

MATERIAL SPEZIFIKATION DIN EN 10204 2.1

LAURAMID® FPM TYPE A

Lauramid® FPM Type A is a high molecular, high crystalline, impact modified polyamide 12 made from pure Laurinlactam by lactam casting. The low viscosity melt is cast pressureless into the mold where it polymerizes. The processing of regrind material is not possible due to technical reasons.

PROPERTY	TEST SPECIFICATION	VALUE	UNIT
Density	DIN EN ISO 1183	1.025	kg/m ³
Yield stress	DIN EN ISO 527	51-58	Mpa
Elongation at yield stress	DIN EN ISO 527	9-13	%
Break strength	DIN EN ISO 527	30-40	Mpa
Elongation at break	DIN EN ISO 527	>200	%
Modulus of elasticity (tensile)	DIN EN ISO 527	1800-2000	Mpa
Modulus of elasticity (pressure)	DIN EN ISO 604	1400-1800	Mpa
Compressive strength	DIN EN ISO 604	54-58	Mpa
Impact strength	DIN EN ISO 179	(+23 °C)	(N)
		(-30 °C)	(N)
Notched impact strength (Charpy)	DIN EN ISO 179	(+23 °C)	15-28
		(-30 °C)	8-18
Water absorption (with standard climate)	DIN EN ISO 62	0,9	%
Water absorption (with water storage)	DIN EN ISO 62	1.4	%
Vicat B 50	DIN EN ISO 306	172-180	°C
Dielectric strength (50MHz)	DIN IEC 250	3,5	-
Dielectric loss factor [50 Hz]	DIN IEC 250	3,8x10 ⁻⁴	-
Specific contact resistance	DIN IEC 93	3x10 ¹⁴	Ωcm
Surface resistance	DIN IEC 93	6,6x10 ¹⁵	Ω

Average values, not guaranteed, valid for Lauramid® in nature color.
Test specimen machined from a semi-finished part, air moisture. (N) = no break.

Lauramid® FPM Type A is characterized by a very low water absorption, a good hydrolysis resistance, a very good dimensional stability, mechanical and chemical resistance. Lauramid® FPM Type A is impact modified.

Applications: Gears, worm gears and chain wheels, rollers, seals, cylinders, propellers and camdisks, semi-finished products with cast-in metal parts, other semi-finished products.

Manufacturing specifics: Cast parts made of Lauramid® are x-rayed

Albert Handtmann Elteka GmbH & Co. KG

Marco Baisch B.Sc.
Hubertus-Liebrecht-Straße 21
88400 Biberach
Deutschland

Tel.: +49 7351 342-7136

Fax: +49 7351 342-7159

marco.baisch@handtmann.de

www.handtmann.de/en/plastics/