



TRIVALENCE

TriVEX™ 14FR5 (U,R)

Headquarters
3001 Maxx Rd
Evansville, IN 47711
800.209.2517

trivalencetechnologies.com

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

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.