

AKROMID®

B3 S1 natural (7748)

PA6-I

AKROMID® B3 S1 natural (7748) is an unreinforced, cold impact strength polyamide 6

Features

impact modified

Properties

Modulus	Strength	Impact
1.350 MPa	35 MPa	180 kJ/m ²

Mechanical Properties

Tensile modulus ISO 527-2	1 mm/min d.a.m.	1350 MPa
	1 mm/min conditioned	450 MPa
Tensile stress at yield ISO 527-2	50 mm/min d.a.m.	35 MPa
	50 mm/min conditioned	25 MPa
Tensile strain at break ISO 527-2	50 mm/min d.a.m.	> 100 %
	50 mm/min conditioned	>= 250 %
Charpy impact strength ISO 179-1/1eU	23°C d.a.m.	no break
	23°C conditioned	no break
	-30°C d.a.m.	no break
Charpy notched impact strength ISO 179-1/1eA	23°C d.a.m.	80 kJ/m ²
	23°C conditioned	>= 100 kJ/m ²
	-30°C d.a.m.	45 kJ/m ²

Thermal Properties

Melting temperature ISO 11357-3	DSC, 10K/min	220 °C
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Flammability

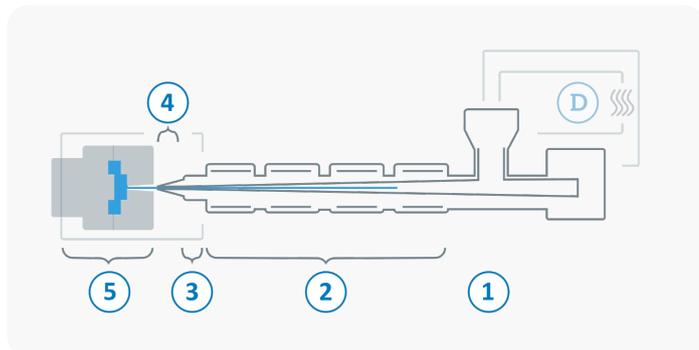
Flammability UL 94	1,6 mm Wall thickness	HB Class
Burning rate (<100 mm/min) FMVSS 302	> 1 mm Thickness	+

General Properties

Density ISO 1183	23°C	1,07 g/cm³
Molding shrinkage ISO 294-4	flow	1,0 - 1,2 %
	transverse	1,1 - 1,3 %

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.



Ⓓ	Drying time	0 - 4 h
	Drying temperature ($\tau \leq -30^\circ\text{C}$)	80 °C
	Processing moisture	0,02 - 0,1 %
①	Feed section	60 - 80 °C
②	Temperature Zone 1 - Zone 4	220 - 270 °C
③	Nozzle temperature	230 - 300 °C
④	Melt temperature	240 - 270 °C
⑤	Mold temperature	40 - 80 °C
→	Holding pressure, spec.	300 - 800 bar
←	Back pressure, spec.	50 - 150 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min