# AKROMID® A3 GF 50 HU black (6303)

PA66-GF50 Akro-Plastic GmbH

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

| Mechanical properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Tensile Modulus | **18000 / 12700** | MPa | ISO 527 |
| Stress at break | **255 / 180** | MPa | ISO 527 |
| Strain at break | **2.8 / 3.5** | % | ISO 527 |
| Charpy impact strength, +23°C | **105 / -** | kJ/m² | ISO 179/1eU |
| Charpy notched impact strength, +23°C | **20 / -** | kJ/m² | ISO 179/1eA |

| Thermal properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Melting temperature, 10°C/min | **262 / *** | °C | ISO 11357-1/-3 |
| Temp. of deflection under load, 1.80 MPa | **260 / *** | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | **260 / *** | °C | ISO 75-1/-2 |
| Coeff. of linear therm. expansion, parallel | **14 / *** | E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal | **125 / *** | E-6/K | ISO 11359-1/-2 |
| Burning behav. at 1.5 mm nom. thickn. | **HB / *** | class | IEC 60695-11-10 |
| Thickness tested | **1.6 / *** | mm | - |
| Yellow Card available | **yes / *** | - | - |
| Burning behav. at thickness h | **HB / *** | class | IEC 60695-11-10 |
| Thickness tested | **0.4 / *** | mm | - |
| Yellow Card available | **yes / *** | - | - |
| Glow Wire Flammability Index (GWFI) | **700** | °C | IEC 60695-2-12 |
| GWFI - thickness tested (1) | **0.8** | mm | - |
| Glow Wire Flammability Index (GWFI) | **700** | °C | IEC 60695-2-12 |
| GWFI - thickness tested (2) | **1.6** | mm | - |
| Glow Wire Flammability Index (GWFI) | **700** | °C | IEC 60695-2-12 |
| GWFI - thickness tested (3) | **3.2** | mm | - |

| Other properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| Density | **1560 / -** | kg/m³ | ISO 1183 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|---|---|---|
| Melt temperature | **320** | °C | - |
| Mold temperature | **100** | °C | - |
| Injection pressure | **75** | MPa | - |

## Characteristics

**Processing**
Injection Molding

**Applications**
Automotive

**Delivery form**
Black

**Regional Availability**
Europe, Asia Pacific

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