

Datasheet**Description:**

AKROMID® B3 3 S3 10 natural (1808) is a nonreinforced, nucleated, dry impact resistant polyamide 6 with light inherent color.

Applications

Applications are handles and fittings for power tools and furniture industry.

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

Mechanical Properties

Tensile modulus	1 mm/min	ISO 527-2	MPa	2700	955
Tensile stress at yield	50 mm/min	ISO 527-2	MPa	70	40
Elongation at yield	50 mm/min	ISO 527-2	%	4,3	15
Elongation at break	50 mm/min	ISO 527-2	%	> 45	> 100
Flexural modulus	2 mm/min	ISO 178	MPa	2600	950
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	10	28
Charpy notched impact strength	-30°C	ISO 179-1/1eA	kJ/m ²	8	10
Ball indentation hardness	358/30	ISO 2039-1	MPa	102	

Thermal Properties

Melting Point	DSC, 10K/min	DIN EN 11357-1	°C	222	
Heat distortion temperature HDT/A	1,8 MPa	ISO 75	°C	60	
Heat distortion temperature HDT/B	0,45 MPa	ISO 75	°C	162	

Flammability

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

General Properties

Density	23°C	ISO 1183	g/cm ³	1,1	
Humidity absorption	70°C, 62% r.h.	ISO 1110	%	2,6	

Processing

Flowability	Flows spiral**	AKRO	mm	850	
Molding shrinkage	flow	ISO 294-4	%	1,3	
Molding shrinkage	transverse	ISO 294-4	%	1,7	

n.b. = not broken

* = specimen acc. ISO 1110 stored

** = mould temperature: 80°C, melt temperature: 270°C, injection pressure: 750 bar, cross section of flow spiral: