



TRIVALENCE

TriVEX™ 16FR5 (U,R)

Polycarbonate + Siloxane

General Information

Product Description

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

FEATURES

- High Impact/Ductility (Ambient and Extreme Cold)
- Enhanced Flow and Release
- Flame Retardant
- RoHS/REACH Compliant

ADDITIONAL FORMULAS

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

COLOR

- All
- Opaque

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 (-40C)	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	