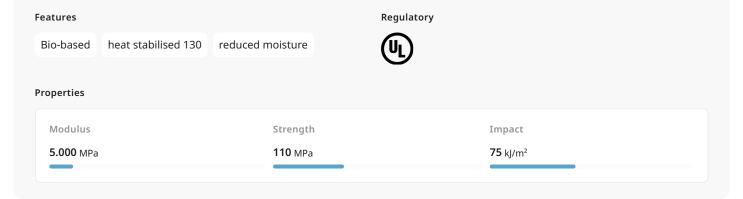


Compound No.: 8822

# AKROMID® UL PRELIMINARY NEXT S3 GF 15 1 HU natural (8822)

PA6.10 GF15

AKROMID® NEXT S3 GF 15 1 HU natural (8822) is a partially biobased and heat-stabilised PA6.10. With 15% glass fibre reinforcement, the material is suitable for household and industrial applications with medium demands on strength and stiffness. This sustainable and UL listed grade is characterised by its low moisture absorption and high chemical resistance compared to classic PA6 and PA 6.



#### **Sustainability**

Biobased carbon content	61 %

### **Mechanical Properties**

Tensile modulus	1 mm/min   d.a.m.	5000 MPa
ISO 527-2	1 mm/min   conditioned	3500 MPa
Tensile stress at break	5 mm/min   d.a.m.	110 MPa
ISO 527-2	5 mm/min   conditioned	75 MPa
Tensile strain at break	5 mm/min   d.a.m.	5,5 %
ISO 527-2	5 mm/min   conditioned	15 %
Charpy impact strength	23°C   d.a.m.	75 kJ/m²
ISO 179-1/1eU	23°C   conditioned	80 kJ/m²
	-30°C   d.a.m.	60 kJ/m²



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Charpy notched impact strength	23°C   d.a.m.	5 kJ/m²
ISO 179-1/1eA	-30°C   d.a.m.	5 kJ/m²

# **Thermal Properties**

Temperature of deflection under load HDT/A ISO 75	1,8 MPa	190 °C
Temperature of deflection under load HDT/B	0,45 MPa	220 °C
Temperature of deflection under load HDT/C	8 MPa	75 °C
Melting temperature ISO 11357-3	DSC, 10K/min	220 °C

# **Flammability**

Flammability UL 94	UL 0,8 mm Wall thickness UL 3,2 mm Wall thickness	HB Class HB Class
Burning rate (<100 mm/min) FMVSS 302	> 1 mm Thickness	+

## **General Properties**

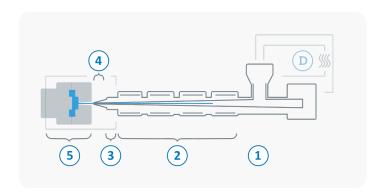
Density ISO 1183	23°C	1,18 g/cm³
Humidity absorption ISO 1110	70°C, 62% r.H.	1,4 - 1,6 %
Molding shrinkage ISO 294-4	flow transverse	0,5 - 0,7 % 1,0 - 1,2 %





#### **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	240 - 300 °C
4	Melt temperature	270 - 290 °C
5	Mold temperature	80 - 100 °C
$\ominus$	Holding pressure, spec.	300 - 800 bar
$\bigcirc$	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min