



**TRIVALENCE**

# TriVAN™ 12P (U, R, UR)

Headquarters  
3001 Maxx Rd  
Evansville, IN 47711  
800.209.2517

[trivalenctechnologies.com](http://trivalenctechnologies.com)

## Acrylonitrile Butadiene Styrene

### General Information

#### Product Description

Low flow ABS used in most painting and plating applications.

#### FEATURES

- Great Impact
- Plateable
- Low Flow
- Weldable
- Paintable

#### 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	1.04 g/cm <sup>3</sup>	ASTM D792
Melt Flow Rate (230°C/3.8kg)	2 g/10min	ASTM D1238
Molding Shrinkage - Flow (3.2mm)	0.4 to 0.6 %	TVT Internal
Outdoor Suitability (QUV) (23PU Grades)	Pass	TVT Internal
Mechanical	Nominal Value Unit	Test Method
Tensile Strength, yld	6800 psi	ASTM D638
Tensile Elongation	>18 %	ASTM D638
Flexural Modulus	345000 psi	ASTM D790
Notched Izod Impact	4.2 ft-lbs/in	ASTM D256
Rockwell Hardness	106 R-Scale	ASTM D785
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load (0.45 MPa)	188 °F	ASTM D648
Deflection Temperature Under Load (1.8 MPa)	168 °F	ASTM D648
Vicat Softening Temperature	206 °F	ASTM D1525
CLTE - Flow	3.3E-5 in/in/°F	ASTM E831
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.