

#### 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 <sup>2</sup>	n.b.	n.b.
Charpy impact strength	-30°C	ISO 179-1/1eU	kJ/m <sup>2</sup>	n.b.	n.b.
Charpy notched impact strength	23°C	ISO 179-1/1eA	kJ/m <sup>2</sup>	15	
Charpy notched impact strength	-30°C	ISO 179-1/1eA	kJ/m <sup>2</sup>	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	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 <sup>3</sup>	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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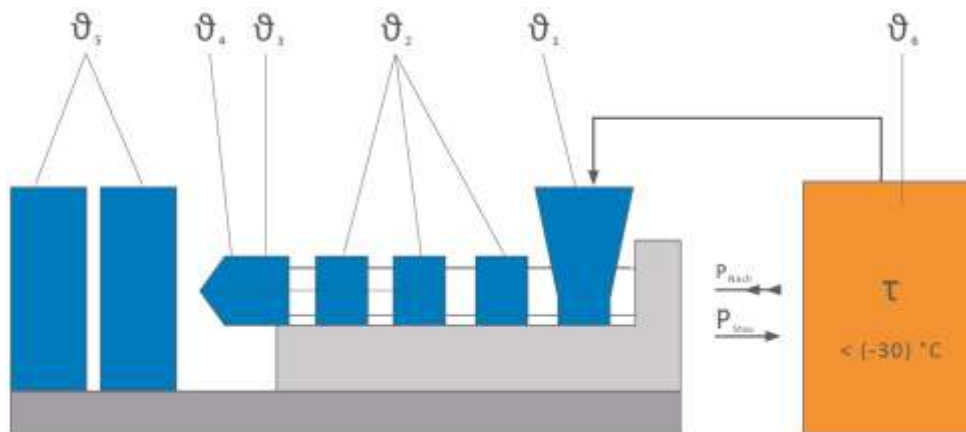
n.b. = not broken

\* = specimen acc. ISO 1110 stored

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

#### Continuation

#### Processing recommendations



$\vartheta_6$	Drying time	h	0 - 4
$\vartheta_6$	Drying temperature	°C	80
	Processing moisture	%	0,02 - 0,1
$\vartheta_1$	Feed section	°C	60 - 80
$\vartheta_2$	Section 1 - Section 4	°C	260 - 300
$\vartheta_3$	Nozzle	°C	270 - 310
$\vartheta_4$	Melt	°C	280 - 300
$\vartheta_5$	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.