datasheet

KYDEX® 100

HIGH IMPACT FIRE RATED SHEET

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

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-0/5V and UL 746C and has 18 ft-lbs./in (961 J/m) Notched Izod impact resistance.

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 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 results in uniform wall thicknesses and crisp detail, plus easy machining and fabricating using conventional methods, further expanding finished part possibilities.

ELECTRICAL PROPERTIES – KYDEX 100 exhibits a of 565 V/mil and a Dielectric Constant of 3.13 @ MHz, 2.46 @800MHz, 2.42 @1.9 GHz, 2.67 @ 5(GHz.

RIPH- KYDEX is endorsed by the Royal Institute of conformance to the standard of Hygienic Merit

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 *2310 MPa*
Notched Izod Impact Resistance, @ 73°F (23°C)	ASTM D-256	18 ft-lbs./in *953 J/m*
Rockwell Hardness (R Scale)	ASTM D-785	94
Coefficient of Linear Thermal Expansion	ASTM D-696	$4.2x10^{-5}$ °F *$7.56 X 10^{-5}$/°C*
Heat Deflection Temperature (HDT) @ 264 psi (1.8Mpa) annealed	ASTM D-648	173 °F *79°C*
Flammability: Underwriter's Lab. Component Recognition	UL Standard 94[2]	V-0,5V[3]
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)

[1]All values based upon .125" (3.17mm) sheet unless otherwise specified.
[2]Underwriter's Laboratories Inc., File E115252
[3]All gauges .028" (0.71 mm) and above.
Not intended for specification purposes.

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