



**TRIVALENCE**

# TriVAN™ 12 (U, R, UR)

Acrylonitrile Butadiene Styrene

**General Information**

**Product Description**

Low flow, high impact grade ABS used for extrusion and blow molding applications

**FEATURES**

- High Impact
- Low Flow

**ADDITIONAL FORMULAS**

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

**COLOR**

- All
- Opaque

**General**

- |                             |                                       |
|-----------------------------|---------------------------------------|
| <b>Typical Applications</b> | -Appliance, construction, sheet.      |
| <b>Processing Method</b>    | -Injection/Extrusion/Blow Molding     |
| <b>Form(s)</b>              | -Pellets                              |
| <b>Availability</b>         | -North America, Europe, Latin America |

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

<b>Physical</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
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)	0.5 to 0.7 %	TVT Internal
Outdoor Suitability (QUV) ("U" Grades)	Pass	TVT Internal
<b>Mechanical</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Tensile Strength, yld	5800 psi	ASTM D638
Tensile Elongation	>35 %	ASTM D638
Flexural Modulus	335000 psi	ASTM D790
Notched Izod Impact	5 ft-lbs/in	ASTM D256
Rockwell Hardness	112 R-Scale	ASTM D785
<b>Thermal</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (0.45 MPa)	199 °F	ASTM D648
Deflection Temperature Under Load (1.8 MPa)	175 °F	ASTM D648
Vicat Softening Temperature	209 °F	ASTM D1525
CLTE - Flow	4.5E-5 in/in/°F	ASTM E831
<b>Flammability</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
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 |