

AKROMID® A3 GF 50 1 EN black (5737)

PA66-GF50

Akro-Plastic GmbH

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.6 / *	%	ISO 294-4, 2577

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	16700 / 12600	MPa	ISO 527
Stress at break	250 / 180	MPa	ISO 527
Strain at break	2.5 / 3.5	%	ISO 527
Flexural modulus, 23°C	15200 / 13600	MPa	ISO 178
Flexural strength	380 / 310	MPa	ISO 178
Charpy impact strength, +23°C	105 / 110	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	105 / -	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	19 / 23	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	16 / -	kJ/m ²	ISO 179/1eA
Ball indentation hardness	290 / -	MPa	ISO 2039-1

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	262 / *	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	260 / *	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	260 / *	°C	ISO 75-1/-2
Temp. of deflection under load, 8.00 MPa	235 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	17 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	88 / *	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.6 / *	mm	-
Glow Wire Flammability Index (GWFI)	650	°C	IEC 60695-2-12
GWFI - thickness tested (1)	1.6	mm	-

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
Volume resistivity	1E11 / 1E8	Ohm*m	IEC 62631-3-1
Surface resistivity	* / 1E10	Ohm	IEC 62631-3-2
Comparative tracking index	600 / -	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	4.3 / *	%	Sim. to ISO 62
Density	1570 / -	kg/m ³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Melt temperature	320	°C	-
Mold temperature	100	°C	-
Injection pressure	75	MPa	-

Characteristics**Processing**

Injection Molding

Delivery form

Black

Special Characteristics

Heat stabilized or stable to heat

Applications

Automotive

Regional Availability

Europe, Asia Pacific