# AvaSpire® AV-848 GF30

PAEK-GF30 Syensqo

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|---|---|---|---|
| **ASTM Data** | | | |
| Melt Flow Index, MFI | **9** | g/10min | ASTM D 1238 |
| Temperature | **400** | °C | - |
| Load | **2.16** | kg | - |
| Mold Shrinkage, MD | **0.003** | mm/mm | ASTM D 955 |
| Mold Shrinkage, TD | **0.006** | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ASTM Data** | | | |
| Tensile Modulus | **10600** | MPa | ASTM D 638 |
| Tensile Strength | **168** | MPa | ASTM D 638 |
| Elongation at Break | **2.3** | % | ASTM D 638 |
| Compressive Strength | **139** | MPa | ASTM D 695 |
| Flexural Modulus | **9900** | MPa | ASTM D 790 |
| Flexural Strength | **239** | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | **69** | J/m | ASTM D 256 |
| Izod Impact unnotched, 1/8 in | **960** | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ASTM Data** | | | |
| Melting Temperature | **340** | °C | ASTM D 3418 |
| Glass Transition Temperature | **158** | °C | ASTM E 1356 |

| Electrical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ASTM Data** | | | |
| Dielectric Strength, Short Time | **18** | kV/mm | ASTM D 149 |
| Dissipation Factor, 60 Hz | **0.002** | - | ASTM D 150 |
| Dissipation Factor, 1 MHz | **0.006** | - | ASTM D 150 |
| Dielectric Constant, 60 Hz | **3.74** | - | ASTM D 150 |
| Dielectric Constant, 1 MHz | **3.69** | - | ASTM D 150 |
| Surface Resistivity | **>1E15** | Ohm | ASTM D 257 |
| Volume Resistivity | **>1E15** | Ohm*cm | ASTM D 257 |

| Other properties | Value | Unit | Test Standard |
|---|---|---|---|
| Water Absorption, 24hr | **0.1** | % | ASTM D 570 |
| Density | **1530** | kg/m³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|---|---|---|
| Pre-drying - Temperature | **149** | °C | - |
| Pre-drying - Time | **4** | h | - |
| Melt temperature | **382 - 404** | °C | - |
| Mold temperature | **166 - 193** | °C | - |
| Zone 1 | **366** | °C | - |
| Zone 2 | **371** | °C | - |
| Zone 3 | **377** | °C | - |
| Nozzle temperature | **382** | °C | - |

## Characteristics

**Processing**

Injection Molding, Profile Extrusion

**Delivery form**

Pellets, Natural Color

**Features**

Fatigue Resistance

**Chemical Resistance**

General Chemical Resistance

**Special Characteristics**
Flame retardant, Heat stabilized or stable to heat

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