



TRIVALENCE

TriVAN™ 22E (U, R)

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 | -Utility, appliance, electrical, lawn & garden, automotive, medical, construction |
| Processing Method | -Injection/Extrusion |
| Form(s) | -Pellets |
| Availability | -North America, Europe, Latin America |

ASTM / ISO Properties¹

| Physical | Nominal Value | Unit | Test Method |
|--|---------------|-------------------|---------------------|
| Density | 1.06 | 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) ("U" Grades) | Pass | | TVT Internal |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength, yld | 6000 | psi | ASTM D638 |
| Flexural Modulus | 280,000 | psi | ASTM D790 |
| Notched Izod Impact | 2.5 | ft-lbs/in | ASTM D256 |
| Rockwell Hardness | 112 | R-Scale | ASTM D785 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (0.45 MPa) | 185 | °F | ASTM D648 |
| Deflection Temperature Under Load (1.8 MPa) | 170 | °F | ASTM D648 |
| Vicat Softening Temperature | 209 | °F | ASTM D1525 |
| CLTE - Flow | 4.5E-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 |