



TRIVALENCE

TriVEX™ 14FR0HF (U,R)

Polycarbonate + Siloxane

General Information

Product Description

Non halogenated flame retardant polycarbonate modified with siloxane for superior cold temperature impact resistance.

FEATURES

- Good Impact/Ductility (Ambient and Extreme Cold)
- Enhanced Flow and Release
- Flame Retardant
- RoHS/REACH Compliant
- Improved Chemical Resistance
- Halogen Free
- Bromine Free
- Chlorine Free
- PFAS Free
- Excellent Aesthetics
- Offers Paint Elimination

ADDITIONAL FORMULAS

- Added Release "R"
- Additional UV "U" - Great UV Performance

COLOR

- All

General

Typical Applications

-Solar, military and defense gear, healthcare, 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 Properties¹

Physical

	Nominal Value	Unit	Test Method
Density	1.19	g/cm ³	ASTM D792
Melt Flow Rate (300°C/1.2kg)	16	g/10min	ASTM D1238
Molding Shrinkage - Flow (3.2mm)	0.5 to 0.8	%	TVT Internal
Outdoor Suitability (QUV) (U Grades)	Pass		TVT Internal

Mechanical

	Nominal Value	Unit	Test Method
Tensile Strength, brk	8600	psi	ASTM D638
Tensile Elongation	120	%	ASTM D638
Flexural Modulus	320,000	psi	ASTM D790
Notched Izod Impact (R.T)	14	ft-lbs/in	ASTM D256
Notched Izod Impact (-40C)	8	ft-lbs/in	ASTM D257
Rockwell Hardness	118	R-Scale	ASTM D785

Thermal

	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (0.45 MPa)	272	°F	ASTM D648
Deflection Temperature Under Load (1.8 MPa)	252	°F	ASTM D648
Vicat Softening Temperature	284	°F	ASTM D1525
CLTE - Flow	3.4E-5	in/in/°F	ASTM E831

Flammability

	Nominal Value	Unit	Test Method
0.06 in	V0		UL94 - Pending
0.12 in	5V		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	500 to 590 °F
Mold Temperature	145 to 195 °F