

AKROMID®

A3 5 S3 15 black (1434)

PA66-I

AKROMID® A3 5 S3 15 black 950058 (1434) is an unreinforced, impact modified Polyamide 6.6. It is characterised by a medium dry impact strength. Furthermore, the material is high heat stabilised and therefore perfectly suitable for connecting and fixing systems which are used at elevated temperatures in the automotive and electro industry.

Features

heat stabilised 160

impact modified

Properties

Modulus

2.500 MPa

Strength

65 MPa

Impact

180 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

2500 MPa

1 mm/min | conditioned

1200 MPa

Tensile stress at yield

ISO 527-2

50 mm/min | d.a.m.

65 MPa

50 mm/min | conditioned

45 MPa

Tensile strain at yield

ISO 527-2

50 mm/min | d.a.m.

7 %

50 mm/min | conditioned

24 %

Tensile strain at break

ISO 527-2

50 mm/min | d.a.m.

30 %

50 mm/min | conditioned

> 100 %

Flexural modulus

ISO 178

2 mm/min | d.a.m.

2500 MPa

Flexural strength

ISO 178

2 mm/min | d.a.m.

95 MPa

Flexural strain at break

ISO 178

2 mm/min | d.a.m.

7,5 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

no break

23°C | conditioned

no break

-30°C | d.a.m.

no break

-30°C | conditioned

no break

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

15 kJ/m²

-30°C | d.a.m.

13 kJ/m²

Thermal Properties

Melting temperature

ISO 11357-3

DSC, 10K/min

262 °C

Flammability

Flammability

UL 94

1,6 mm Wall thickness

HB Class

Burning rate (<100 mm/min)

FMVSS 302

> 1 mm Thickness

+

General Properties

Density

ISO 1183

23°C

1,11 g/cm³

Humidity absorption

ISO 1110

70°C, 62% r.H.

1,9 %

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.



D	Drying time	2 - 4 h
	Drying temperature ($\tau \leq -30^{\circ}\text{C}$)	80 °C
	Processing moisture	0,02 - 0,1 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	260 - 300 °C
3	Nozzle temperature	270 - 310 °C
4	Melt temperature	270 - 300 °C
5	Mold temperature	40 - 90 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min

Diagrams

