

## AKROMID®

### A28 GF 35 6 black (7278)

PA66 GF35

AKROMID® A28 GF 35 6 black (7278) is a 35% glass fiber reinforced, easy-flowing, inorganically highly heat-stabilized polyamide 6.6. The material is characterized by easy processability due to its very good flowability. Its high rigidity and strength make it the material of choice for technical components in mechanical engineering and the automotive industry.

#### Features

laser markable

easy flow

#### Properties

Modulus

11.500 MPa

Strength

210 MPa

Impact

85 kJ/m<sup>2</sup>

## Mechanical Properties

### Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

11500 MPa

1 mm/min | conditioned

8300 MPa

### Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

210 MPa

5 mm/min | conditioned

140 MPa

### Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

3 %

5 mm/min | conditioned

5 %

### Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

85 kJ/m<sup>2</sup>

23°C | conditioned

95 kJ/m<sup>2</sup>

### Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

15 kJ/m<sup>2</sup>

23°C | conditioned

20 kJ/m<sup>2</sup>

## Thermal Properties

### Melting temperature

ISO 11357-3

DSC, 10K/min

262 °C

## Flammability

Burning rate (<100 mm/min)

FMVSS 302

> 1 mm Thickness

+

## General Properties

Density

ISO 1183

23°C

1,4 g/cm<sup>3</sup>

Humidity absorption

ISO 1110

70°C, 62% r.H.

1,8 - 2,0 %

Molding shrinkage

ISO 294-4

flow

0,1 - 0,3 %

transverse

0,65 - 0,85 %

## Processing

The values mentioned are recommendations. We only recommend desiccant / dry air dryers or vacuum dryers. Too long a drying time and the resulting residual moisture content below the lower limit can lead to filling problems and surface defects. The specified drying time refers to closed and undamaged bagged material. When processing from previously opened bags or from octabins with polyolefin inliners, a longer drying time may be necessary. It is recommended to check the residual moisture content after the drying process.



|          |  |                |
|----------|--|----------------|
| <b>D</b> | Drying time  | 0 - 4 h        |
|          | Drying temperature ( $\tau \leq -30^{\circ}\text{C}$ ) | 80 °C          |
|          | Processing moisture                                    | 0,02 - 0,1 %   |
| <b>1</b> | Feed section   | 60 - 80 °C     |
| <b>2</b> | Temperature Zone 1 - Zone 4                            | 260 - 300 °C   |
| <b>3</b> | Nozzle temperature                                     | 270 - 310 °C   |
| <b>4</b> | Melt temperature                                       | 280 - 300 °C   |
| <b>5</b> | Mold temperature                                       | 80 - 100 °C    |
| <b>→</b> | Holding pressure, spec.                                | 300 - 800 bar  |
| <b>←</b> | Back pressure, spec.                                   | 50 - 150 bar   |
|          | Injection speed  | medium to high |
|          | Screw speed  | 8 - 15 m/min   |

## Diagrams

