



TRIVALENCE

TriVEX™ 12G40 (U,R)

Headquarters
3001 Maxx Rd
Evansville, IN 47711
800.209.2517

trivalencetechnologies.com

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

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

ASTM / ISO Properties¹

Physical	Nominal Value Unit	Test Method
Density	1.52 g/cm ³	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

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.