

AKROMID®

C3 5 S3 black (4605)

PA66+PA6

AKROMID® C3 5 S3 black (4605) is an unreinforced, high temperature stabilised, dry impact resistant polyamide 6.6/6-Blend.

Features

heat stabilised 130

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

900 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 break

ISO 527-2

50 mm/min | d.a.m.

> 25 %

50 mm/min | conditioned

> 250 %

Flexural modulus

ISO 178

2 mm/min | d.a.m.

2100 MPa

Flexural strength

ISO 178

2 mm/min | d.a.m.

85 MPa

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

no break

-30°C | d.a.m.

no break

Charpy notched impact strength

ISO 179-1/1eA

23°C | d.a.m.

7 kJ/m²

23°C | conditioned

23 kJ/m²

-30°C | d.a.m.

5 kJ/m²

Thermal Properties

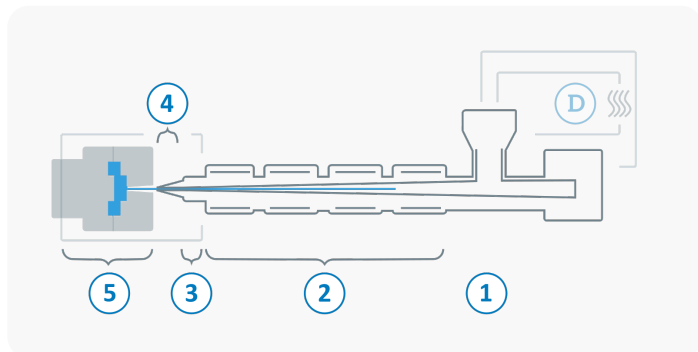
Temperature of deflection under load HDT/A ISO 75	1,8 MPa	57 °C
Temperature of deflection under load HDT/B ISO 75	0,45 MPa	160 °C
Melting temperature ISO 11357-3	DSC, 10K/min	260 °C

General Properties

Density ISO 1183	23°C	1,12 g/cm³
Humidity absorption ISO 1110	70°C, 62% r.H.	2,1 %
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	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	260 - 300 °C
(3) Nozzle temperature	270 - 300 °C
(4) Melt temperature	270 - 300 °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