

Compound No.: 8197

AKROMID® PRELIMINARY T9 GF 15 FR LA black (8197)

PPA GF15 FR(40)

AKROMID® T9 GF 15 FR LA black (8197) is a flame retardant, 15% glass fibre reinforced polyphthalamide. The product is based on PA9T and has a significantly lower moisture absorption compared to conventional PA6T grades. As a result, the glass transition area is much more constant and even in the conditioned state, the product impresses with its medium strength and stiffness. Due to its high temperature and media resistance, this material is suitable for technical components that come into contact with chemicals. The flame retardant system is free of red phosphorus and halogens. This type is laser-markable.

Features flame retardant laser markable Properties Modulus Strength Impact 6.000 MPa 107 MPa 48 kJ/m²

Mechanical Properties

Tensile modulus	1 mm/min d.a.m.	6000 MPa
ISO 527-2	1 mm/min conditioned	6000 MPa
Tensile stress at break	5 mm/min d.a.m.	107 MPa
ISO 527-2	5 mm/min conditioned	101 MPa
Tensile strain at break	5 mm/min d.a.m.	3,2 %
ISO 527-2	5 mm/min conditioned	2,8 %
Charpy impact strength	23°C d.a.m.	48 kJ/m²
ISO 179-1/1eU	23°C conditioned	40 kJ/m²
Charpy notched impact strength	23°C d.a.m.	6 kJ/m²
ISO 179-1/1eA	23°C conditioned	6 kJ/m²

Thermal Properties



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Melting temperature	DSC. 10K/min	305 °C
ISO 11357-3	550, 101011111	303 C

Flammability

Flammability	0,8 mm Wall thickness	V-0 Class
UL 94	1,6 mm Wall thickness	V-0 Class
	3,2 mm Wall thickness	V-0 Class
GWFI	0.8 mm Wall thickness	960 °C
IEC 60695-2-12	0,0 mm wan theriess	300 €
Burning rate (<100 mm/min)	> 1 mm Thickness	+
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General Properties

Density ISO 1183	23°C	1,26 g/cm³
Molding shrinkage	flow	0.2 - 0.4 %
ISO 294-4	transverse	0.6 - 0.8 %

Electrical Properties

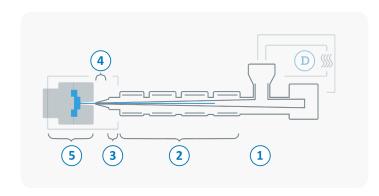
Volume resistivity IEC 62631-3-1	d.a.m. conditioned	$10^{14} \Omega$ x cm $10^{14} \Omega$ x cm
Surface resistivity IEC 62631-3-2	d.a.m. conditioned	10 ¹³ Ω 10 ¹² Ω
Comparative tracking index IEC 60112	Test liquid A	600 V



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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)	120 °C
	Processing moisture	<0,05 %
1	Feed section	60 - 90 °C
2	Temperature Zone 1 - Zone 4	305 - 325 °C
3	Nozzle temperature	310 - 340 °C
4	Melt temperature	310 - 325 °C
5	Mold temperature	>135 °C
\bigcirc	Holding pressure, spec.	300 - 800 bar
	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min