



# PROFESSIONAL PLASTICS

## UltraTuf™ SG High Performance Copolyester Sheet

### Product Description

**UltraTuf™ SG**, manufactured using Eastman Tritan™ copolyester, is an ideal material for signage and glazing applications. Its strength and versatility provide ease in fabrication using many techniques, including thermoforming, cutting and routing. Due to excellent formability at low temperatures, UltraTuf SG can be thermoformed after decoration with vinyl graphics and screen inks.

UltraTuf SG provides the strength and formability required without sacrificing superior design aesthetics.

### Value Solution

**UltraTuf SG** offers exceptional forming detail, improved material distribution, short heating and cooling cycles, and no pre-drying. These features allow sign manufacturers to save on energy, labor and production costs.

### Key Characteristics

The primary features and benefits of UltraTuf SG sheet are:

- Excellent toughness
- Ease of fabrication
- High heat resistance
- Outstanding weatherability
- Chemical resistance



Exceptional clarity  
 Available in clear or white  
 Custom colors available upon request

**Markets and End-Use Applications**

Intended for indoor or outdoor sign faces.  
 Other applications include glazing, fixtures, displays and skylights.

**UltraTuf™ SG Physical Properties**

| PROPERTY                         | TEST METHOD | UNIT     | ULTRATUF SG |
|----------------------------------|-------------|----------|-------------|
| Specific Gravity                 | ASTM D792   | -        | 1.18        |
| Rockwell Hardness, R Scale       | ASTM D785   | -        | 114 (114)   |
| <b>MECHANICAL</b>                |             |          |             |
| Tensile Stress @ Yield           | ASTM D638   | psi      | 6,527       |
| Tensile Stress @ Break           | ASTM D638   | psi      | 6,672       |
| Flexural Modulus                 | ASTM D790   | psi      | 218,000     |
| Izod Impact Strength - Notched   |             |          |             |
| @23°C (73°F)                     | ASTM D256A  | ft-lb/in | 18.9        |
| @0°C (32°F)                      | ASTM D256A  | ft-lb/in | 18.8        |
| @-30°C (-22°F)                   | ASTM D256A  | ft-lb/in | 2.5         |
| Izod Impact Strength - Unnotched |             |          |             |
| @23°C (73°F)                     | ASTM D256A  | ft-lb/in | No break    |
| @0°C (32°F)                      | ASTM D256A  | ft-lb/in | No break    |
| @-30°C (-22°F)                   | ASTM D256A  | ft-lb/in | 22.8        |
| <b>THERMAL</b>                   |             |          |             |
| Heat Deflection Temperature      |             |          |             |
| @ 264 psi                        | ASTM D648   | °F (°C)  | 196(91)     |
| @ 66 psi                         | ASTM D648   | °F (°C)  | 211(99)     |

Properties reported here are based on limited testing.