

ISO 9001:2000 Certified

678 Howard Ave. Bridgeport, CT 06605 National Toll Free: 800.243.9696

## KYDEX® 100

## HIGH IMPACT FIRE-RATED SHEET

## General Information

Super tough, durable KYDEX 100, a proprietary alloy sheet, brings new dimensions to thermoformers in: formability, rigidity, breakage resistance, chemical resistance and fire retardancy. This high performance thermoplastic sheet is available in a wide range of standard and customer colors, textures, and sheet sizes. It is Underwriters Laboratories, Inc.® recognized for UL Std 94 V-0/5 V and UL 746C and has 18 ft-lbs./in (961 J/m) Notched Izod impact resistance.

## **Features**

Superior Formablity: For deep or hard to form parts or where good finished detail is required. KYDEX 100 is unsurpassed.

Rigidity: KYDEX 100 is more rigid than most other thermoplastics resulting in parts that will deform less when loaded.

Breakage Resistance: With a high Notched Izod impact resistance, KYDEX 100 offers unsurpassed resistance to breakage.

Chemical Resistance: KYDEX 100 meets the highest standard for chemical resistance for thermoplastic materials.

Fire Retardance: KYDEX is recognized by Underwriter's Laboratories, Inc.® for Standard 94 V-0 and 5V and UL 746C in all gauges and colors.

Thermoformability: Excellent forming properties and crisp detail, plus easy machining and fabricating using conventional methods, further expanding finished part possibilities.

Electrical Properties: KYDEX 100 exhibits a Dielectric Strength of 565 V/mil and a Dielectric Constant of 3.13 @1000 Hz, 2.78 @1 MHz, 2.46 @800MHz, 2.42 @1.9 GHz, 2.67 @ 5GHz, and 2.7 @20 GHz.

RIPH: KYDEX is endorsed by the Royal Institute of Public Health for conformance to the standard of Hygienic Merit

Offering superior performance in formability, rigidity, impact resistance, fire retardance, and chemical resistance.

Property	Test Method	Typical Value 1
Specific Gravity	ASTM D-792	1.35
Tensile Strength	ASTM D-638	6,100 psi (42 MPa)
Elongation %	ASTM D-638	160
Flexural Strength	ASTM D-790	9,100 psi (63 MPa)
Modulus of Elasticity	ASTM D-790	335,000 psi (2,310 MPa)
Notched Izod Impact Resistance @ 73° F (23° C)	ASTM D-256	18 ft-lbs. / in (961 J/m)
Rockwell Hardness (R Scale)	ASTM D-785	94
Coefficient of Thermal Expansion	ASTM D-785	4.2x10 <sup>-5</sup> ° F (7.56x10 <sup>-5</sup> ° C)
Heat Deflection Temperature (HDT) @ 264 psi, annealed °F	ASTM D-648	173 ° F (79 ° C)
Flammability: Underwriter's Lab. Component Recognition	UL Standard 94	V-0, 5V
Motor Vehicle Safety Standard	MVSS 302	Pass
Federal Aviation Administration	FAR 25.853(a)	Pass 3
BS 476 Part 7		Class 1 at 3.2mm Class 1Y at 2.0mm
EC 95/28/EG		Pass (1-6mm)
DIN 5510-2		.9mm (S4,ST2,SR2) 6.5mm (S4,ST2,SR1)

<sup>&</sup>lt;sup>1</sup> All Values are based upon 0.125" (3.12 mm) sheet unless otherwise specified.

etting the Standards in Plastics Distribution'

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Underwriter's Laboratories Inc., File E115252

 $<sup>^3</sup>$  All Gauges 0.028" (0.711 mm) and above. Not intended for specification purposes.