

Compound No.: 8438

# AKROMID® B28 GF 30 S3 black (8438)

PA6-I GF30

AKROMID® B28 GF 30 S3 black (8438) is a 30% glass fiber reinforced, impact modified Polyamide 6. It is characterised by high stiffness and strength as well as a higher impact strength compared to a standard PA 6 GF 30. The material is therefore perfectly suitable for industrial applications and for housings and covers in the automotive industry.

#### Features

impact modified

#### **Properties**

Modulus	Strength	Impact
9.000 MPa	<b>155</b> MPa	<b>77</b> kJ/m²

## **Mechanical Properties**

Tensile modulus ISO 527-2	1 mm/min   d.a.m.	9000 MPa
Tensile stress at break ISO 527-2	5 mm/min   d.a.m.	155 MPa
Tensile strain at break ISO 527-2	5 mm/min   d.a.m.	3,5 %
Charpy impact strength ISO 179-1/1eU	23°C   d.a.m. -30°C   d.a.m.	77 kJ/m² 75 kJ/m²
Charpy notched impact strength ISO 179-1/1eA	23°C   d.a.m. -30°C   d.a.m.	15 kJ/m² 9 kJ/m²

## **Thermal Properties**

Melting temperature	DSC. 10K/min	220 °C
ICO 113F7 3	<i>23</i> c, 101011111	220 0



Compound No.: 8438

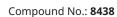
Temperature index for 50% loss of tensile strength IEC 60216	20.000 h	115 °C

# **Flammability**

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

# **General Properties**

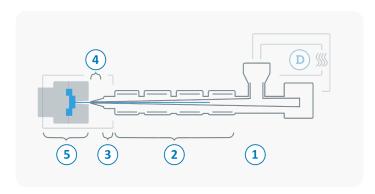
Density ISO 1183	23°C	1,33 g/cm³
Humidity absorption ISO 1110	70°C, 62% r.H.	1,3 - 1,5 %
Molding shrinkage ISO 294-4	flow transverse	0,1 - 0,3 % 0,5 - 0,7 %





#### **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 (τ <= -30°C)	80 °C
	Processing moisture	0,02 - 0,1 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	240 - 290 °C
3	Nozzle temperature	260 - 300 °C
4	Melt temperature	270 - 290 °C
5	Mold temperature	80 - 100 °C
$\ominus$	Holding pressure, spec.	300 - 800 bar
	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min