



TRIVALENCE

TriVEX™ 24 (U,R)

Polycarbonate + Siloxane

General Information

Product Description

Polycarbonate modified with siloxane for superior cold temperature impact resistance. High flow.

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)	15	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

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