

KYDEX® 410

Proprietary ABS/PVC sheet

INTRODUCTION

KYDEX® 410 is a proprietary ABS/PVC thermoplastic sheet that offers superior thermoformability, rigidity, breakage resistance, chemical resistance and fire retardancy.

GENERAL INFORMATION

KYDEX® 410 is available in a wide range of standard and custom colors, textures, and sheet sizes. It is Underwriters Laboratories, Inc® recognized for UL std 94 V-0, 5V (rating pending).

SUGGESTED APPLICATIONS

- Medical Equipment Housings
- Mass Interior Vehicle Components
- Electrical Equipment Housings
- Miscellaneous Applications

FEATURES

- FAR 25.853a
- UL94 V-0, 5-V @ 1mm
- Radiant Panel: RP25
- FMVSS 302
- Good for hard for deep to form parts
- More rigid, parts will deform less when loaded - or can be down-gauged for weight-savings
- High notched izod impact resistance offers resistance to breakage
- Meets highest standard for chemical resistance for thermoplastic materials
- Passes UL Std 947 V-0 and 5V in all thicknesses and colors
- Uniform wall thickness and crisp detail
- Easy machining and fabricating using conventional methods and equipment
- Low moisture absorption - no drying needed prior to thermoforming
- Passes ball pressure test as per UL 60601-1
- Good low temperature impact resistance

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: www.kydex.com.



Customer Collaboration

1305 Lincoln Ave. Holland MI 49423 USA
Phone: 800.823.1305, +1.616.694.3808
Email: info@kydex.com

appLab™

Phone: 800.682.8758
Email: applab@kydex.com

kydex.com

KYDEX® 410

Proprietary ABS/PVC sheet

Property	Test Method	Typical Value ¹	
Specific Gravity	ASTM D-792	1.29	
Tensile Strength	ASTM D-638	53.84 MPa	7,800 psi
Notched Izod Impact Resistance, @ 22°C (72°F)	ASTM D-256	801 J/m	15 ft-lbs/in
Notched Izod Impact Resistance, @ -20°C (-4°F)	ASTM D-256	94 J/m	1.76 ft-lbs/in
Flexural Strength	ASTM D-790	76.53 MPa	11,100 psi
Flexural Modulus	ASTM D-790	2,537 MPa	368,000 psi
Heat Deflection Temperature (HDT) ² @ 264 psi (1.8 MPa) unannealed/annealed	ASTM D-648	71.1-79.4°C	160/175°F
Ball Pressure Test	UL 60601-1 Sub clause 59.2b	Pass	
Coefficient of Thermal Expansion	ASTM E-831	8.3 x 10 ⁻⁵ mm/mm°C	4.6x10 ⁻⁵ in/in°F
Rockwell Hardness (R Scale)	ASTM D-785	107	
12 and 60 sec Vertical Burn	FAR 25.853a	Pass	
Federal Motor Vehicle Safety Standard	FMVSS 302	Pass	
Flammability: Underwriter's Laboratories, Inc [®] Component Recognition	UL Standard 94 ⁴	V-0, 5V ⁵	
Mold Shrinkage		0.5 - 0.7%	
Moisture Absorption: 24 hours @ 50°C ³	ASTM D-570	0.07%	
Thermoforming Range ³		163 - 204°C	325 - 400°F

¹ Values based upon 3.18mm (0.125") sheet unless otherwise specified
² Annealed at 65.5°C (150°F) for 8 hours and cooled slowly
³ After three months storage, drying may be required
⁴ Underwriter's Laboratories, Inc[®], File E115252
⁵ All thicknesses 1.0mm (0.039") and above
 Not intended for specification purposes.



Customer Collaboration

1305 Lincoln Ave. Holland MI 49423 USA
 Phone: 800.823.1305, +1.616.694.3808
 Email: info@kydex.com

appLab™

Phone: 800.682.8758
 Email: applab@kydex.com

kydex.com

Because we cannot anticipate or control the many different conditions under which this information and our products may be used, we do not guarantee the applicability of the accuracy of this information or the suitability of our products in any given situation. Users should conduct their own tests to determine the suitability of each product for their particular purposes. Data in the physical property table represents typical values and are to serve only as a guide for engineering design. Results are obtained from specimens under ideal laboratory conditions. Right to change physical properties as a result of technical progress is reserved. The products discussed are sold without warranty of merchantability or fitness for a particular use, either expressed or implied, except as provided in our standard terms and conditions of sale. Buyer assumes all responsibility for loss or damage arising from the handling and use of our products, whether done in accordance with directions or not. In no event shall the supplier or the manufacturer be liable for incidental or consequential damages. Also, statements concerning the possible use of our products are not intended as recommendations to use our products in the infringement of any patent. Consult local code and regulatory agencies for specific requirements regarding code compliance, transporting, processing, recycling and disposal of our product. Product not intended for use as a heat resistant surface. Texture, product grade and other conditions may cause variations in appearance.