

Compound No.: 8864

AKROMID® PRELIMINARY T9 ICF 20 1 black (8864)

PPA CF 20

AKROMID® T9 ICF 20 1 black (8864) is a with 20% recycled carbon fibre reinforced polyphthalamide with high stiffness and strength, as well as high chemical resistance. The compound is based on PA9T and has lower moisture uptake than conventional PA6T variants. This leads to a significantly higher consistency of the glass transition temperature and higher strength at elevated temperatures especially in conditioned state.

heat stabilised 130 recycled content reduced moisture metal substitution Sports & leisure Properties Modulus Strength Impact 14.500 MPa 195 MPa 40 kJ/m²

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min d.a.m.	14500 MPa
Tensile stress at break ISO 527-2	5 mm/min d.a.m.	195 MPa
Tensile strain at break ISO 527-2	5 mm/min d.a.m.	2,2 %
Charpy impact strength ISO 179-1/1eU	23°C d.a.m.	40 kJ/m²
Charpy notched impact strength ISO 179-1/1eA	23°C d.a.m.	5 kJ/m²

Thermal Properties

Temperature of deflection under load HDT/A	1.8 MPa	270 °C
ISO 75	1,0 1411 a	270 C



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Melting temperature	DSC. 10K/min	300 °C
ISO 11357-3	55,	223 C

Flammability

General Properties

Density ISO 1183	23°C	1,22 g/cm³
Humidity absorption ISO 1110	70°C, 62% r.H.	0,1 - 0,3 %
Molding shrinkage	flow	0,1 - 0,3 %
ISO 294-4	transverse	0,5 - 0,7 %

Electrical Properties

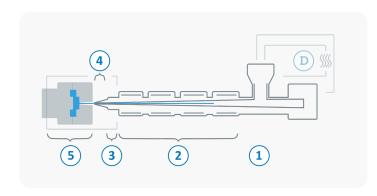
Surface resistivity	d.a.m.	$10^2 \Omega$
IEC 62631-3-2	d.d.m.	10 12





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	310 - 340 °C
3	Nozzle temperature	320 - 350 °C
4	Melt temperature	320 - 340 °C
5	Mold temperature	>150 °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