

# Product Data - OPTIX SG5 Acrylic



OPTIX SG5 acrylic sheet provides excellent forming characteristics with detailed vacuum definition, high optical clarity, and superb weatherability. SG5 is stocked in various thicknesses, sheet sizes, and colors. SG5 products are available in sheets and reels.

## APPLICATIONS

Interior and Exterior Signs, Point-of-Purchase Displays, Skylights

## TYPICAL PROPERTIES

| Property                                           | Test Method | Units             | Values      |
|----------------------------------------------------|-------------|-------------------|-------------|
| <b>PHYSICAL</b>                                    |             |                   |             |
| Specific Gravity                                   | ASTM D792   | –                 | 1.15 - 1.19 |
| Light Transmission- total                          | ASTM D1003  | %                 | 90 - 92     |
| Light Transmission- haze                           | ASTM D1003  | %                 | <3          |
| Water Absorption                                   | ASTM D570   | %                 | 0.4         |
| Mold Shrinkage                                     | ASTM D955   | Mils/in           | 2-6         |
| <b>MECHANICAL</b>                                  |             |                   |             |
| Tensile Strength                                   | ASTM D638   | psi               | 8,000       |
| Tensile Modulus of Elasticity                      | ASTM D638   | psi               | 340,000     |
| Flexural Strength                                  | ASTM D790   | psi               | 12,000      |
| Izod Impact Strength – Notched                     | ASTM D256   | ft-lb./in         | 0.7         |
| Rockwell hardness                                  | ASTM D785   | –                 | 68          |
| <b>THERMAL</b>                                     |             |                   |             |
| Maximum Recommended Continuous Service Temperature | –           | °F                | 170 - 190   |
| Softening Temperature                              | –           | °F                | 210-220     |
| Deflection Temperature @ 264 psi (1.8 MPa)         | ASTM D648   | °F                | 194         |
| Coefficient of Thermal Expansion                   | ASTM D696   | in/(in-°F) x 10-5 | 3.0 - 5.0   |
| Flammability (Burning Rate)                        | ASTM D635   | in/minute         | 1.25        |
| Flammability                                       | UL94        | –                 | HB          |
| Smoke Density Rating                               | ASTM D2843  | %                 | 8.5         |
| Self-Ignition Temperature                          | ASTM D1929  | °F                | 833         |

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