AKROMID ®

A3 S1 black 950089 (1071)

PA66-I

AKRO-PLASTIC GmbH
Member of the Feddersen Group

Industriegebiet Brohltal Ost
Im Stiefelfeld 1
D-56651 Niederzissen
Phone +49 2636/9742-0
Fax +49 2636/9742-31
info@akro-plastic.com
www.akro-plastic.com

Datasheet

Description:

AKROMID® A3 S1 black 950089 (1071) is an unreinforced, cold impact modified polyamide 6.6

Applications

Connectors and fixtures for the automotive electro and furniture industry, if high impact resistance at low temperatures is required.

Typical values	Test specification	Method	Unit	Value	
				d.a.m.	moist.*
Mechanical Properties					
Tensile modulus	1 mm/min	ISO 527-2	MPa	2000	900
Stress at yield	50 mm/min	ISO 527-2	MPa	50	40
Strain at yield	50 mm/min	ISO 527-2	%	4,8	
Strain at break	50 mm/min	ISO 527-2	%	> 50	> 100
Flexural modulus	2 mm/min	ISO 178	MPa	1950	
Charpy impact strength	23°C	ISO 179-1/1eU	kJ/m²	n.b.	n.b.
Charpy impact strength	-30°C	ISO 179-1/1eU	kJ/m²	n.b.	n.b.
Charpy impact strength	-40°C	ISO 179-1/1eU	kJ/m²	n.b.	
Charpy notched impact strength	23°C	ISO 179-1/1eA	kJ/m²	> 80	> 100
Charpy notched impact strength	-30°C	ISO 179-1/1eA	kJ/m²	35	35
Charpy notched impact strength	-40°C	ISO 179-1/1eA	kJ/m²	35	
Ball indentation hardness	358/30	ISO 2039-1	MPa	80	
Electrical Properties					
Volume resistivity		IEC 60093	Ohm x cm	1,0E+15	
Surface resistivity		b.o. IEC 60093	Ohm	1,0E+14	
Comparative tracking index	test solution A	IEC 60112		600	
Thermal Properties					
Melting temperature	DSC, 10K/min	DIN EN 11357-1	°C	262	
Temp. of deflection under load HDT/A	1,8 MPa	ISO 75	°C	70	
Temp. of deflection under load HDT/B	0,45 MPa	ISO 75	°C	152	
Flammability					
Wall thickness			mm	0,4	0,8	1,6	2,0	3,2
Flammability		UL 94	class			HB		
Burning rate (< 100 mm/min)	> 1 mm thickness	FMVSS 302		+				
General Properties					
Density	23°C	ISO 1183	g/cm³	1,07	
Humidity absorption	70°C, 62% r.h.	ISO 1110	%	2,0	
Processing					
Flowability	7 x 3,5 mm & **	AKRO	mm	770	
Molding shrinkage	flow	ISO 294-4	%	1,3 - 1,5	
Molding shrinkage	transverse	ISO 294-4	%	1,5 - 1,7	

b.o.: based on

n.b. = not broken

* = specimen acc. ISO 1110 stored

** = mould temperature: 100°C, melt temperature: 320°C, injection pressure: 750 bar

AKRO-PLASTIC GmbH
Commercial registered office: Niederzissen
Commercial Register: Koblenz HRB 12227
Managing Director: Andreas Stuber, Dirk Steinbrück
Chairman of the Supervisory Board: Dr. Matthias von Rönn

last update: 15.09.2017

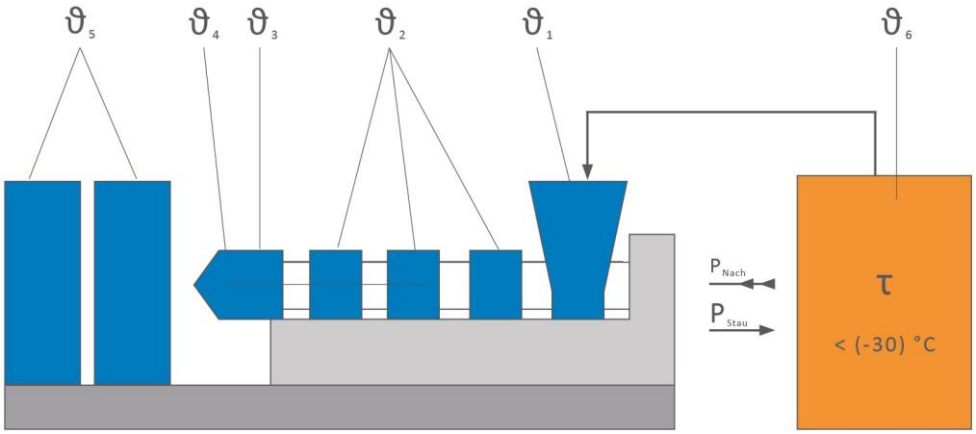
AKROMID ®

A3 S1 black 950089 (1071)
PA66-I

AKRO-PLASTIC GmbH
Member of the Feddersen Group

Continuation

Processing recommendations



ϑ_6	Drying time	h	0 - 4
ϑ_6	Drying temperature	°C	80
	Processing moisture	%	0,02 - 0,1
ϑ_1	Feed section	°C	60 - 80
ϑ_2	Section 1 - Section 4	°C	260 - 300
ϑ_3	Nozzle	°C	270 - 310
ϑ_4	Melt	°C	280 - 300
ϑ_5	Mould	°C	40 - 80
P_{Nach}	Holding pressure, spec.	bar	300 - 800
P_{Stau}	Back pressure, spez.	bar	50 - 150
	Injection speed		medium to high
	Screw speed	m/min	8 - 15

The listed values are recommendations. Higher values should be used for higher glass loadings.
We recommend only de-humidifying or vacuum dryers. Extensive drying can cause filling problems and surface defects.

AKRO-PLASTIC GmbH
Commercial registered office: Niederzissen
Commercial Register: Koblenz HRB 12227
Managing Director: Andreas Stuber, Dirk Steinbrück
Chairman of the Supervisory Board: Dr. Matthias von Rönn

last update: 15.09.2017