

KYDEX® T-IM

Vertical burn compliant injection molding compound

INTRODUCTION

KYDEX® T-IM is a high performance injection molding compound with integral colour engineered with the same properties as KYDEX® T thermoplastic sheet including flame resistance, impact resistance, and chemical resistance.

GENERAL INFORMATION

KYDEX® T-IM is designed for injection-molded parts adjacent to KYDEX® thermoplastic sheet parts. This solution is intended to minimize the visual variation between injection molded and thermoformed parts. It meets 12 and 60-second vertical burn requirements outlined in Federal Aviation Regulations (FAR) 25.853 paragraph (a). 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
- Medical Products
- Kiosk Housings

FEATURES

- Meets the vertical burn requirements of FAR 25.853 paragraph (a) in all thicknesses and colours
- Excellent processing characteristics
- Available in endless integral colours through our custom colour creation
- Excellent bonding capability with KYDEX® Thermoplastic Sheet
- Colour matching coordination with KYDEX® Thermoplastic Sheet
- Chemical resistant
- Recognized by Underwriter's Laboratories, Inc.® for Std 94 V-0, 5V in all thicknesses

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.



Customer Collaboration

6685 Low St, Bloomsburg, PA 17815 USA

Phone: 800.325.3133, +1.570.389.5810

Email: info@kydex.com

appLab™

Phone: 800.682.8758

Email: applab@kydex.com

kydex.com

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PROPERTY	TEST METHOD	TYPICAL VALUE ¹	
PHYSICAL			
Specific Gravity	ASTM D792	1.34	
Rockwell Hardness, R-scale	ASTM D785	105	
Moisture Absorption, 24 hrs. @ 50°C	ASTM D570	0.05%	
Melt Flow Index, 200°C/2.16kg	ASTM D1238	2.40g/10min	
MECHANICAL			
Tensile Strength	ASTM D638	47.4 MPa	6,880 psi
Tensile Modulus	ASTM D638	2,558 MPa	371,000 psi
Poisson's Ratio	ASTM D638	0.409	
Flexural Strength	ASTM D790	68.5 MPa	9,930 psi
Flexural Modulus	ASTM D790	2,510 MPa	364,000 psi
Izod Impact, notched	ASTM D256	801 J/m	15 ft-lb _f /in
Compressive Strength, yield	ASTM D695	50.6 MPa	7,340 psi
Compressive Modulus	ASTM D695	2,696 MPa	391,000 psi
Shear Strength	ASTM D732	52.3 MPa	7,580 psi
Bearing Strength, Max	ASTM D953	202 MPa	29,300 psi
Gardner Drop Dart Impact, GE	ASTM D5420	55.4 J	490 in-lb _f
THERMAL			
Heat Deflection Temperature (HDT) @ 264 psi (1.8 MPa) unannealed	ASTM D648	68.7°C	155.7°F
Coefficient of Thermal Expansion	ASTM E831	75.8 μmm/m/°C	42.1 μmin/in/°F
ELECTRICAL			
Dielectric Strength, oil	ASTM D149	17.7 kV/mm	450 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") injection molded plaques 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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applab™
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kydex.com

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