+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

AKROMID®
A28 LGF 50 9 black (7705)

PA66 LGF50

AKROMID® A28 LGF 50 9 black (7705) is an easy flowing PA6.6 with 50% long glass fibre reinforcement which leads to an extraordinary high stiffness and strength even at high temperature. The material distinguishes itself due to its isotropic mechanical properties as well as increased creep resistance and higher heat deflection temperature. The excellent fatigue performance, high energy absorption in the event of a crash and low shrinkage make it the product of your choice for technical parts e.g. oil pan.

Features

easy flow | process improved

Properties

Modulus	Strength	Impact
18.000 MPa	**270** MPa	**95** kJ/m²

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min | d.a.m. 1 mm/min | conditioned	**18000 MPa** **14200 MPa**
Tensile stress at break ISO 527-2	5 mm/min | d.a.m. 5 mm/min | conditioned	**270 MPa** **210 MPa**
Tensile strain at break ISO 527-2	5 mm/min | d.a.m. 5 mm/min | conditioned	**2 %** **2,2 %**
Charpy impact strength ISO 179-1/1eU	23°C | d.a.m. 23°C | conditioned	**95 kJ/m²** **100 kJ/m²**
Charpy notched impact strength ISO 179-1/1eA	23°C | d.a.m. 23°C | conditioned	**45 kJ/m²** **45 kJ/m²**
Izod impact strength ISO 180/1A	23°C | d.a.m.	**90 kJ/m²**

Thermal Properties

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	**260 °C**
Glass transition temperature ISO 11357-2	DSC, 2nd heating	**60 °C**
Melting temperature ISO 11357-3	DSC, 10K/min	**262 °C**
Coefficient of linear thermal expansion ISO 11359-1/2	23°C to 80°C | parallel 23°C to 80°C | transverse	**0,25 10^{-4}/K** **0,75 10^{-4}/K**
Temperature index for 50% loss of tensile strength IEC 60216	5.000 h	**150 °C**

Flammability

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

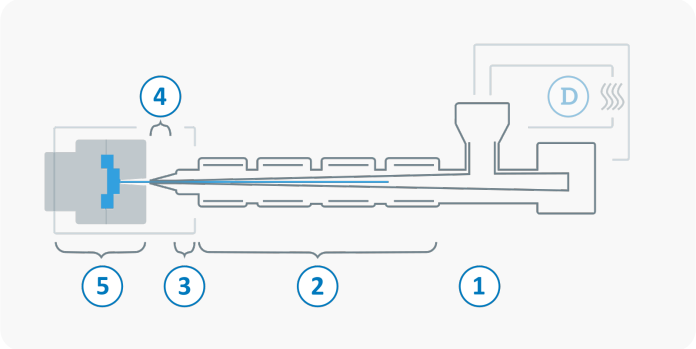
General Properties

Density ISO 1183	23°C	**1,57 g/cm^3**
Humidity absorption ISO 1110	70°C, 62% r.H.	**1,3 - 1,5 %**
Molding shrinkage ISO 294-4	flow transverse	**0,3 - 0,5 %** **0,6 - 0,8 %**

+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

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 (τ <= -30°C)	80 °C
	Processing moisture	0,02 - 0,1 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	270 - 300 °C
3	Nozzle temperature	280 - 300 °C
4	Melt temperature	280 - 300 °C
5	Mold temperature	80 - 100 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	10 - 30 bar
	Injection speed	slow to medium
	Screw speed	5 - 15 m/min

+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

Diagrams