



**TRIVALENCE**

# TriVAN™ 21E (U, R, UR) ISO

Acrylonitrile Butadiene Styrene

## General Information

### Product Description

Medium flow ABS, utility grade

#### FEATURES

- Good Impact
- Medium Flow
- Utility Grade

#### ADDITIONAL FORMULAS

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

#### COLOR

- All
- Opaque

### General

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

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

Physical	Nominal Value	Unit	Test Method
Density	1.05	g/cm <sup>3</sup>	ISO 1183
Melt Flow Rate (230°C/3.8 kg)	5	g/10min	ISO 1133
Molding Shrinkage - Flow (3.2mm)	0.4 to 0.7	%	TVT Internal
Outdoor Suitability (QUV) (23PU Grades)	Pass		TVT Internal
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength, yld	38	MPa	ISO 527
Tensile Elongation	>15	%	ISO 527
Flexural Modulus	2100	MPa	ISO 178
Charpy notched Impact	18.0	kJ/m <sup>2</sup>	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (0.45 MPa)	85	°C	ISO 75
Deflection Temperature Under Load (1.8 MPa)	76	°C	ISO 75
Vicat Softening Temperature	84	°C	ISO 306
Flammability	Nominal Value	Unit	Test Method
0.06 in	HB		UL94 - TVT Internal

### Recommended Processing Guidance

Drying Temperature	175 to 200 °F
Drying Time	3 to 5 Hours
Suggested Max Moisture	0.04 %
Processing Melt Temperature	480 to 530 °F
Mold Temperature	110 to 175 °F