

## KYDEX® 2210LT

EN45545, R1 & R6 Hazard Level 2 compliant sheet for rail interior applications

### INTRODUCTION

KYDEX® 2210LT is a high performance thermoplastic sheet designed for use in rail interior applications where EN45545 R1 & R6 Hazard Level 2 compliance is required.

### GENERAL INFORMATION

KYDEX® 2210LT is an alternative to FRP, metal and melamine that offers significant weight savings.

### SUGGESTED APPLICATIONS

- Seatbacks
- Armrests
- Window Shrouds
- Bulkhead Components
- Wall and Ceiling Panels

### FEATURES

- Meets the stringent requirements of EN45545, R1 & R6 Hazard Level 2 for EN45545
- Integral colour eliminates the need for painting or gel coat.
- Excellent resistance to graffiti, chemicals, and staining
- Excellent formability and fabrication characteristics
- Available in P3 - Velour Matte and PC - Level Haircell textures

### ENVIRONMENTAL & SAFETY CONSIDERATIONS

SEKISUI KYDEX 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 appLab™ department at 800.682.8758 for resources and Safety Data Sheets or visit our website: [www.kydex.com](http://www.kydex.com).



#### Customer Collaboration

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| PROPERTY                                                          | TEST METHOD                                                  | TYPICAL VALUE <sup>1</sup>             |                                            |
|-------------------------------------------------------------------|--------------------------------------------------------------|----------------------------------------|--------------------------------------------|
| PHYSICAL                                                          |                                                              |                                        |                                            |
| Specific Gravity                                                  | ASTM D792                                                    | 1.35                                   |                                            |
| Density                                                           | ASTM D792                                                    | 1.35 g/cm³                             | 0.0488 lb/in³                              |
| Water Absorption, 24hr                                            | ASTM D570                                                    | 0.12%                                  |                                            |
| Rockwell Hardness, R-scale                                        | ASTM D785                                                    | 116                                    |                                            |
| MECHANICAL                                                        |                                                              |                                        |                                            |
| Tensile Strength                                                  | ASTM D638                                                    | 64.1 MPa                               | 9,300 psi                                  |
| Tensile Modulus                                                   | ASTM D638                                                    | 5,078 MPa                              | 736,500 psi                                |
| Poisson's Ratio                                                   | ASTM D638                                                    | 0.499                                  |                                            |
| Flexural Strength                                                 | ASTM D790                                                    | 100.0 MPa                              | 14,500 psi                                 |
| Flexural Modulus                                                  | ASTM D790                                                    | 4,422 MPa                              | 641,300 psi                                |
| Compressive Strength, yield                                       | ASTM D695                                                    | 194.1 MPa                              | 28,150 psi                                 |
| Compressive Modulus                                               | ASTM D695                                                    | 2,775 MPa                              | 402,500 psi                                |
| Shear Strength                                                    | ASTM D732                                                    | 49.3 MPa                               | 7,150 psi                                  |
| Bearing Strength, 4% deflection                                   | ASTM D953                                                    | 16.9 MPa                               | 2,445 psi                                  |
| Notched Izod Impact                                               | ASTM D256                                                    | 48.6 J/m                               | 0.91 ft-lb <sub>i</sub> /in                |
| Garnder Drop Dart Impact, GE                                      | ASTM D5420                                                   | 32.9 J                                 | 291 in-lb <sub>i</sub>                     |
| THERMAL                                                           |                                                              |                                        |                                            |
| Heat Deflection Temperature (HDT)<br>@ 264 psi (1.8 MPa) annealed | ASTM D648                                                    | 98.9°C                                 | 210°F                                      |
| Coefficient of Thermal Expansion                                  | ASTM E831                                                    | 96.6 µm/m/°C (MD)<br>87.3 µm/m/°C (TD) | 53.7 µin/in/°F (MD)<br>48.5 µin/in/°F (TD) |
| ELECTRICAL                                                        |                                                              |                                        |                                            |
| Dielectric Strength                                               | ASTM D149                                                    | 16.3 kV/mm                             | 415 V/mil                                  |
| FLAMMABILITY <sup>2</sup>                                         |                                                              |                                        |                                            |
| EN 45545-2: R1 Interior Surfaces                                  | ISO 5658-2 (50kW) CFE                                        | HL2                                    |                                            |
|                                                                   | ISO 5659-2 (50kW) Ds(4), VOF <sub>4</sub> , CIT <sub>G</sub> |                                        |                                            |
|                                                                   | ISO 56560-1 (50kW) MARHE                                     |                                        |                                            |
| EN 45545-2: R6 Passenger Seat Shells                              | ISO 5659-2 (50kW) Ds(4), VOF <sub>4</sub> , CIT <sub>G</sub> | HL2                                    |                                            |
|                                                                   | ISO 56560-1 (50kW) MARHE                                     |                                        |                                            |

<sup>1</sup> Values based upon 3.18mm (0.125") sheet unless otherwise specified.

<sup>2</sup> All thicknesses and colours  
Rough draft, final values may change  
Not intended for specification purposes.

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