



**TRIVALENCE**

# TriVEX™ 12G40 (U,R)

**Polycarbonate**

**General Information**

**Product Description**

Glass fiber reinforced polycarbonate

**FEATURES**

- 40% Glass Fiber Reinforced
- Great Strength
- Good Creep Resistance
- Low 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  |
| <b>Form(s)</b>              | -Pellets  |
| <b>Availability</b>         | -North America, Europe, Asia, Latin America                   |

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

Physical	Nominal Value Unit	Test Method
Density	1.52 g/cm <sup>3</sup>	ASTM D792
Melt Flow Rate (300°C/1.2kg)	8 g/10min	ASTM D1238
Molding Shrinkage - Flow (3.2mm)	0.1 to 0.3 %	TVT Internal
Outdoor Suitability - QUV ("U" grades only)	Pass	QUV - TVT Internal

Mechanical	Nominal Value Unit	Test Method
Tensile Strength, yld	20,000 psi	ASTM D638
Tensile Elongation	>2 %	ASTM D638
Flexural Modulus	1350000 psi	ASTM D790
Notched Izod Impact	2.0 ft-lbs/in	ASTM D256
Rockwell Hardness	123 R-Scale	ASTM D785

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load (0.45 MPa)	302 °F	ASTM D648
Deflection Temperature Under Load (1.8 MPa)	289 °F	ASTM D648
Vicat Softening Temperature	309 °F	ASTM D1525
CLTE - Flow	1.5E-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 260 °F |
| Drying Time                 | 3 to 6 Hours  |
| Suggested Max Moisture      | 0.02 %        |
| Processing Melt Temperature | 600 to 650 °F |
| Mold Temperature            | 180 to 250 °F |