KYDEX® T MB

High impact fire-rated sheet with antimicrobial protection

INTRODUCTION

KYDEX® T MB is a proprietary thermoplastic sheet that is cost competitive with fire retardant ABS/PVC (FR-ABS) formulations but with significantly higher impact strength and extensibility. Antimicrobial protection is built-in to continuously fight the growth of microbes.

GENERAL INFORMATION

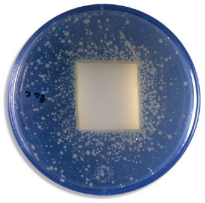
Since KYDEX® T MB is less hygroscopic, unlike FR-ABS, it typically does not require pre-drying, offers superior impact, more uniform forming with less wall thinning and offers significantly greater resistance to a broad range of corrosive chemicals and cleaning solutions. It is available in a wide range of aesthetic choices and is Underwriter's Laboratories, Inc.® recognized Std 94 V-0, 5V.

SUGGESTED APPLICATIONS

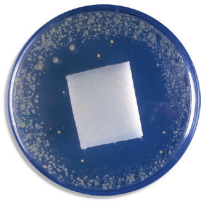
- Aircraft Interiors
- Equipment Housings
- Kiosk Housings
- Mass Transit Vehicle Interior Components
- Medical Products

FEATURES

- Substitute for FR-ABS sheet with competitive pricing but superior cost/performance
- Higher breakage resistance measured by the Notched Izod test than competitive thermoplastics
- Available in thicknesses from 0.71mm (0.028") and up, in eight textures, a variety of colors, custom blank sizes and low minimums
- Among the most rigid of thermoforming materials with a modulus of elasticity of 2,482 MPa (360,000 psi)
- Easy to form with excellent part definition and deep-draw characteristics
- Recognized by Underwriter's Laboratories, Inc® for Std 94 V-0, 5V in all thicknesses
- Form times similar to FR-ABS making it an easy transition from competitive products.
- Antimicrobial protection inhibits the growth of bacteria that can cause stains, odors and product deterioration.
- Antimicrobial protection is built-in to the sheet so it won't wash or wear away and lasts for the lifetime of the product/sheet.
- Antimicrobial protection keeps the surface cleaner between cleanings.



Without antimicrobial protection



With antimicrobial protection

This information is based upon standard laboratory tests and is provided for comparative purposes to substantiate antimicrobial activity for non-public health applications. Antimicrobial protection inhibits the growth of microorganisms that can cause stains, odors and product degradation.

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 Technical Service department at 800.682.8758 for resources or visit our website: http://www.kydex.com. For Material Safety Data Sheets, please call 800.325.3133.

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KYDEX THERMOPLASTICS

KYDEX® T MB

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PROPERTY	TEST METHOD	TYPICAL VALUE[1]	
PHYSICAL			
Specific Gravity	ASTM D792	1.35	
Rockwell Hardness, R-scale	ASTM D785	94	
Moisture Absorption, 24 hrs. @ 50°C	ASTM D570	0.08%	
MECHANICAL			
Tensile Strength	ASTM D638	42 MPa	6,100 psi
Tensile Modulus	ASTM D638	2,600 MPa	382,000 psi
Poisson's Ratio	ASTM D638	0.433	
Elongation	ASTM D638	110%	
Flexural Strength	ASTM D790	66 MPa	9,600 psi
Flexural Modulus	ASTM D790	2,480 MPa	360,000 psi
Izod Impact, notched	ASTM D256	801 J/m	15 ft-lb_f/in
Compressive Strength, yield	ASTM D695	54 MPa	7,900 psi
Compressive Modulus	ASTM D695	3,300 MPa	489,000 psi
Shear Strength	ASTM D732	50 MPa	7,380 psi
Bearing Strength, 4% deflection	ASTM D953	31 MPa	4,600 psi
Bearing Strenth, Max	ASTM D953	197 MPa	28,700 psi
Gardner Drop Dart Impact, GE	ASTM D5420	>70 J	>627 in-lb_f
THERMAL			
Heat Deflection Temperature (HDT) @ 264 psi (1.8 MPa) annealed	ASTM D648	75.6ºC	168ºF
ELECTRICAL			
Dielectric Strength, oil	ASTM D149	17.1 kV/mm	435 V/mil
FLAMMABILITY			
Underwriters Laboratories, Inc.® Component Recognition	UL Standard 94[2]	V-0, 5V[3]	
Vertical Burn, 60-second	FAR 25.853(a)(i)	Pass	
Vertical Burn, 12-second	FAR 25.853(a)(ii)	Pass	

1 Values based upon 3.18mm (0.125") sheet unless otherwise specified.
2 Underwriters Laboratories, Inc.®, File Number E115252
3 All thicknesses 0.71mm (0.028") and above
Not intended for specification purposes.

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