

Compound No.: 8160

# AKROMID® PRELIMINARY A3 GF 30 6 ECO black (8160)

PA6.6 GF30

AKROMID® A3 GF 30 6 ECO black (8160) is a 30% glass fibre-reinforced, inorganically heat-stabilised polyamide 6.6. The material is suitable for technical components in mechanical engineering and the automotive industry with demands for high stiffness and strength. The formulations of the sustainable ECO products are partly based on regenerated post-industrial feedstock (at least 30 weight-% by recipe) and thus contribute to reducing the consumption of valuable raw materials. This type is laser-markable.

# heat stabilised 160 laser markable recycled content Properties Modulus Strength Impact 9.000 MPa 150 MPa 50 kJ/m²

### **Sustainability**

Recycled content		30 %
Mechanical Properties		
Tensile modulus	1 mm/min   d.a.m.	9000 MPa
ISO 527-2	1 mm/min   conditioned	6300 MPa
Tensile stress at break	5 mm/min   d.a.m.	150 MPa
ISO 527-2	5 mm/min   conditioned	100 MPa
Tensile strain at break	5 mm/min   d.a.m.	2,5 %

Tensile strain at break	5 mm/min   d.a.m.	2,5 %
ISO 527-2	5 mm/min   conditioned	5 %
Flexural modulus ISO 178	2 mm/min   d.a.m.	7500 MPa
Charpy impact strength	23°C   d.a.m.	50 kJ/m²
ISO 179-1/1eU	23°C   conditioned	65 kl/m <sup>2</sup>



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Charpy notched impact strength	23°C   d.a.m.	7 kJ/m²
ISO 179-1/1eA	23°C   conditioned	11 kJ/m²

# **Thermal Properties**

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	255 °C
Temperature of deflection under load HDT/B	0,45 MPa	260 °C
Melting temperature ISO 11357-3	DSC, 10K/min	262 °C

## Flammability

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

## **General Properties**

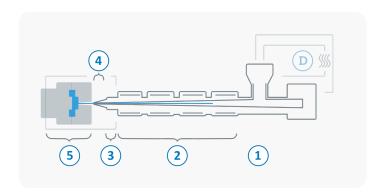
Density ISO 1183	23°C	1,36 g/cm³
Molding shrinkage ISO 294-4	flow transverse	0,1 - 0,3 % 0,5 - 0,7 %





### **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	260 - 300 °C
3	Nozzle temperature	270 - 310 °C
4	Melt temperature	280 - 300 °C
5	Mold temperature	80 - 100 °C
$\ni$	Holding pressure, spec.	300 - 800 bar
	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min