

KYDEX® 6185

High temperature aircraft sheet

INTRODUCTION

KYDEX® 6185 is a proprietary thermoplastic sheet with improved heat distortion temperature (HDT) for higher in-service temperatures while providing excellent extensibility, good impact resistance and excellent solvent resistance.

GENERAL INFORMATION

KYDEX® 6185 meets FAR 25.853 (a) (i) + (ii) for use in aircraft interior parts. Maximum recommended service temperature is approximately 85 - 90°C (185 - 195°F) depending on thermoforming technique and application.

SUGGESTED APPLICATIONS

- Aircraft Interiors
- Equipment Housings

FEATURES

- Available in thicknesses from 1.00mm (0.040") in eight distinctive textures and custom colours
- Meets the requirements of the Federal Aviation Administration FAR 25.853 (a)(i) + (ii) in all thicknesses for vertical burn
- Heat distortion temperature (HDT) is 85°C (185°F) unannealed at 1.8 MPa (264 psi) and a high 90°C (195°F) after annealing
- Excellent forming properties, uniform wall thickness and crisp detail
- Easy machining and fabricating using conventional methods and equipment

ENVIRONMENTAL & SAFETY CONSIDERATIONS

SEKISUI 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.



Customer Collaboration

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PROPERTY	TEST METHOD	TYPICAL VALUE ¹	
PHYSICAL			
Specific Gravity	ASTM D792	1.33 - 1.37	
Rockwell Hardness, R-scale	ASTM D785	104	
MECHANICAL			
Tensile Strength	ASTM D638	44 MPa	6,400 psi
Flexural Strength	ASTM D790	66 MPa	9,600 psi
Flexural Modulus	ASTM D790	2,241 MPa	325,000 psi
Izod Impact, notched	ASTM D256	267 J/m	5 ft-lb _f /in
Bearing Strength, 4% deflection	ASTM D953	19.3 MPa	2,800 psi
Bearing Strength, Max	ASTM D953	198 MPa	28,800 psi
THERMAL			
Heat Deflection Temperature (HDT) @ 264 psi (1.8 MPa) annealed	ASTM D648	90.6°C	195°F
Heat Deflection Temperature (HDT) @ 264 psi (1.8 MPa) unannealed	ASTM D648	85°C	185°F
FLAMMABILITY			
Vertical Burn, 60-second	FAR 25.853(a)(i)	Pass	
Vertical Burn, 12-second	FAR 25.853(a)(ii)	Pass	
¹ Values based upon 3.18mm (0.125") sheet unless otherwise specified. Not intended for specification purposes.			



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