



TRIVALENCE

TriVEX™ 31G10FR2 (U,R)

Polycarbonate

General Information

Product Description

Flame retardant, 10% glass reinforced polycarbonate.

FEATURES

- Flame Retardant
- Great Impact
- UV Stabilized
- High Flow

ADDITIONAL FORMULAS

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

COLOR

-All

General

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

ASTM / ISO Properties¹

| Physical | Nominal Value Unit | Test Method |
|---|------------------------|--------------|
| Density | 1.25 g/cm ³ | ASTM D792 |
| Melt Flow Rate (300°C/1.2kg) | 20 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 |

| Mechanical | Nominal Value Unit | Test Method |
|-----------------------|--------------------|-------------|
| Tensile Strength, yld | 9400 psi | ASTM D638 |
| Tensile Elongation | 10 % | ASTM D638 |
| Flexural Modulus | 480000 psi | ASTM D790 |
| Notched Izod Impact | 2.5 ft-lbs/in | ASTM D256 |
| Rockwell Hardness | 122 R-Scale | ASTM D785 |

| Thermal | Nominal Value Unit | Test Method |
|--|--------------------|-------------|
| 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 |

| Flammability | Nominal Value Unit | Test Method |
|--------------|--------------------|-------------------|
| 0.06 in | V2 | UL94 TVT Internal |
| 0.12 in | V0 | 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 |