

KYDEX® 100

High impact fire-rated sheet

INTRODUCTION

Super tough, durable KYDEX® 100, a proprietary alloy sheet, brings new dimensions to thermoformers informability, rigidity, breakage resistance, chemical resistance and fire retardancy.

GENERAL INFORMATION

KYDEX® 100 is available in a wide range of standard and custom colours, textures, and sheet sizes. It is Underwriters Laboratories, Inc® recognized for UL Std 94 V-0, 5V and has 961 J/m (18 ft-lbs/in) Notched Izod impact resistance.

SUGGESTED APPLICATIONS

- Aircraft Interiors
- Mass Transit Vehicle Interior Components
- Equipment Enclosures
- Medical Products
- Miscellaneous Applications

FEATURES

- Good for deep or hard to form parts more rigid, parts will deform less when loaded
- High Notched Izod impact resistance offers unsurpassed resistance to breakage
- Meets highest standard for chemical resistance for thermoplastic materials
- Recognized by Underwriters Laboratories, Inc® for Std 94 V-0, 5V in all thicknesses and colours
- 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 appLab™ department at 800.682.8758 for resources and Safety Data Sheets or visit our website: <http://www.kydex.com>.



Customer Collaboration

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Property	Test Method	Typical Value ¹	
PHYSICAL			
Specific Gravity	ASTM D792	1.35	
Rockwell Hardness, R-scale	ASTM D785	94	
Moisture Absorption, 24 hrs. @ 50°C	ASTM D570	0.09%	
MECHANICAL			
Tensile Strength	ASTM D638	42 MPa	6,100 psi
Tensile Modulus	ASTM D638	2,400 MPa	353,000 psi
Elongation	ASTM D638	160%	
Flexural Strength	ASTM D790	63 MPa	9,100 psi
Flexural Modulus	ASTM D790	2,310 MPa	335,000 psi
Izod Impact, notched	ASTM D256	961 J/m	18 ft-lb/in ²
Compressive Strength, yield	ASTM D695	52 MPa	7,500 psi
Compressive Modulus	ASTM D695	2,600 MPa	379,000 psi
Shear Strength	ASTM D732	46 MPa	6,790 psi
Bearing Strength, 4% deflection	ASTM D953	30 MPa	4,400 psi
Bearing Strength, max	ASTM D953	206 MPa	29,900 psi
Gardner Drop Dart Impact, GE	ASTM D5420	65 J	576 in-lb _f
THERMAL			
Heat Deflection Temperature (HDT) @ 264 psi (1.8 MPa) unannealed	ASTM D648	78.3 °C	173 °F
Coefficient of Linear Thermal Expansion	ASTM D696	7.56 x 10 ⁻⁵ °C	4.2 x 10 ⁻⁵ °F
ELECTRICAL			
Dielectric Strength, oil	ASTM D149	16.5 kV/mm	420 V/mil
FLAMMABILITY			
Underwriters Laboratories, Inc. [®] Component Recognition	UL Standard 94 ² UL Standard 746C	V-0, 5V ³	
Motor Vehicle Safety Standard ⁴	FMVSS 302	Pass	
Vertical Burn, 60-second ⁴	FAR 25.853(a)(i)	Pass	
Vertical Burn, 12-second ⁴	FAR 25.853(a)(ii)	Pass	
BS 476, Part 7		Class 1 @ 3.20mm Class 1Y @ 2.00mm	
¹ Values based upon 3.18mm (0.125") sheet unless otherwise specified. ² Underwriters Laboratories, Inc. [®] , File Number E115252. ³ All thicknesses 0.71mm (0.028") and above. ⁴ All thicknesses and colors * Not intended for specification purposes			



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This information supersedes all previously published data.