



TRIVALENCE

TriVEX™ 12G20 (U,R)

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

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|-----------------------------|---------------|
| 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 |