AKROMID® A3 GF 50 black (2431)

PA66-GF50 Akro-Plastic GmbH

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	**0.3 / ***	%	ISO 294-4, 2577
Molding shrinkage, normal	**1.2 / ***	%	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/m²	ISO 179/1eU
Charpy impact strength, -30°C	**105 / -**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**19 / 23**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**16 / -**	kJ/m²	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/m³	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

Applications
Automotive

Delivery form
Black

Regional Availability
Europe, Asia Pacific