



Headquarters
3001 Maxx Rd
Evansville, IN 47711
800.209.2517

trivalencetechnologies.com

TriVEX™ 14 (U,R)

Polycarbonate + Siloxane

General Information

Product Description

Polycarbonate modified with siloxane for superior cold temperature impact resistance.

FEATURES

- Good Impact/Ductility (Ambient and Extreme Cold)
- Enhanced Flow and Release
- Excellent Aesthetics
- RoHS/REACH Compliant

- Offers Paint Elimination
- PFAS Free
- Improved Chemical Resistance

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	1.18 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	8200 psi	ASTM D638
Tensile Elongation	120 %	ASTM D638
Flexural Modulus	315,000 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)	258 °F	ASTM D648
Deflection Temperature Under Load (1.8 MPa)	245 °F	ASTM D648
Vicat Softening Temperature	282 °F	ASTM D1525
CLTE - Flow	3.4E-5 in/in/°F	ASTM E831

Flammability

Nominal Value Unit

Test Method

0.12 in	HB	UL94 - Pending
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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

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.