



TRIVALENCE

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TriVET 12G30FR5 (U,R)

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Polybutylene Terephthalate/Polycarbonate

General Information

Product Description

Glass fiber reinforced PBT + PC, flame retardant

FEATURES

- 30% Glass Fiber Reinforced
- Chemical Resistance
- RoHS/REACH Compliant
- Medium Flow

-Flame Retardant

ADDITIONAL FORMULAS

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

COLOR

-All

General

- Typical Applications** -Appliance, electrical, lawn & garden, recreation
- Processing Method** -Injection/Extrusion
- Form(s)** -Pellets
- Availability** -North America, Europe, Latin America

ASTM / ISO Properties¹

Physical

| | Nominal Value | Unit | Test Method |
|---|---------------|-------------------|--------------------|
| Density | 1.59 | g/cm ³ | ASTM D792 |
| Melt Flow Rate (250°C/2.16kg) | 16 | g/10min | ASTM D1238 |
| Molding Shrinkage - Flow (3.2mm) | 0.4 to 0.6 | % | ASTM D955 |
| Outdoor Suitability - QUV ("U" grades only) | Pass | | QUV - TVT Internal |

Mechanical

| | Nominal Value | Unit | Test Method |
|--------------------------|---------------|----------|-------------|
| Tensile Strength, brk | 15,500 | psi | ASTM D638 |
| Tensile Elongation | >2 | % | ASTM D638 |
| Flexural Modulus | 1200000 | psi | ASTM D790 |
| Notched Izod Impact, 73F | 1.5 | ft-lb/in | ASTM D256 |

Thermal

| | Nominal Value | Unit | Test Method |
|--|---------------|----------|-------------|
| Deflection Temperature Under Load (0.45 MPa)(0.25in) | 399 | °F | ASTM D648 |
| Deflection Temperature Under Load (1.8 MPa)(0.25in) | 280 | °F | ASTM D648 |
| CLTE - Flow | 1.3E-5 | in/in/°F | ASTM E831 |

Flammability

| | Nominal Value | Unit | Test Method |
|----------|---------------|----------|-------------------|
| 0.06 in | V0 | Bum Rate | UL94 TVT Internal |
| 0.125 in | 5V | Bum Rate | UL94 TVT Internal |

Recommended Processing Guidance

| | | |
|-----------------------------|------------|-------|
| Drying Temperature | 220 to 255 | °F |
| Drying Time | 3 to 6 | Hours |
| Suggested Max Moisture | 0.02 | % |
| Processing Melt Temperature | 450 to 490 | °F |
| Mold Temperature | 140 to 190 | °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.