



## Kleerdex Company

## KYDEX® 100 HIGH IMPACT FIRE RATED SHEET

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

### GENERAL INFORMATION

Super tough, durable Kydex 100 acrylic/PVC 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 Underwriter's Laboratories Inc recognized for UL Std 94 V-0/5V and UL 746C and has 18 ft-lbs/in (953 J/m) Notched Izod impact resistance.

### SUGGESTED END-USES

- Housings for equipment such as photocopy machines, instrument panels, computers,
- Hidden parts for equipment such as vending machines, air ducts, grilles, etc.
- Orthopedic braces
- Medical equipment parts (for example: centrifuge covers, blood analyzers, etc.)
- In-store displays
- Electrical equipment and any components requiring either UL 94 V-0, 5V or UL746C ratings

### FEATURES

**SUPERIOR FORMABILITY** - 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 Notched Izod impact resistance of 18 ft-lbs/in (953 J/m), Kydex 100 offers unsurpassed resistance to breakage.

**CHEMICAL RESISTANCE** - Kydex meets the highest standard for chemical resistance for thermoplastic materials.

**FIRE RETARDANCY** - Kydex is recognized by Underwriter's Laboratories Inc. for Standard 94 V-0 and 5V and UL 746C in all gauges and colors.

**FABRICATION** Excellent forming properties result in uniform wall thicknesses and crisp detail, plus easy machining and fabricating using conventional methods, further expanding finished part possibilities.

PROPERTY	TEST METHOD	TYPICAL VALUE <sup>1</sup>
Specific Gravity	ASTM D-792	1.35
Tensile Strength, psi (MPa)	ASTM D-638	6,100 (42)
Elongation at Break, %	-	160
Flexural Strength, psi (MPa)	ASTM D-790	9,300 (64)
Modulus / Elasticity, psi (MPa)	-	335,000 (2319)
Rockwell Hardness, R	ASTM D-785	94
Notched Izod Impact Resistance, 73°F (23°C), ft-lbs/in (J/m)	ASTM D-256	18 (953)
Taber Abrasion Resistance, wt loss gms, 1000 cycles	ASTM D-1044	0.038%
Heat Deflection Temperature, HDT, @264psi (1.8 MPa), annealed, °F (°C)	- ASTM D-648	- 173° (78°)
Flammability <sup>2</sup> Underwriter's Lab.	UL Standard 94	V-0, 5V
Flammability <sup>2</sup> Fed. Aviation Admin.	FAR 25.853a (Replaces par b)	Pass
Motor Veh. Sfty Std.	MVSS 302	Pass
Radiant Panel	ASTM E-162	22.5
Forming Temperature		325° - 390°F (163-200°C)

<sup>1</sup>All values based on 0.125" (3.12mm) sheet unless otherwise specified.

<sup>2</sup>All gauges from 0.028" (.71mm) and greater. Not intended for specification purposes.