



**TRIVALENCE**

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# TriVAN™ 21E (U, R, UR) ISO

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## 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

##### Typical Applications

-Appliance, electrical, lawn & garden, automotive, medical, lighting, rails

##### 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	1.05	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

<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.