

AKROMID® PRELIMINARY

A3 S1 white (8180)

PA66-I

AKROMID® A3 S1 white (8180) is an UL94 HB listed unreinforced, impact modified Polyamide 6.6. colored in white similar to RAL 9016. The material is characterised by a very high impact strength even at low temperatures and is therefore perfectly suitable for connecting and fixing systems which are used in the automotive and electro industry and that are exposed to high loading speeds.

Features

impact modified

Regulatory



Properties

Modulus

1.600 MPa

Strength

42 MPa

Impact

180 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

1600 MPa

Tensile stress at yield

ISO 527-2

50 mm/min | d.a.m.

42 MPa

Tensile strain at break

ISO 527-2

50 mm/min | d.a.m.

> 70 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

no break

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

90 kJ/m²

Thermal Properties

Melting temperature

ISO 11357-3

DSC, 10K/min

262 °C

Flammability

Flammability

UL 94

UL

0,8 mm Wall thickness

HB Class

General Properties

Humidity absorption

ISO 1110

70°C, 62% r.H.

1,7 - 2,2 %

Molding shrinkage

ISO 294-4

flow

1,3 - 1,5 %

transverse

1,5 - 1,7 %

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