

AKROMID®

S3 8 natural (4881)

PA610

AKROMID® S3 8 natural (4881) is an unreinforced polyamide 6.10 with lower moisture absorption, high chemical resistance and light inherent color, modified for the respective application.

Features

reduced moisture

Regulatory



Properties

Modulus

2.300 MPa

Strength

65 MPa

Impact

180 kJ/m²

Sustainability

Biobased carbon content 56 %

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

2300 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

50 MPa

Tensile strain at break

ISO 527-2

50 mm/min | d.a.m.

> 75 %

50 mm/min | conditioned

> 75 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

no break

23°C | conditioned

no break

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

4 kJ/m²

23°C | conditioned

12 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A	1,8 MPa	55 °C
ISO 75		

Melting temperature	DSC, 10K/min	220 °C
ISO 11357-3		

General Properties

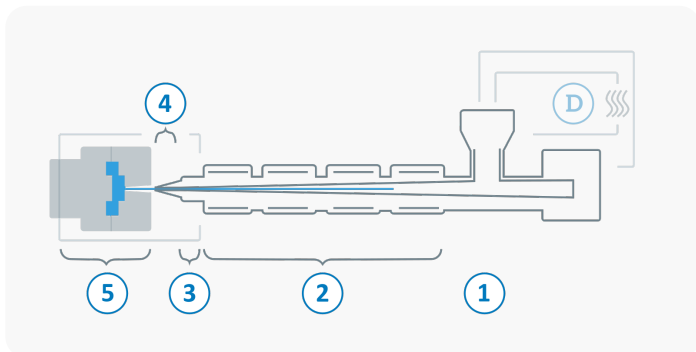
Density	23°C	1,08 g/cm³
ISO 1183		

Humidity absorption	70°C, 62% r.H.	1,7 %
ISO 1110		

Molding shrinkage	flow	1,6 %
ISO 294-4	transverse	1,8 %

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	0 - 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	230 - 270 °C
3	Nozzle temperature	230 - 280 °C
4	Melt temperature	250 - 270 °C
5	Mold temperature	40 - 80 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min