

AKROMID® B3 GF 40-1 black (8178)

PA6-GF40

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	12800 / 8200	MPa	ISO 527
Stress at break	205 / 130	MPa	ISO 527
Strain at break	3 / 5	%	ISO 527
Flexural modulus, 23°C	10300 / -	MPa	ISO 178
Flexural strength	300 / -	MPa	ISO 178
Charpy impact strength, +23°C	100 / 110	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	90 / -	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	17 / 23	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	14 / -	kJ/m ²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	215 / *	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	220 / *	°C	ISO 75-1/-2
Temp. of deflection under load, 8.00 MPa	170 / *	°C	ISO 75-1/-2
Burning behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	-
Yellow Card available	yes / *	-	-
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	5.7 / *	%	Sim. to ISO 62
Density	1460 / -	kg/m ³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Melt temperature	270	°C	-
Mold temperature	80	°C	-
Injection pressure	75	MPa	-

Characteristics

Processing
Injection Molding

Delivery form
Black

Special Characteristics
U.V. stabilized or stable to weather

Applications
Automotive

Regional Availability
Europe, Asia Pacific