



## AKROMID® A3 2 S1 white (5973)

PA66-I

AKROMID® A3 2 S1 white (5973) is an unreinforced, impact modified PA 6.6. The material is UV-stabilised and characterised by a very high cold impact strength. Therefore, it is perfectly suitable for connecting and fixing systems which are used in the automotive, electro and furniture industry where a very high impact strength even at low temperatures is required. The color is similar to RAL 9010.

Features					
UV-stabilised	impact modified				
Properties					
Modulus		Strength	Impact		
<b>1.700</b> MPa		<b>45</b> MPa	<b>180</b> kJ/m <sup>2</sup>		
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## **Mechanical Properties**

Tensile modulus ISO 527-2	1 mm/min   d.a.m.	1700 MPa
Tensile stress at yield ISO 527-2	50 mm/min   d.a.m.	45 MPa
<b>Tensile strain at yield</b> ISO 527-2	50 mm/min   d.a.m.	5 %
Tensile strain at break ISO 527-2	50 mm/min   d.a.m.	>= 50 %
Charpy impact strength ISO 179-1/1eU	23°C∣d.a.m. -30°C∣d.a.m.	no break no break
Charpy notched impact strength ISO 179-1/1eA	23°C   d.a.m.	> 80 kJ/m²
Ball indentation hardness ISO 2039-1	358N/30s   d.a.m.	80 MPa





## **Thermal Properties**

Melting temperature ISO 11357-3	DSC, 10K/min	262 °C
Flammability		
<b>Flammability</b> UL 94	1,6 mm Wall thickness	HB Class
Burning rate (<100 mm/min) FMVSS 302	> 1 mm Thickness	+
General Properties		
Density ISO 1183	23°C	1,07 g/cm <sup>3</sup>





## Processing

The values mentioned are recommendations. We only recommend desiccant / dry air dryers or vacuum dryers. Too long a drying time and the resulting residual moisture content below the lower limit can lead to filling problems and surface defects. The specified drying time refers to closed and undamaged bagged material. When processing from previously opened bags or from octabins with polyolefin inliners, a longer drying time may be necessary. It is recommended to check the residual moisture content after the drying process.



D	Drying time	2 - 4 h
	Drying temperature (τ <= -30°C)	80 °C
	Processing moisture	0,02 - 0,1 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	260 - 300 °C
3	Nozzle temperature	270 - 310 °C
4	Melt temperature	270 - 300 °C
5	Mold temperature	40 - 90 °C
$\ominus$	Holding pressure, spec.	300 - 800 bar
$\bigcirc$	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min