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TriVEX™ 14FR0 (U,R)

Polycarbonate + Siloxane

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)	-Halogen Free	-Added Release "R"	-All
	-Bromine Free	-Additional UV "U" - Great UV Perfomance	
-Enhanced Flow and Release	-Chlorine Free		
-Flame Retardant	-PFAS Free		
-RoHS/REACH Compliant	-Excellent Aesthetics		
-Improved Chemical Resistance	-Offers Paint Elimination		

General

Typical Applications	-Solar, military and defense gear, heathcare, 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[1]

Physical	Nominal Value	Unit	Test Method
Density	1.19	g/cm³	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	8600	psi	ASTM D638
Tensile Elongation	120	%	ASTM D638
Flexural Modulus	320,000	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)	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	

[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.