight thicknesses from 0.71mm (0.028") and up
- Excellent formability and fabrication characteristics allowing for crisp detail and minimal rejects
- Easy to clean with aviation grade cleaners such as celeste® FSC and celeste® Interior Cleaner Complete. Avoid ammoniated cleaners.

#### SEKISUI SPI

##### Customer Service

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[techservice@sekisui-spi.com](mailto:techservice@sekisui-spi.com)

[sekisui-spi.com](http://sekisui-spi.com)

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### Environmental and Safety Considerations

### Physical Properties

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.

Property	Test Method	Typical Value <sup>1</sup>	
<b>PHYSICAL</b>			
Specific Gravity	ASTM D-792	1.52	
Water Absorption, 24 hr	ASTM D-570	0.09%	
Rockwell Hardness, R-Scale	ASTM D-785	107	
<b>MECHANICAL</b>			
Tensile Strength	ASTM D-638	43 MPa	6,180 psi
Tensile Modulus	ASTM D-638	3,523 MPa	511,000 psi
Poisson's Ratio	ASTM D-638	0.37	
Flexural Strength	ASTM D-790	72 MPa	10,500 psi
Flexural Modulus	ASTM D-790	3,323 MPa	482,000 psi
Compressive Strength	ASTM D-695	66 MPa	9,550 psi
Compressive Modulus	ASTM D-695	3,868 MPa	561,000 psi
Shear Strength	ASTM D-732	50 MPa	7,220 psi
Bearing Strength, 4% deflection	ASTM D-953	37 MPa	5,390 psi
Bearing Strength, max	ASTM D-953	207 MPa	30,000 psi
<b>THERMAL</b>			
Heat Deflection Temperature (HDT) @ 264 psi (1.8 MPa) annealed	ASTM D-648	75.9°C	168.6°F
Coefficient of Thermal Expansion	ASTM E-831	66.3 µm/m/°C	36.8 µin/in/°F
<b>ELECTRICAL</b>			
Dielectric Strength, oil	ASTM D-149	19.4 kV/mm	492 V/mil
<b>FLAMABILITY<sup>2</sup></b>			
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	Total: <55 kW/m <sup>2</sup> Total: <55 kW/m <sup>2</sup>	
NBS Smoke Density	FAR 25.853(d) Part V	Ds max < 150	

<sup>1</sup> Values based upon 3.18mm (0.125") sheet unless otherwise specified.

<sup>2</sup> All thicknesses and colours  
Not intended for specification purposes.

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This information supersedes all previously published data.