

Product Texts

Injection Molding, 30% Glass Reinforced, Heat Stabilized, Flame Retardant (halogen free)

ISO 1043 (PA66+PA6)-GF30 FR(40)

| Processing/Physical Characteristics | dry / cond | Unit | Test Standard |
|--|------------|------|-----------------|
| ISO Data | | | |
| ^[C] Molding shrinkage, parallel | 0.3 / * | % | ISO 294-4, 2577 |
| ^[C] Molding shrinkage, normal | 0.8 / * | % | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties | dry / cond | Unit | Test Standard |
|--|--------------|-------------------|---------------|
| ISO Data | | | |
| ^[C] Tensile Modulus | 10500 / 6500 | MPa | ISO 527 |
| ^[C] Stress at break | 138 / 87 | MPa | ISO 527 |
| ^[C] Strain at break | 2.9 / 5.7 | % | ISO 527 |
| ^[C] Charpy impact strength, +23°C | 65 / 70 | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy impact strength, -30°C | 60 / 60 | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy notched impact strength, +23°C | - / 11 | kJ/m ² | ISO 179/1eA |
| ^[C] Charpy notched impact strength, -30°C | - / 10 | kJ/m ² | ISO 179/1eA |

[C]: CAMPUS

| Thermal properties | dry / cond | Unit | Test Standard |
|--|------------|-------|-----------------|
| ISO Data | | | |
| ^[C] Melting temperature, 10°C/min | 260 / * | °C | ISO 11357-1/-3 |
| ^[C] Temp. of deflection under load, 1.80 MPa | 230 / * | °C | ISO 75-1/-2 |
| ^[C] Temp. of deflection under load, 0.45 MPa | 250 / * | °C | ISO 75-1/-2 |
| ^[C] Coeff. of linear therm. expansion, parallel | 20 / * | E-6/K | ISO 11359-1/-2 |
| ^[C] Coeff. of linear therm. expansion, normal | 70 / * | E-6/K | ISO 11359-1/-2 |
| ^[C] Burning Behav. at 1.5 mm nom. thickn. | V-0 / * | class | IEC 60695-11-10 |
| ^[C] Burning Behav. 5V at thickness h | 5VA / * | class | IEC 60695-11-20 |
| Thickness tested | 1.5 / * | mm | - |
| ^[C] Oxygen index | 34 / * | % | ISO 4589-1/-2 |

[C]: CAMPUS

| Electrical properties | dry / cond | Unit | Test Standard |
|---|----------------|-------|---------------|
| ISO Data | | | |
| ^[C] Relative permittivity, 100Hz | 4 / 7.3 | - | IEC 62631-2-1 |
| ^[C] Relative permittivity, 1MHz | 3.4 / 3.9 | - | IEC 62631-2-1 |
| ^[C] Dissipation factor, 100Hz | 200 / 1090 | E-4 | IEC 62631-2-1 |
| ^[C] Dissipation factor, 1MHz | 175 / 555 | E-4 | IEC 62631-2-1 |
| ^[C] Volume resistivity | >1E13 / 2.7E11 | Ohm*m | IEC 62631-3-1 |
| ^[C] Surface resistivity | * / 2.7E14 | Ohm | IEC 62631-3-2 |
| ^[C] Electric strength | 40 / 36 | kV/mm | IEC 60243-1 |
| ^[C] Comparative tracking index | 600 / - | - | IEC 60112 |

[C]: CAMPUS

| Other properties | dry / cond | Unit | Test Standard |
|------------------------------------|------------|-------------------|----------------|
| ^[C] Water absorption | 4.4 / * | % | Sim. to ISO 62 |
| ^[C] Humidity absorption | 1.4 / * | % | Sim. to ISO 62 |
| ^[C] Density | 1420 / - | kg/m ³ | ISO 1183 |

[C]: CAMPUS

| Test specimen production | Value | Unit | Test Standard |
|--|-------|------|---------------|
| ISO Data | | | |
| ^[C] Injection Molding, melt temperature | 270 | °C | ISO 294 |
| Injection Molding, mold temperature | 80 | °C | ISO 294 |

[C]: CAMPUS

Durethan® AKV30FN04 000000

(PA66+PA6)-GF30 FR(40)

Envalior

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|--|------------------|-------------|----------------------|
| Pre-drying - Temperature | 80 | °C | - |
| Pre-drying - Time | 2 - 6 | h | - |
| Processing humidity | ≤0.07 | % | - |
| Melt temperature | 265 - 285 | °C | - |
| Mold temperature | 80 - 100 | °C | - |

Characteristics**Processing**

Injection Molding

Special Characteristics

Flame retardant, Halogen-free, Heat stabilized or stable to heat

Delivery form

Pellets

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 - 0.07%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING

Melt temperature (Tmin - Tmax): 265 - 285 °C

Mold temperature: 80 - 100 °C