



**TRIVALENCE**

# TriVEX™ 16FR5HF (U,R)

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Headquarters  
3001 Maxx Rd  
Evansville, IN 47711  
800.209.2517

[trivalencetechnologies.com](http://trivalencetechnologies.com)

## General Information

### Product Description

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

#### FEATURES

-Good Impact/Ductility (Ambient and Extreme Cold)  
-Enhanced Flow and Release  
-Flame Retardant  
-RoHS/REACH Compliant  
-Improved Chemical Resistance

-Halogen Free  
-Bromine Free  
-Chlorine Free  
-PFAS Free  
-Excellent Aesthetics  
-Offers Paint Elimination

#### 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 Properties<sup>1</sup>

Physical	Nominal Value Unit	Test Method
Density	1.19 g/cm <sup>3</sup>	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	8800 psi	ASTM D638
Tensile Elongation	120 %	ASTM D638
Flexural Modulus	320,000 psi	ASTM D790
Notched Izod Impact (R.T)	15 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 - Pending
0.12 in	5V	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

<sup>1</sup> 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.