



TRIVALENCE

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TriVET 21G50BP (U,R)

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Polybutylene Terephthalate + PET

General Information

Product Description

Glass fiber reinforced polybutylene terephthalate + PET

FEATURES

- 50% Glass Fiber Reinforced
- Great Strength
- Good Dimensional Stability
- Low Flow

ADDITIONAL FORMULAS

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

COLOR

- All

General

Typical Applications

-Appliance, electrical, lawn & garden, automotive, electronic

Processing Method

-Injection

Form(s)

-Pellets

Availability

-North America, Europe, Asia, Latin America

ASTM / ISO Properties¹

| Physical | Nominal Value | Unit | Test Method |
|---|---------------|-------------------|--------------------|
| Density | 1.73 | g/cm ³ | ISO 1183 |
| Melt Flow Rate (275°C/2.16kg) | 12 | g/10min | ISO 1133 |
| Molding Shrinkage - Flow (3.2mm) | 0.2 to 0.4 | % | TVT Internal |
| Outdoor Suitability - QUV ("U" grades only) | Pass | | QUV - TVT Internal |

| Mechanical | Nominal Value | Unit | Test Method |
|-----------------------|---------------|-------------------|-------------|
| Tensile Strength, yld | 165 | MPa | ISO 527 |
| Tensile Elongation | >1.5 | % | ISO 527 |
| Flexural Modulus | 17,000 | MPa | ISO 178 |
| Charpy Notched Impact | 10.0 | kJ/m ² | ISO 179 |

| Thermal | Nominal Value | Unit | Test Method |
|--|---------------|------|-------------|
| Deflection Temperature Under Load (0.45 MPa) | 220 | °C | ISO 75 |
| Deflection Temperature Under Load (1.8 MPa) | 205 | °C | ISO 75 |
| Vicat Softening Temperature | 215 | °C | ISO 75 |

| Flammability | Nominal Value | Unit | Test Method |
|--------------|---------------|------|-------------------|
| 0.06 in | HB | | UL94 TVT Internal |

| Recommended Processing Guidance | Nominal Value | Unit |
|---------------------------------|---------------|-------|
| Drying Temperature | 110 to 130 | °C |
| Drying Time | 3 to 6 | Hours |
| Suggested Max Moisture | 0.02 | % |
| Processing Melt Temperature | 250 to 280 | °C |
| Mold Temperature | 60 to 100 | °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.