

PRELIMINARY !!

Material: **LiNOTAM AST**

As of 09/2025

Material Short Description

Polyamide produced by direct polymerisation in casting moulds, resulting in a semi-crystalline structure. The high degree of crystallinity leads to excellent mechanical properties. Special additives are used to achieve a surface resistance of $10^8 - 10^{10} \Omega$ (anti-static).

Application Examples

- Pulleys
- Track Rollers
- Conveyor hoppers / conveyor systems
- Automation
- Slide rails & plates
- Guide rails

Available Colours

Black (marbled)

Mechanical Properties	ISO / EN / DIN	Dry	Humid	Unit
Density	ISO 1183	1.15	--	g/cm ³
Yield stress	ISO 527	70	50	MPa
Elongation at break	ISO 527	25	100	%
Tensile modulus	ISO 527	2600	1600	MPa
Flexural modulus	ISO 178	2800	1800	MPa
Flexural strength	ISO 178	140	60	MPa
Impact strength ¹⁾	ISO 179	no break	no break	kJ/m ²
Notched impact strength	ISO 179	>3.5	>15	kJ/m ²
Ball indentation hardness H358/30	ISO 2039-1	90	125	MPa
Creep stress at 1% strain ²⁾	DIN EN ISO 899-1	>7	--	MPa
Coefficient of sliding friction against steel ³⁾	-	0.36	0.42	-
Sliding wear against steel ³⁾	-	0.10	--	µm/km
Thermal Properties				
Melting temperature	ISO 3146	+220	--	°C
Thermal conductivity	DIN EN 12939	0.23	--	W/(K*m)
Specific heat capacity	-	1.7	--	J/(g*K)
Coefficient of linear thermal expansion ⁴⁾	-	7-8	--	10 ⁻⁵ *K ⁻¹
Operating temperature range (long-term) ⁵⁾	-	-40 to +105	--	°C
Operating temperature range (short-term) ⁵⁾	-	+170	--	°C
Flammability	UL 94, IEC 60695	HB	--	-
Electrical Properties				
Dielectric constant ⁶⁾	IEC 60250	3.7	--	-
Dielectric dissipation factor ⁶⁾	IEC 60250	0.03	--	-
Volume resistivity	IEC 60093	10 ¹⁵	10 ¹²	Ω *cm
Surface resistivity	IEC 60093	10 ⁹ - 10 ¹⁰	10 ⁸ - 10 ⁹	Ω
Dielectric strength	IEC 60243	50	20	kV/mm
Comparative tracking index	IEC 60112	CTI 600	--	-
Other Data				
Water absorption in standard atmosphere until saturation	DIN EN ISO 62	2.2	--	%
Water absorption until saturation	DIN EN ISO 62	6.5	--	%

¹⁾ Measured with pendulum impact tester 0.1 DIN 51 222

²⁾ Stress leading to 1% total elongation after 1,000h

³⁾ Against steel, hardened and ground

P = 0.05 MPa; V = 0.6 m/s; t = 60 °C near the running surface

⁴⁾ For temperature range +23 °C to +60 °C

⁵⁾ Empirical value, determined on finished parts without load in heated air; dependent on type and form of thermal exposure, short-term = max. 1h, long-term = months.

⁶⁾ At 10⁶ Hz

The information provided in this datasheet is intended to give an overview of the properties of the product. It reflects the current state of our knowledge and does not claim to be exhaustive. Due to the significant influence of environmental factors and further processing, the values given are to be understood as guideline values only. They do not in any way constitute a legally binding assurance regarding the properties of the product or its suitability for use in a specific application. All specified values were calculated as averages from numerous individual measurements and are based on a temperature of 23 °C and 50% relative humidity. We recommend conducting a practical test to verify suitability for specific applications.

Management: Dr. Otto Lose

Phone: +49 2683 977-0

Fax: +49 2683 977-111

info@licharz.com

VAT No. DE 260268077

Licharz GmbH
Industriepark Nord 13
53567 Buchholz Germany

www.licharz.com