



TRIVALENCE

TriVEX 12G20 (U,R)

Headquarters
3001 Maxx Road
Evansville, IN 47711
800.209.2517

trivalencetechnologies.com

Polycarbonate

General Information

Product Description

Glass fiber reinforced polycarbonate

FEATURES

- 20% 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	1.35	g/cm ³	ASTM D792
Melt Flow Rate (300°C/1.2kg)	6	g/10min	ASTM D1238
Molding Shrinkage - Flow (3.2mm)	0.2 to 0.4	%	TVT Internal
Outdoor Suitability - QUV ("U" grades only)	Pass		QUV - TVT Internal

Mechanical

	Nominal Value	Unit	Test Method
Tensile Strength, yld	16,000	psi	ASTM D638
Tensile Elongation	>5	%	ASTM D638
Flexural Modulus	790000	psi	ASTM D790
Notched Izod Impact	2.2	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)	295	°F	ASTM D648
Deflection Temperature Under Load (1.8 MPa)	280	°F	ASTM D648
Vicat Softening Temperature	318	°F	ASTM D1525
CLTE - Flow	1.6E-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.