KYDEX®
THERMOPLASTIC SHEET

KYDEX® 6503
Integral pearlescent low heat release aviation sheet

Introduction

KYDEX® 6503 is a proprietary, high performance thermoplastic sheet specifically formulated to meet the safety needs of the aviation industry. Integrally pearlescent, this sheet is perfect for use with LED lighting or on it's own.

General Information

KYDEX® 6503 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 2 and 3-dimensional aircraft components.

Suggested Applications

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

Features

- Highlighted in a collection of 28 developed colours, colour matching also available
- Available in P-3 texture and thicknesses from 0.71mm (0.028") to 3.18mm (0.125")
- Easy to clean with aggressive cleaners such as Soft Scrub®, Fantastic®, and citrus-based cleaners such as Citri Kleen® (avoid ammoniated cleaners)
- Meets the stringent requirements of FAR 25.853 paragraph (d) in all thicknesses and colors
- Forms deep draws with low forces when heated to the upper end of forming temperature range
- Crisp detail, minimal rejects
- Can be formed on all standard presses and cut on all standard die-cutting machines
- Secondary operations include: machining, sawing, blanking, punching, etc. are easily performed

Environmental and Safety Considerations

KYDEX, LLC 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.kydex.com. For Material Safety Data Sheets, please call 800.325.3133.

KYDEX, LLC
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@kydex.com

Technical Service
Phone: 800.682.8758
Fax: +1.570.387.8722
Outside the US: +1.570.387.6997
Email: techservice@kydex.com

www.kydex.com

KYDEX ®
THERMOPLASTIC SHEET

KYDEX® 6503
Integral pearlescent low heat release aviation sheet

Physical Properties

Property	Test Method	Typical Value[1]	
Specific Gravity	ASTM D-792	1.48	
Tensile Strength	ASTM D-638	45 MPa	6,500 psi
Flexural Strength	ASTM D-790	70 MPa	10,100 psi
Modulus of Elasticity	ASTM D-790	2,896 MPa	420,000 psi
Dynatup 23°C (73°F)	Max. Energy Cum. Energy	7.24 J 130.65 J	5.34 ft-lbs 96.36 ft-lbs
Rockwell Hardness (R Scale)	ASTM D-785	98	
Heat Deflection Temperature (HDT) @ 1.8 MPa (264 psi) annealed	ASTM D-648	78.3°C	173°F
Flammability: Radiant Panel	ASTM E-162	Pass	
Flammability:	FAR 25.853 (a)	Pass	
Flammability:	FAR 25.853 (d) (a) Smoke Generation (b) Rate of Heat Release	(a) Pass (b) < 65 / 65	
Forming Temperature		163 - 200°C	325 - 390°F

1 Values based upon 3.18mm (0.125") sheet unless otherwise specified.
Not intended for specification purposes.