

# AKROMID® PRELIMINARY

## NEXT U28 GF 35 1 natural (8642)

PA11 GF35

AKROMID® NEXT U28 GF 35 1 natural (8642) is a Polyamide 11 reinforced with 35% glass fibre. It is characterised by a high stiffness and strength.

### Features

reduced density   reduced moisture   3D printing / additive manufacturing   Sports & leisure   lightweight construction

### Properties

Modulus

8.200 MPa

Strength

130 MPa

Impact

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

## Sustainability

Biobased carbon content 90 %

## Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

8200 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

130 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

5 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

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

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

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

## Thermal Properties

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**Melting temperature**

ISO 11357-3

DSC, 10K/min

**189 °C**

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**Flammability**

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**Flammability**

UL 94

1,6 mm Wall thickness

**HB Class**

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## 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	240 - 300 °C
<b>3</b>	Nozzle temperature	230 - 300 °C
<b>4</b>	Melt temperature	240 - 290 °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