

**TRIVALENCE**

Headquarters  
3001 Maxx Rd  
Evansville, IN 47711  
800.209.2517

# TriVEX™ 12G20FR0 (U,R)

[trivalencetechnologies.com](http://trivalencetechnologies.com)

## Polycarbonate

### General Information

#### Product Description

Flame retardant, 20% glass reinforced polycarbonate

#### FEATURES

- Flame Retardant
- Good Mechanical Properties
- 20% Glass Fiber Reinforced

#### 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 Properties<sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.34	g/cm <sup>3</sup>	ASTM D792
Melt Flow Rate (300°C/1.2kg)	8	g/10min	ASTM D1238
Molding Shrinkage - Flow (3.2mm)	0.2 to 0.5	%	TVT Internal
Outdoor Suitability QUV ("U" grades only)	Pass		QUV TVT Internal
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength, yld	14000	psi	ASTM D638
Tensile Elongation	5	%	ASTM D638
Flexural Modulus	760000	psi	ASTM D790
Notched Izod Impact	1.5	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)	290	°F	ASTM D648
Deflection Temperature Under Load (1.8 MPa)	288	°F	ASTM D648
Vicat Softening Temperature	300	°F	ASTM D1525
CLTE - Flow	1.5E-5	in/in/°F	ASTM E831
Flammability	Nominal Value	Unit	Test Method
0.06 in	V2		UL94 TVT Internal/z
0.12 in	V0		UL94 TVT Internal/z

### 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 240 °F

<sup>1</sup> 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.