

AKROMID® A3 1 S3 black (1139)

PA66

Akro-Plastic GmbH

| Processing/Physical Characteristics | dry / cond | Unit | Test Standard |
|--|-------------------|-------------------|----------------------|
| ISO Data | | | |
| Molding shrinkage, parallel | 1.4 / * | % | ISO 294-4, 2577 |
| Molding shrinkage, normal | 1.6 / * | % | ISO 294-4, 2577 |
| Mechanical properties | | | |
| ISO Data | | | |
| Tensile Modulus | 2700 / 1300 | MPa | ISO 527 |
| Yield stress | 63 / 45 | MPa | ISO 527 |
| Yield strain | 5.6 / - | % | ISO 527 |
| Flexural modulus, 23°C | 2500 / - | MPa | ISO 178 |
| Flexural strength | 90 / - | MPa | ISO 178 |
| Charpy impact strength, +23°C | N / N | kJ/m ² | ISO 179/1eU |
| Charpy impact strength, -30°C | N / N | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength, +23°C | 17 / 95 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength, -30°C | 10 / 13 | kJ/m ² | ISO 179/1eA |
| Izod notched impact strength, +23°C | 15 / - | kJ/m ² | ISO 180/1A |
| Izod notched impact strength | 12 / - | kJ/m ² | ISO 180/1A |
| Temperature | -40 | °C | - |
| Shore D hardness | 75 / - | - | ISO 7619-1 |
| Thermal properties | | | |
| ISO Data | | | |
| Melting temperature, 10°C/min | 262 / * | °C | ISO 11357-1/-3 |
| Temp. of deflection under load, 1.80 MPa | 70 / * | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 213 / * | °C | ISO 75-1/-2 |
| Coeff. of linear therm. expansion, parallel | 87 / * | E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal | 87 / * | 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 | - |
| Glow Wire Flammability Index (GWFI) | 650 | °C | IEC 60695-2-12 |
| GWFI - thickness tested (1) | 1.6 | mm | - |
| Glow Wire Ignition Temperature (GWIT) | 675 | °C | IEC 60695-2-13 |
| GWIT - thickness tested (1) | 1.6 | mm | - |
| Electrical properties | | | |
| ISO Data | | | |
| Volume resistivity | 1E13 / - | Ohm*m | IEC 62631-3-1 |
| Comparative tracking index | 600 / - | - | IEC 60112 |
| Other properties | | | |
| Density | 1100 / - | kg/m ³ | ISO 1183 |
| Processing Recommendation Injection Molding | | | |
| Melt temperature | 320 | °C | - |
| Mold temperature | 100 | °C | - |
| Injection pressure | 75 | MPa | - |

Characteristics**Processing**

Injection Molding

Applications

Automotive, Electrical and Electronical

Delivery form

Black

Regional Availability

Europe, Asia Pacific

Special Characteristics

High impact or impact modified, Heat stabilized or stable to heat