



## AZCARB UV2 Polycarbonate Sheet and Reels

**AZCARB UV2** Weatherable Polycarbonate sheet is produced via a proprietary process which creates a built-in protective UV barrier on the surface of the sheet. Unlike our competitors we UV Cap both sides of the Sheet or Reel. This eliminates any possibility of incorrect installation. The result is reduced yellowing, improved haze resistance, and improved light transmission over time vs General-Purpose polycarbonate sheet. This sheet is ideal for the sign, glazing, barrel vaults & skylight applications.

- Standard UV Enhanced both sides
- Excellent surface energy for digital & UV inks
- Available in Clear, White, Black & Tints
- Thickness Available .040" to .500"
- Available in Matte, Prismatic & Pebble Textures
- Easily fabricated, thermoformed and decorated
  - Available in Sign Matte One Side
- Available in full web & trimmed reels or sheet
  - Oversize sheets available over 275"
- Limited ten (10) year warranty against yellowing & light transmission



## AZCARB UV Weatherable Polycarbonate Sheet

### TYPICAL STANDARD PROPERTIES<sup>1</sup>

| PROPERTY                                         | TEST METHOD | UNITS              | AZCARB UV  |
|--------------------------------------------------|-------------|--------------------|------------|
| <b>PHYSICAL</b>                                  |             |                    |            |
| Specific gravity                                 | ASTM D792   | N/A                | 1.2        |
| Refractive index @ 72°F                          | ASTM D542   | -                  | 1.586      |
| Light transmission, Clear 1/8"                   | ASTM D1003  | %                  | 87         |
| Light transmission, 7130 Gray & 5109 Bronze 1/8" | ASTM D1003  | %                  | 50         |
| Rockwell hardness                                | ASTM D785   | M scale            | 70         |
| Water absorption, equilibrium, 24 hrs            | ASTM D570   | %                  | 0.15       |
| Poisson's Ratio                                  | ASTM E 132  |                    | 0.38       |
| <b>MECHANICAL</b>                                |             |                    |            |
| Tensile strength, yield                          | ASTM D638   | psi                | 9,000      |
| Tensile strength, ultimate                       | ASTM D638   | psi                | 9,500      |
| Tensile modulus                                  | ASTM D638   | psi                | 340,000    |
| Tensile elongation                               | ASTM D638   | %                  | 110        |
| Flexural strength                                | ASTM D790   | psi                | 14,000     |
| Flexural modulus                                 | ASTM D790   | psi                | 340,000    |
| Compression strength                             | ASTM D695   | psi                | 12,500     |
| Compression modulus                              | ASTM D695   | psi                | 340,000    |
| Poisson's ratio                                  | N/A         | N/A                | 0.38       |
| Izod impact strength, notched @ 1/8"             | ASTM D256   | ft-lbs/inch        | 16         |
| Charpy impact                                    | ASTM D256   | ft-lbs/inch        | no break   |
| Instrumental drop dart, 1/8"                     | ASTM D3763  | ft-lbs             | >50        |
| Shear strength @ yield                           | ASTM D732   | psi                | 5,800      |
| <b>THERMAL</b>                                   |             |                    |            |
| Coefficient of thermal expansion                 | ASTM D696   | in/in/°F           | 0.0000380  |
| Coefficient of thermal conductivity              | ASTM D177   | BTU-in/hr-sq ft-°F | 1.35       |
| DTUFL @ 264 psi                                  | ASTM D648   | °F                 | 275        |
| Vicat Softening Temp. (50N)                      | ISO 306     | °C                 | 144        |
| <b>ELECTRICAL</b>                                |             |                    |            |
| Dielectric constant, test @ 0.125" thick         | ASTM D149   | volts/mil          | 380 @ 25°C |
| Dielectric constant                              | ASTM D150   |                    |            |
| 60 Hz                                            |             |                    | 2.90       |
| 1,000,000 Hz                                     |             |                    | 2.9        |
| Volume resistivity @ 23°C                        | ASTM D257   | ohm/cm             | 10x16      |
| <b>FLAMMABILITY</b>                              |             |                    |            |
| Horizontal burn rate                             | ASTM D635   | inches             | <1 (CC-1)  |
| Ignition temperature                             | ASTM D1929  | °F                 | 1,090      |
| Smoke developed                                  | ASTM D2843  | N/A                | 70         |

<sup>1</sup>Values reported are averages and should not be used for specification purposes.

AZCARB GP Polycarbonate Sheet is a combustible thermoplastic. Observe fire precautions appropriate for comparable forms of wood and paper. For building uses, check code approvals. Impact resistance is a factor of thickness. Avoid exposure to heat or aromatic solvents. Clean with soap and water. Avoid abrasives. The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, AZPolymers expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.

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