



TRIVALENCE

TriVEX 12G10 (U,R)

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Polycarbonate

General Information

Product Description

Glass fiber reinforced polycarbonate

FEATURES

- 10% Glass Fiber Reinforced
- Great Strength
- Good Creep Resistance
- Low 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 | 1.26 | g/cm ³ | ASTM D792 |
| Melt Flow Rate (300°C/1.2kg) | 8 | g/10min | ASTM D1238 |
| Molding Shrinkage - Flow (3.2mm) | 0.2 to 0.5 | % | TVT Internal |
| Outdoor Suitability - QUV ("U" grades only) | Pass | | QUV - TVT Internal |

| Mechanical | Nominal Value | Unit | Test Method |
|-----------------------|---------------|-----------|-------------|
| Tensile Strength, yld | 10500 | psi | ASTM D638 |
| Tensile Elongation | 10 | % | ASTM D638 |
| Flexural Modulus | 505,000 | psi | ASTM D790 |
| Notched Izod Impact | 2.2 | 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) | 295 | °F | ASTM D648 |
| Deflection Temperature Under Load (1.8 MPa) | 278 | °F | ASTM D648 |
| Vicat Softening Temperature | 302 | °F | ASTM D1525 |
| CLTE - Flow | 1.8E-5 | in/in/°F | ASTM E831 |

| Flammability | Nominal Value | Unit | Test Method |
|--------------|---------------|------|-------------------|
| 0.06 in | HB | | 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 | 590 to 640 | °F |
| Mold Temperature | 175 to 230 | °F |

¹ Note: The values listed on this guide are typical values based on general molding conditions and used solely for the purpose of general material processing. It is recommended that application properties be derived from actual molded articles, whereas properties as molded could vary. These are not to be used as specifications. This data does not provide an implied conditional warranty.