



**TRIVALENCE**

# TriVEX™ 21G10 (U,R)

**Polycarbonate**

**General Information**

**Product Description**

Flame retardant, 10% glass reinforced polycarbonate.

**FEATURES**

- Flame Retardant
- Good Impact
- Medium Flow

**ADDITIONAL FORMULAS**

- Added Release "R"
- Added UV "U"

**COLOR**

-All

**General**

- |                             |   |
|-----------------------------|---|
| <b>Typical Applications</b> | -Appliance, electrical, lawn & garden, automotive, electronic |
| <b>Processing Method</b>    | -Injection/Extrusion  |
| <b>Form(s)</b>              | -Pellets  |
| <b>Availability</b>         | -North America, Europe, Asia, Latin America                   |

**ASTM / ISO Properties<sup>1</sup>**

| <b>Physical</b>                             | <b>Nominal Value Unit</b> | <b>Test Method</b> |
|---|---------------------------|--------------------|
| Density                                     | 1.26 g/cm <sup>3</sup>    | ASTM D792          |
| Melt Flow Rate (300°C/1.2kg)                | 12 g/10min                | ASTM D1238         |
| Molding Shrinkage - Flow (3.2mm)            | 0.2 to 0.4 %              | TVT Internal       |
| Outdoor Suitability (QUV) ("U" grades only) | Pass                      | TVT Internal       |

| <b>Mechanical</b>     | <b>Nominal Value Unit</b> | <b>Test Method</b> |
|-----------------------|---------------------------|--------------------|
| Tensile Strength, yld | 10,900 psi                | ASTM D638          |
| Tensile Elongation    | 5 %                       | ASTM D638          |
| Flexural Modulus      | 550,000 psi               | ASTM D790          |
| Notched Izod Impact   | 1.5 ft-lbs/in             | ASTM D256          |
| Rockwell Hardness     | 122 R-Scale               | ASTM D785          |

| <b>Thermal</b>                               | <b>Nominal Value Unit</b> | <b>Test Method</b> |
|--|---------------------------|--------------------|
| Deflection Temperature Under Load (0.45 MPa) | 292 °F                    | ASTM D648          |
| Deflection Temperature Under Load (1.8 MPa)  | 284 °F                    | ASTM D648          |
| Vicat Softening Temperature                  | 308 °F                    | ASTM D1525         |
| RTI Elec                                     | 176 °F                    | UL 746             |
| RTI IMP                                      | 176 °F                    | UL 746             |
| RTI Str                                      | 176 °F                    | UL 746             |
| CLTE - Flow                                  | 1.8E-5 in/in/°F           | ASTM E831          |

| <b>Flammability</b> | <b>Nominal Value Unit</b> | <b>Test Method</b> |
|---------------------|---------------------------|--------------------|
| 0.06 in             | V2                        | UL94 TVT Internal  |

**Recommended Processing Guidance**

- |                             |               |
|-----------------------------|---------------|
| Drying Temperature          | 230 to 250 °F |
| Drying Time                 | 3 to 6 Hours  |
| Suggested Max Moisture      | 0.02 %        |
| Processing Melt Temperature | 580 to 615 °F |
| Mold Temperature            | 175 to 230 °F |