

# AKROMID® PRELIMINARY

## B3 1 S3 natural (8013)

PA6-I

AKROMID® B3 1 S3 natural (8013) is an unreinforced, impact modified Polyamide 6. It is characterised by a medium dry impact strength. Furthermore, the material is 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 130   impact modified

### Properties

Modulus

2.200 MPa

Strength

55 MPa

Impact

180 kJ/m<sup>2</sup>

## Mechanical Properties

### Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

2200 MPa

### Tensile stress at yield

ISO 527-2

50 mm/min | d.a.m.

55 MPa

### Tensile strain at break

ISO 527-2

50 mm/min | d.a.m.

60 %

### 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.

18 kJ/m<sup>2</sup>

23°C | conditioned

100 kJ/m<sup>2</sup>

## Thermal Properties

### Melting temperature

ISO 11357-3

DSC, 10K/min

220 °C

## Flammability

<b>Flammability</b> UL 94	1,6 mm Wall thickness	<b>HB Class</b>
<b>Burning rate (&lt;100 mm/min)</b> FMVSS 302	> 1 mm Thickness	+

## General Properties

<b>Density</b> ISO 1183	23°C	<b>1,1 g/cm<sup>3</sup></b>
<b>Molding shrinkage</b> ISO 294-4	flow	<b>1 - 1,2 %</b>
	transverse	<b>1,1 - 1,3 %</b>

## 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	220 - 270 °C
<b>(3)</b> Nozzle temperature	230 - 300 °C
<b>(4)</b> Melt temperature	240 - 270 °C
<b>(5)</b> Mold temperature	40 - 80 °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