



TRIVALENCE

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TriVET™ 31B (U,R)

Polybutylene Terephthalate

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General Information

Product Description

Medium flow, modified PBT.

FEATURES

- 1.00IV
- High Molecular Weight
- Good strength
- Good Chemical Resistance
- Medium Flow

ADDITIONAL FORMULAS

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

COLOR

- All

General

- Typical Applications** -Transportation, housing, electrical
- Processing Method** -Injection
- Form(s)** -Pellets
- Availability** -North America, Europe, Asia, Latin America

ASTM / ISO Properties¹

| Physical | Nominal Value | Unit | Test Method |
|--|---------------|-------------------|--------------------|
| Density | 1.31 | g/cm ³ | ISO 1183 |
| Melt Flow Rate (250°C/2.16kg) | 60 | g/10min | ISO 1133 |
| Molding Shrinkage - Flow (3.2mm) | 1.8 to 2.0 | % | TVT Internal |
| Outdoor Suitability - QUV ("U" grades only) | Pass | | QUV - TVT Internal |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength, yld | 58 | MPa | ISO 527 |
| Tensile Modulus | 2400 | MPa | ISO 178 |
| Charpy Notched Impact | 3.1 | kJ/m ² | ISO 179 |
| Rockwell Hardness | 70 | M-Scale | ISO 2039 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (0.45 MPa) | 301 | °F | ISO 75 |
| Deflection Temperature Under Load (1.8 MPa) | 122 | °F | ISO 75 |
| Vicat Softening Temperature | 364 | °F | ISO 75 |
| CLTE - Flow | 6.1E-5 | in/in/°F | ASTM E831 |
| Flammability | Nominal Value | Unit | Test Method |
| 0.06 in | HB | | UL94 TVT Internal |

Recommended Processing Guidance

- Drying Temperature 110 to 130 °C
- Drying Time 3 to 6 Hours
- Suggested Max Moisture 0.02 %
- Processing Melt Temperature 240 to 275 °C
- Mold Temperature 60 to 90 °C

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.