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AKRO COMPOUNDS

Compound No.: **8181**

AKROMID® UL PRELIMINARY
A3 S1 green (8181)

PA66-I

AKROMID® A3 S1 green (8181) - is an UL94 HB listed unreinforced, impact modified Polyamide 6.6. colored in green. The material is characterised by a very high impact strength even at low temperatures and is therefore perfectly suitable for connecting and fixing systems which are used in the automotive and electro industry and that are exposed to high loading speeds.

Regulatory

Properties

Modulus	Strength	Impact
1.800 MPa	46 MPa	180 kJ/m²

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min | d.a.m.	**1800 MPa**
Tensile stress at yield ISO 527-2	50 mm/min | d.a.m.	**46 MPa**
Tensile strain at break ISO 527-2	50 mm/min | d.a.m.	**> 30 %**
Charpy impact strength ISO 179-1/1eU	23°C | d.a.m.	**no break**
Charpy notched impact strength ISO 179-1/1eA	23°C | d.a.m.	**80 kJ/m²**

Thermal Properties

Melting temperature ISO 11357-3	DSC, 10K/min	**262 °C**

Flammability

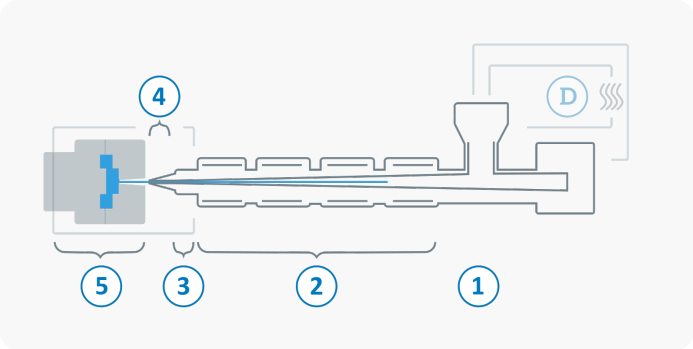
Flammability UL 94	UL 0,8 mm Wall thickness	**HB Class**

General Properties

Humidity absorption ISO 1110	70°C, 62% r.H.	**1,8 - 2,2 %**
Molding shrinkage ISO 294-4	flow	**1,3 - 1,5 %**
	transverse	**1,5 - 1,7 %**

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
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min