

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).

Applications

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

Flammability

- FAR 25.853a
- UL94 V-0, 5-V @ 1mm
- Radiant Panel: RP25
- FMVSS 302

Features

- Good for deep or hard 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 94 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 and Safety Considerations

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.

SEKISUI SPI

ISO 9001 and 14001 Certified

Customer Service

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Technical Service

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Physical Properties

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 ⁵		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.

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This information supersedes all previously published data.