



TRIVALENCE

TriVAN™ 23P (U, R, UR)

Headquarters
3001 Maxx Rd
Evansville, IN 47711
800.209.2517

trivalenctechnologies.com

Acrylonitrile Butadiene Styrene

General Information

Product Description

Medium flow ABS used in most painting and plating applications.

FEATURES

- Great Impact
- Plateable
- Medium Flow
- Weldable
- Paintable

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 Properties¹

| Physical | Nominal Value Unit | Test Method |
|--|------------------------|---------------------|
| Density | 1.04 g/cm ³ | ASTM D792 |
| Melt Flow Rate (230°C/3.8kg) | 5 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 | 350000 psi | ASTM D790 |
| Notched Izod Impact | 4 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 |

¹ 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.