



TRIVALENCE

TriVEX™ 14FR5 (U,R)

Polycarbonate

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
- Low/Medium Flc
- Weatherable

ADDITIONAL FORMULAS

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

COLOR

-All

General

Typical Applications

-Appliance, electrical, lawn & garden, automotive, military, rescue, sporting goods

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)	8	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	9000	psi	ASTM D638
Tensile Elongation	120	%	ASTM D638
Flexural Modulus	380000	psi	ASTM D790
Notched Izod Impact (R.T)	16	ft-lbs/in	ASTM D256
Notched Izod Impact (-22C)	10	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 - TVT Internal
0.12 in	5V		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	550 to 600	°F
Mold Temperature	140 to 195	°F