KYDEX THERMOPLASTICS

# ALLEN® 5165WHG

Co-extruded, High Impact ASA/ABS, High Gloss Sheet

## INTRODUCTION

**ALLEN® 5165WHG is high impact ABS capped with a high gloss ASA for UV protection.**

## GENERAL INFORMATION

ALLEN® 5165WHG has been tested under laboratory conditions and has achieved a UL94 HB rating at 0.060 in (1.52mm) and above and meets the requirements of Federal Motor Vehicle Safety Standard No. 302 (FMVSS 302).

## SUGGESTED APPLICATIONS

- Heavy equipment exterior and interior applications
- Agricultural equipment exterior and interior applications
- Heavy truck exterior and interior applications
- Marine exterior applications
- Radomes & Cell tower antennas
- Outdoor housings & machinery covers

## FEATURES

- Excellent UV properties
- Custom color matching
- Good forming properties
- Edge trim easily used in future orders
- High gloss, High impact
- Good low temperature performance

## 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 appLab™ department at 800.682.8758 for resources and Safety Data Sheets or visit our website: www.kydex.com.

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## Co-extruded, High Impact ASA/ABS, High Gloss Sheet

| PROPERTY | TEST METHOD | TYPICAL VALUE[1] | |
|---|---|---|---|
| **PHYSICAL** | | | |
| Specific Gravity | ASTM D792 | 1.06 | |
| Density | ASTM D792 | 1.06 g/cm$^3$ | 0.038 lb/in$^3$ |
| Water Absorption, equilibrium, 73°F | ASTM D570 | 0.28% | |
| Rockwell Hardness, R-scale | ASTM D785 | 98 | |
| **MECHANICAL** | | | |
| Tensile Strength | ASTM D638 | 36.7 MPa | 5,330 psi |
| Tensile Modulus | ASTM D638 | 2020.2 MPa | 293,000 psi |
| Flexural Modulus | ASTM D790 | 2116.7 MPa | 307,000 psi |
| Flexural Stress at 5% Strain | ASTM D790 | 61.5 MPa | 8,920 psi |
| Compressive Strength, yield | ASTM D695 | 49.6 MPa | 7,190 psi |
| Shear Strength | ASTM D732 | 40.1 MPa | 5,810 psi |
| Bearing Strength, 4% deflection | ASTM D953 | 27.9 MPa | 4,040 psi |
| Bearing Strength, max. | ASTM D953 | 180.6 MPa | 26,200 psi |
| Notched Izod Impact Resistance @ 23°C (73°F) | ASTM D256 | 358.8 J/m | 6.72 ft-lbs/in |
| Notched Izod Impact Resistance @ -40°C (-40°F) | ASTM D256 | 117.4 J/m | 2.2 ft-lbs/in |
| Gardner Drop Dart Impact, GE @ 23°C (73°F) | ASTM D5420 | 34.0 J | 301 in-lb$_f$ |
| **THERMAL** | | | |
| Heat Deflection Temperature (HDT) 264 psi (1.8 MPa), Annealed | ASTM D648 | 99.9°C | 211.7°F |
| Heat Deflection Temperature (HDT) 66 psi (0.45 MPa), Annealed | ASTM D648 | 104°C | 219.1°F |
| Coefficient of Thermal Expansion (TD) | ASTM E831 | 90.1 µm/m/°C | 50.1 µin/in/°F |
| **ELECTRICAL** | | | |
| Dielectric Strength, oil | ASTM D149 | 17.4 kV/mm | 442 V/mil |
| **FLAMMABILITY**[2] | | | |
| Underwriters Laboratories., Inc ® Component Recognition | UL Standard 94[2] | HB @ 1.52mm (0.060 in) | |

1 Values based upon 0.125" (3.17mm) sheet unless otherwise specified..

2 ALLEN® 5165WHG has been tested under laboratory conditions and has passed UL 94HB criteria. SEKISUI KYDEX, LLC makes no warranty or guarantee that these products will meet UL 94HB in the part's final, finished configuration.

Not intended for specification purposes.

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