

Datasheet

Description:

AKROMID® A3 5 S3 15 black 950058 (1434) is a nonreinforced, high temperature stabilised, dry impact resistant polyamide 6.6.

Applications

Typical values	Test specification	Method	Unit	Value	
				d.a.m.	moist.*

Mechanical Properties

Tensile modulus	1 mm/min	ISO 527-2	MPa	2500	1200
Stress at yield	50 mm/min	ISO 527-2	MPa	65	45
Strain at yield	50 mm/min	ISO 527-2	%	7	24
Strain at break	50 mm/min	ISO 527-2	%	30	> 100
Flexural modulus	2 mm/min	ISO 178	MPa	2500	
Flexural strength	2 mm/min	ISO 178	MPa	95	
Flexural strain at break	2 mm/min	ISO 178	%	7,5	
Charpy impact strength	23°C	ISO 179-1/1eU	kJ/m ²	n.b.	n.b.
Charpy impact strength	-30°C	ISO 179-1/1eU	kJ/m ²	n.b.	n.b.
Charpy notched impact strength	23°C	ISO 179-1/1eA	kJ/m ²	15	
Charpy notched impact strength	-30°C	ISO 179-1/1eA	kJ/m ²	13	

Thermal Properties

Melting temperature	DSC, 10K/min	DIN EN 11357-1	°C	262
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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/cm ³	1,11
Humidity absorption	70°C, 62% r.h.	ISO 1110	%	1,9

Processing

Flowability	7 x 3,5 mm & **	AKRO	mm	800
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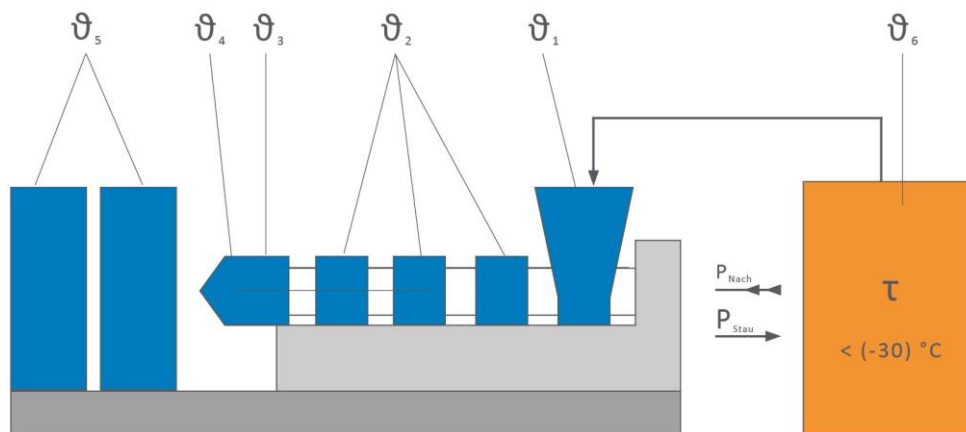
n.b. = not broken

* = specimen acc. ISO 1110 stored

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

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 - 310
ϑ_3	Nozzle	°C	270 - 310
ϑ_4	Melt	°C	280 - 310
ϑ_5	Mould	°C	80 - 100
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.