



**TRIVALENCE**

# TriVEX™ 12 (U,R)

**Polycarbonate**

**General Information**

**Product Description**

General purpose, high impact polycarbonate

**FEATURES**

- Great Impact
- High Optical Quality

**ADDITIONAL FORMULAS**

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

**COLOR**

- All
- Transparent

**General**

- |                             |  |
|-----------------------------|--|
| <b>Typical Applications</b> | -Appliance, electrical, lawn & garden, automotive, medical |
| <b>Processing Method</b>    | -Injection/Extrusion                                       |
| <b>Form(s)</b>              | -Pellets   |
| <b>Availability</b>         | -North America, Europe, Asia, Latin America                |

**ASTM / ISO Properties<sup>1</sup>**

**Physical**

	Nominal Value	Unit	Test Method
Density	1.20	g/cm <sup>3</sup>	ASTM D792
Melt Flow Rate (300°C/1.2kg)	8	g/10min	ASTM D1238
Molding Shrinkage - Flow (3.2mm)	0.5 to 0.7	%	TVT Internal
Outdoor Suitability (QUV) (12U Grades)	Pass		TVT Internal

**Mechanical**

	Nominal Value	Unit	Test Method
Tensile Strength, brk	9700	psi	ASTM D638
Tensile Elongation	>120	%	ASTM D638
Flexural Modulus	325000	psi	ASTM D790
Notched Izod Impact	15	ft-lbs/in	ASTM D256
Rockwell Hardness	118	R-Scale	ASTM D785

**Thermal**

	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (0.45 MPa)	278	°F	ASTM D648
Deflection Temperature Under Load (1.8 MPa)	270	°F	ASTM D648
Vicat Softening Temperature	308	°F	ASTM D1525
RTI Elec	176	°F	UL 746
RTI IMP	176	°F	UL 746
RTI Str	176	°F	UL 746
CLTE - Flow	3.8E-5	in/in/°F	ASTM E831

**Flammability**

	Nominal Value	Unit	Test Method
0.06 in	HB		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	520 to 560 °F
Mold Temperature	140 to 180 °F