# Durethan® ECOBKV50H2.0EF 900116

PA6-GF50 Envalior

**Product Texts**

Injection Molding, 50% Glass Reinforced, Heat Stabilized, Improved flow, Recycled Content

ISO 1043 PA6-GF50

| Processing/Physical Characteristics | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Molding shrinkage, parallel | **0.2 / *** | % | ISO 294-4, 2577 |
| [C] Molding shrinkage, normal | **0.6 / *** | % | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Tensile Modulus | **16200 / 10000** | MPa | ISO 527 |
| [C] Stress at break | **215 / 140** | MPa | ISO 527 |
| [C] Strain at break | **2.7 / 3.5** | % | ISO 527 |
| [C] Charpy impact strength, +23°C | **100 / 85** | kJ/m² | ISO 179/1eU |
| [C] Charpy impact strength, -30°C | **95 / 85** | kJ/m² | ISO 179/1eU |
| [C] Puncture - maximum force, +23°C | **1180 / -** | N | ISO 6603-2 |
| [C] Puncture - maximum force, -30°C | **1000 / -** | N | ISO 6603-2 |
| [C] Puncture energy, +23°C | **4.3 / -** | J | ISO 6603-2 |
| [C] Puncture energy, -30°C | **3.4 / -** | J | ISO 6603-2 |

[C]: CAMPUS

| Thermal properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Melting temperature, 10°C/min | **222 / *** | °C | ISO 11357-1/-3 |
| [C] Temp. of deflection under load, 1.80 MPa | **210 / *** | °C | ISO 75-1/-2 |
| [C] Temp. of deflection under load, 0.45 MPa | **220 / *** | °C | ISO 75-1/-2 |
| [C] Coeff. of linear therm. expansion, parallel | **12 / *** | E-6/K | ISO 11359-1/-2 |
| [C] Coeff. of linear therm. expansion, normal | **90 / *** | E-6/K | ISO 11359-1/-2 |

[C]: CAMPUS

| Electrical properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Relative permittivity, 100Hz | **4.7 / 12.9** | - | IEC 62631-2-1 |
| [C] Relative permittivity, 1MHz | **4.2 / 4.8** | - | IEC 62631-2-1 |
| [C] Dissipation factor, 100Hz | **135 / 2620** | E-4 | IEC 62631-2-1 |
| [C] Dissipation factor, 1MHz | **170 / 774** | E-4 | IEC 62631-2-1 |
| [C] Volume resistivity | **7E12 / 4E9** | Ohm*m | IEC 62631-3-1 |
| [C] Electric strength | **35 / 34** | kV/mm | IEC 60243-1 |
| [C] Comparative tracking index | **400 / -** | - | IEC 60112 |

[C]: CAMPUS

| Other properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| [C] Water absorption | **5 / *** | % | Sim. to ISO 62 |
| [C] Humidity absorption | **1.5 / *** | % | Sim. to ISO 62 |
| [C] Density | **1570 / -** | kg/m³ | ISO 1183 |

[C]: CAMPUS

| Test specimen production | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Injection Molding, melt temperature | **280** | °C | ISO 294 |
| Injection Molding, mold temperature | **80** | °C | ISO 294 |

[C]: CAMPUS

## Characteristics

**Processing**
Injection Molding

**Delivery form**
Pellets

**Additives**
Release agent

**Special Characteristics**
Heat stabilized or stable to heat

**Certifications**
Recycled Resin Content

**Regional Availability**
North America, Europe, Asia Pacific, South and Central America, Near East/Africa

## Other text information

**Injection molding**
PREPROCESSING
Residual moisture content: 0.03 - 0.12%
Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING
Melt temperature (Tmin - Tmax): 270 - 290 °C

Mold temperature: 80 - 120 °C