TRIVALENCE

TriVEX™ 16G10 (U,R)

Polycarbonate + Siloxane

General Information

Product Description

Glass reinforced polycarbonate modified with siloxane for superior cold temperature impact resistance.

FEATURES		ADDITIONAL FORMULAS	COLOR
-Good Impact/Ductility (Ambient and Extreme Cold)	-PFAS Free	-Added Release "R"	-All
-10% Glass Reinforced		-Additional UV "U" - Great UV Perfomance	
-Improved Chemical Resistance			
-RoHS/REACH Compliant			

General

Typical Applications	-Solar, military and defense gear, heathcare, EV battery, sporting goods, safety and rescue, transportation, lawn and garden, industrial packaging, electrical components, oil/gas, appliance, aerospace, 3d printing, recreational vehicles, building materials, railway, wire and cable.
Processing Method	-Injection/Extrusion
Form(s)	-Pellets
Availability	-North America, Europe, Latin America

ASTM / ISO Properties[1]

Physical	Nominal Value	Unit	Test Method
Density	1.25	g/cm³	ASTM D792
Melt Flow Rate (300°C/1.2kg)	7	g/10min	ASTM D1238
Molding Shrinkage - Flow (3.2mm)	0.2 to 0.7	%	TVT Internal
Outdoor Suitability (QUV) (U Grades)	Pass		TVT Internal
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength, brk	7000	psi	ASTM D638
Tensile Elongation	>6	%	ASTM D638
Flexural Modulus	505,000	psi	ASTM D790
Notched Izod Impact (R.T)	5	ft-lbs/in	ASTM D256
Notched Izod Impact (-40C)	2.5	ft-lbs/in	ASTM D257
Rockwell Hardness	121	R-Scale	ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (1.8 MPa)	275	°F	ASTM D648
Vicat Softening Temperature	295	°F	ASTM D1525
CLTE - Flow	2.7E-5	in/in/°F	ASTM E831
Flammability	**Nominal Value**	**Unit**	**Test Method**
0.12 in	V1		UL94 - Pending

Recommended Processing Guidance

Drying Temperature	230 to 250	°F
Drying Time	3 to 6	Hours
Suggested Max Moisture	0.02	%
Processing Melt Temperature	580 to 620	°F
Mold Temperature	170 to 220	°F