TRIVALENCE

TriVEX™ 14FR5 (U,R) (20M)

Polycarbonate

General Information

Product Description

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

FEATURES	ADDITIONAL FORMULAS	COLOR
-Good Impact/Ductility (Ambient and Extreme Cold)	-Added Release "R"	-All
-Enhanced Flow and Release	-Additional UV "U" - Great UV Perfomance	
-Flame Retardant		
-RoHS/REACH Compliant		

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 Properties[1]

Physical	Nominal Value	Unit	Test Method
Density	1.19	g/cm³	ASTM D792
Melt Flow Rate (300°C/1.2kg)	20	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